The Administrator Effect: How EL Education Principals Influence Teachers’ Ability to Overcome Challenge

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Concordia University (Portland)

College of Education

Doctorate of Education Program

THE ADMINISTRATOR EFFECT: HOW EL EDUCATION PRINCIPALS
INFLUENCE TEACHERS’ ABILITY TO OVERCOME CHALLENGE

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Dissertation submitted to the Faculty of the College of Education
in partial fulfillment of the requirements for the degree of
Doctor of Education in
Educational Administration

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Concordia University Portland
2016
ABSTRACT

Teacher attrition and movement are difficulties facing school systems today. A variety of concerns contribute to teacher attrition and movement including dissatisfaction, school staffing actions, classroom factors, lack of administrative support, lack of resources, and student performance factors. As a result, educators are prone to burnout due to the stresses of teaching, which in turn leads to attrition and movement. School principals can stem the tide of teacher dissatisfaction and attrition by providing technical and adaptive scaffolds for teachers. Leaders can begin to provide these supports by examining their own beliefs and actions around mindset, grittiness, and resistance to change. The purpose of this qualitative multiple case study was to understand how EL Education principals used growth mindset and grittiness to help teachers to overcome dissatisfaction and the stressors of school. The study focused on the experiences of administrators in EL Education schools and how their beliefs around grittiness and mindset helped to foster a stronger growth mindset and grittiness in teachers so that teachers would willingly change practice. Participants in the study reported that teachers in EL Education schools felt stress in three areas: reporting student achievement, lack of student grit, and revising / implementing learning expeditions. In response to these stressors, the EL Education principals shared that they focused efforts to nurture a culture of revision, a common definition of grittiness, and stronger instructional practices across the school. The participants also shared that they used storytelling and structures for honoring teachers’ struggles to alleviate teacher dissatisfaction.

Keywords: EL Education, growth mindset, grit, school administrators
DEDICATION

This study is dedicated to my grandmother Nellie Mitchell Hite who was my stalwart model of grittiness.
ACKNOWLEDGEMENTS

First, I would like to thank my mother Sandy for being my sounding board, my proof reader, and my biggest supporter on my degree and dissertation journey. I cannot thank you enough for all that you have done to help me become a better educator and school leader. Thank you also to my dad Frank who did all the grunt work for me when I was too tired to think about anything other than work and writing. And, I wish many thanks to my husband Eric who has always supported my desire to learn and grow. I have been in graduate school more years of our marriage than not. I cannot express how crucial your love and steadfast support have been on my journey. In addition, to my cousin Jennifer, you always listened with a critical ear to my ideas about the research. Thank you for asking great questions along the way. I could not have completed this study without the four of you. Thank you, and I love you.

Furthermore, I would like to thank the principals in my study and my EL Education school designer who helped me to complete this research over the last year and a half. Also, I would like to thank my principal Dr. Bill Coon who continues to serve as a model for growth mindset and grit oriented leadership.

In addition, I would like to thank my committee members who included Dr. Julie McCann, Dr. Robert Voelkel, and Dr. Jill Williams. Your guidance and reflection helped to refine my research process and writing. I could not have accomplished this task without you. I thank you more than you know.

Lastly, I would like to thank my students and teachers at Meadow Glen Middle School. You gave me the courage and drive to study this topic. Your journey is my journey, and I am so grateful that I am able to practice what I have learned with all of you. Keep growing, and keep striving. You are worth every struggle.
Table of Contents

ABSTRACT ....................................................................................................................... ii

DEDICATION ................................................................................................................... iii

ACKNOWLEDGEMENTS ............................................................................................... iv

LIST OF TABLES .............................................................................................................. v

Chapter 1: Introduction ................................................................................................... 1
  Introduction to the Problem ............................................................................................ 1
  Background, Context, and Conceptual Framework for the Problem ................................. 2
  Burnout and Stress ......................................................................................................... 2
  Effects of Teacher Attrition and Burnout on the System ............................................... 4
  Statement of the Problem .............................................................................................. 5
  Purpose of the Study ..................................................................................................... 6
  Research Questions ....................................................................................................... 6
  Significance of the Proposed Study ............................................................................... 7
  Nature of the Proposed Study ....................................................................................... 7
  Definition of Terms ....................................................................................................... 8
  Assumptions, Delimitations, and Limitations ................................................................ 11
  Summary .................................................................................................................... 12

Chapter 2: Review of Literature ...................................................................................... 13
  Introduction .................................................................................................................. 13
The Conceptual Framework.............................................................................................................. 16

Ontology, Social Constructivism, and Social Learning Theory ................................................. 16

Brief Discussion of Pivotal Research .......................................................................................... 17

The Review of Research Literature .............................................................................................. 18

What is Mindset? ............................................................................................................................ 18

Growth Mindset ............................................................................................................................... 19

Fixed Intelligence and Mindset ....................................................................................................... 23

Analysis of Self-Theory / Mindset ................................................................................................. 25

What is Grittiness? .......................................................................................................................... 27

The Story of Resilience ................................................................................................................... 28

Factors Influencing Resilience ...................................................................................................... 31

Resilience and Optimism ................................................................................................................ 33

The Human Body and Resilience .................................................................................................. 35

Resilience and Play .......................................................................................................................... 36

Neuroplasticity, Thriving, and Resilience ...................................................................................... 37

The Science behind Optimism ........................................................................................................ 39

Grit, Fear, and Failure ..................................................................................................................... 41

Controlling Fear of Failure ............................................................................................................. 41

The Connection between Grit and Giftedness ............................................................................ 43

Grit and Focused Passion ................................................................................................................. 44
Predictive Validity of Grit ........................................................................................................ 46
Analysis of the Effects of Grittiness ....................................................................................... 49
Resistance to Change ............................................................................................................... 49
Administrator Role in Resistance .......................................................................................... 52
Change and an Accountability Culture .................................................................................... 54
Non-Cognitive Traits: Understanding the Overarching Construct ....................................... 56
Methodological Issues: Defining the Constructs .................................................................... 57
Methodological Issues: Quantitative Measurement of Constructs ....................................... 58
Methodological Issues: Sampling ............................................................................................ 61
The Need for Purposeful Sampling .......................................................................................... 62
Synthesis of Research Findings ............................................................................................... 63
Critique of Previous Research ................................................................................................. 66
Summary of Literature ............................................................................................................. 68
Chapter 3: Methodology .......................................................................................................... 69
Introduction ............................................................................................................................... 69
Guiding Components of the Study .......................................................................................... 69
Context of the Study .................................................................................................................. 69
Purpose of the Study .................................................................................................................. 70
Research Questions .................................................................................................................. 70
Nature of Qualitative Research Design ...................................................................................... 71
Implication Three: Honoring the Struggle ........................................... 151
Recommendations for Future Research .................................................. 152
Suggestion One: Methodological Considerations .................................... 152
Suggestion Two: Growth Mindset and Grit ............................................. 154
Conclusion ............................................................................................ 155

References ............................................................................................ 157

APPENDICES ......................................................................................... 169

Appendix A: Semi-Structured Interview ................................................. 170
Appendix B: Statement of Original Work ................................................. 172
LIST OF TABLES

Table 1 Overview of Case Study Sites.................................................................95
Table 2 Overview of Leadership Experience......................................................96
Table 3 Proposition 1 Word Table.................................................................98
Table 4 Proposition 2 Word Table.................................................................99
Table 5 Proposition 3 Word Table.................................................................100
Chapter 1: Introduction

Introduction to the Problem

According to the United States Department of Education (2014), the number of public school teachers leaving the profession nearly doubled from 1988 to 2013. Of the over 3 million public school teachers employed during the 2011—2012 school year, 250,100 left the education field to work in other professions including the military. More than 90,000 of these individuals had less than ten years of experience in the field, and another 68,000 teachers had between 10–19 years of experience. In addition to the 250,100 teachers leaving the field altogether, another 260,400 teachers moved from one school to another, whether it was a move from public to charter schools or public to private schools. Specifically in South Carolina, 10% of teachers left public school classrooms each year due to a variety of factors, including transfer, retirement, or personal choice (CERRA, 2014b). In addition to teacher attrition, student enrollments increased since 1984, making the teacher shortage issue more poignant for school systems (Ingersoll & Smith, 2003). According to Ingersoll and Smith (2003), many schools struggled to fill teacher openings with qualified candidates. However, Ingersoll and Smith reported that student enrollment and teacher retirements were not the primary causes for the high demand for new teachers. Rather teacher attrition due to other factors played a larger part of the problem, particularly with inexperienced educators. These factors included personal or family issues, school staffing actions, or dissatisfaction. The United States Department of Education (2014) also reported that teachers chose to leave due to life factors, classroom factors, salary and job benefits, school factors, or student performance factors.
Background, Context, and Conceptual Framework for the Problem

Teacher dissatisfaction played an integral role in why teachers leave the profession (Ingersoll & Smith, 2003). Ingersoll and Smith (2003) reported that teachers, particularly those with little experience, left because they were dissatisfied. Young teachers believed they were underpaid, had poor administrative support, and faced inordinate amounts of student discipline problems. Furthermore, poor student motivation, large class sizes, classroom intrusions, and lack of time also contributed to teachers’ dissatisfaction with the profession. In addition, the United States Department of Education (2014) reported teachers who moved to other professions felt they had better opportunities for professional advancement or promotion. Also, 45% of teachers who had left the field felt they received more recognition and support from administrators and managers in their new positions. Last, over 50% of teacher “leavers” reported the workload in their new positions was more manageable and that they had more access to necessary resources and materials in their new position.

Burnout and Stress

The lack of support, resources, and opportunities all played a significant role in causing teacher burnout (Farber, 2000). In addition, Pas et al. (2012) asserted that emotional exhaustion also contributed to teacher burnout; and with elongated periods of burnout Pas and her colleagues shared that teachers were at an increased risk for physical and mental health problems. As a result, teachers experiencing long-term burnout often exhibited diminished performance and increased irritability, according to Pas et al. Farber (2000) reported educators under the age of 40 were particularly prone to burnout due to the stresses of teaching. Farber suggested teachers experienced three different kinds of burnout. Some exhibited behaviors described as the “worn-out” subtype. These individuals gave up and performed work in a
perfunctory manner when they were confronted with too much stress or too little appreciation. Furthermore, teachers also experienced “classic or frenetic” burnout where they worked increasingly hard, to the point of exhaustion, in order to accomplish a task. In both cases, stress played a role in how these individuals felt and performed, and the stress later led to dissatisfaction with the teachers’ field of work. Hallowell (2011) suggested that stress could be good or bad for people. Hallowell described good stress as opportunities for the brain to learn new and unfamiliar information. What was first difficult for individuals became easier with time and practice. Given time for practice and feedback, Hallowell stated individuals could improve performance when certain amounts of stress were placed on them. However, unplanned or uncontrolled stress, often applied from outside, could be harmful. Uncontrolled stress did not allow individuals time to recover or rest. More importantly, it effectively killed creativity, which was key to problem solving and innovation according to Hallowell. Uncontrolled stress also seriously affected a person’s health (Southwick & Charney, 2012). According to Southwick and Charney (2012), chronic stress weakened the immune system, caused gastric issues, decreased physical activity, and increased anxiety and depression. Thus, uncontrolled stress, which played a part in teacher burnout, affected more than just job performance and satisfaction. It also greatly affected teachers’ mental and physical health. Last, teachers may also experience the underchallenged subtype of burnout. In these cases, teachers were excessively dissatisfied because they worked in unstimulating conditions or were completing monotonous tasks. As a result, underchallenged teachers felt they received little reward for the work they were doing. Furthermore, underchallenged teachers avoided “more difficult projects that required thinking, organizing, creating, and dealing with frustration” (Hallowell, 2013, p. 139). In effect,
underchallenged teachers avoided challenge and grappling because it was counter to the monotonous work they were frequently asked to complete.

**Effects of Teacher Attrition and Burnout on the System**

Because teacher attrition, dissatisfaction, and burnout greatly affected how educators worked and innovated, these factors also influenced the workings of the school system. According to Goldhaber and Cowan (2014), the longevity of teacher careers had financial and academic consequences on public school systems. Recruiting, hiring, and training of new teachers required significant financial costs or monies, which could have been used to improve other programs, individuals, or working conditions (Ronfeldt, Loeb, & Wyckoff, 2013). For instance, Goldhaber and Cowan explained recruiting, hiring, and training costs for new teachers in Chicago Public Schools exceeded $9,000 per teacher, and in Milwaukee, the public school system paid over $8,000 per teacher in recruiting and training costs. There were not solely financial costs, however. There were also indirect costs in time and preparation that played into the training, orientation, and professional development of new teachers.

In addition to financial consequences, school systems and students faced real academic consequences from teacher attrition and exits. Goldhaber and Cowan (2014) asserted teachers made significant gains in effectiveness with experience, particularly during their first few years. When veteran teachers moved to other schools or left the profession, school leaders often hired inexperienced, less-prepared teachers to take exiting teachers’ places. As a result, Goldhaber and Cowan believed higher levels of teacher turnover resulted in a decrease in overall teacher quality in a school. Furthermore, teacher turnover also disrupted the instructional programs and collaborative efforts of teacher teams (Ronfeldt et al., 2013). Ronfeldt et al. (2013) contended staff cohesion and community were an integral force affecting student engagement and
achievement. In fact, they stated that the quality of relationships between teachers and between teachers and students could predict student achievement. Thus, when teachers left schools, previously established relationships and teams were altered. Farber (2000) believed some attrition was good, allowing for a variety of experiences and ideas to be introduced to teams. However, in workplaces with high levels of turnover, teams failed to establish and nourish the trusting relationships and connections needed to innovate and be creative (Hallowell, 2011). Furthermore, in schools with higher teacher attrition, the remaining veteran staff members beared the brunt of the instructional program (Ronfeldt et al, 2013). In addition, Ronfeldt et al. (2013) asserted that because districts’ resources were used to train new or inexperienced teachers, the veteran “stayers” had less access to professional development resources. On the other hand, in schools with strong interpersonal and professional connections, there was an atmosphere of well-being. As a result, individuals experienced increases in learning and more creative thinking. Moreover, the workers noticed and appreciated each other and promoted each other more than those in less connected environments (Hallowell, 2011). In fact, Hallowell (2011) believed individuals with strong personal and professional relationships with colleagues were more engaged with their work than individuals with little personal connection with peers. Thus, positive and steady work relationships were powerful and enhanced the work teachers did each day in classrooms.

Statement of the Problem

Teacher attrition, dissatisfaction, and burnout all greatly affected how educators worked and innovated. Therefore, it was critical for school systems to find ways to stem the tide of these factors so that teachers were more connected to their peers and challenged appropriately to meet the needs of their students. Specifically, school leaders must find ways to help teachers
overcome challenges if they wished to affect positive change in teacher retention, teacher growth, and student achievement.

**Purpose of the Study**

Due to the effects of teacher dissatisfaction and attrition, it was clear school leadership teams should find strategies to help teachers grapple with the struggles of teaching and learning. Administrators must provide teachers with scaffolds to bolster their technical and adaptive deficits (Powell & Kusuma-Powell, 2013). The technical and adaptive scaffolds principals provide could be based on the leaders’ beliefs and actions around self-theory (mindset), grittiness, and resistance to change (EL Education, 2011). The purpose of this qualitative study was to investigate how EL Education administrator beliefs and actions around mindset, grittiness, and resistance to change affected teacher attrition and job satisfaction. This study specifically explored the experiences of EL Education school leaders as they worked with their faculties to foster growth mindset and grittiness during their schools’ journeys to improve teaching and learning.

**Research Questions**

The overarching research question was: What are the experiences of EL Education school principals as they work with teachers to overcome challenge, stress, and dissatisfaction? The following sub-questions helped to guide the research process.

- **Sub-question 1**: What experiences do administrators find stressful for teachers?
- **Sub-question 2**: What aspects of EL Education do administrators perceive as challenging for teachers?
- **Sub-question 3**: How do administrator mindset and grittiness affect teachers’ willingness to change practice?
Sub-question 4: How do administrators work with their staffs to develop stronger growth mindset and grittiness?

**Significance of the Proposed Study**

When reviewing previous research around the topics of mindset, grittiness, and resistance to change, three important themes came to light that support the purpose of the study. Firstly, a person’s mindset could affect how he or she approached challenge, success, and failure (Dweck & Leggett, 1988; Dweck, 2006; Gero, 2013). Second, grittiness, defined as resilience behaviors combined with long term passions, could also dictate how successful a person was when facing hardships (Duckworth, Peterson, Matthews, & Kelly, 2007; Duckworth & Quinn, 2009; Eskreis-Winkler, 2014). Lastly, an individual’s resistance to change could affect his or her ability to thrive in the course of change action (Vaill, 1996; Fullan, 2001; Reeves, 2010). Because grittiness, mindset, and resistance to change all played an important role in how individuals approached and overcame challenge, these same traits should also shape how individuals led their staffs when they encountered times of hardship. Specifically, this study showed how EL Education principals leveraged their beliefs and actions about mindset, grittiness, and resistance to affect teachers’ approach to challenge. Ultimately, the study provided school leaders with actionable ways that may change teacher perceptions of challenge, success, failure, and growth.

**Nature of the Proposed Study**

This study employed multi-case study methodology to explore and describe the experiences of EL Education administrators as they fostered growth mindset and grittiness in their faculties. The study was conducted in a variety of natural settings so that specific details could be gathered about each principal’s actions and beliefs and how these actions helped to stem teacher dissatisfaction and attrition. These settings included both public and charter
schools. To select participants for the study, I employed non-probability (purposeful sampling) methods, giving insight into the perspectives of the different kinds of administrators in EL Education schools. The study utilized interviews, online focus groups, and various planning and meeting documents from the schools to gather and triangulate the data collected. To interpret the data, this study employed cross-case synthesis to identify patterns, similarities, and differences between EL Education administrators. Cross-case synthesis helped to identify the effects of principal beliefs and actions around mindset and grittiness across different settings. Finally, the scope of this study was limited through contexts and propositions outlined in detail in Chapter Three of this research paper. By limiting the scope of the study, I more effectively bound each case, which assisted in comparing and contrasting experiences of EL Education administrators across settings.

**Definition of Terms**

The following glossary of terms will be useful to the reader as he or she reviews the research.

**Adaptive challenges.** Adaptive challenges were one of the two types of challenges individuals face in professional learning. Adaptive challenges required transformational learning where individuals must rethink deeply held professional values, beliefs, or assumptions (Powell & Kusuma-Powell, 2015).

**EL Education.** EL Education was a national school improvement network that partnered with schools and charter boards at all levels and in all settings to challenge students to think critically and to take active roles in their classrooms and communities. The network also provided schools with professional development, online tools, coaching to improve instruction, assessment, curriculum, leadership practices, and school culture. (EL Education, 2011).
EL Education core practices. EL Education’s core practices were descriptions of best practices EL Education considered critical for successful school transformation. The core practices addressed five key dimensions in school life including: curriculum, instruction, assessment, culture and character, and leadership (EL Education, 2011).

Fixed mindset. Fixed mindset was based on the belief that a person’s characteristics and basic qualities were set at birth and could not be changed through effort (Dweck, 2006).

Focused passion. Focused passion was the ongoing and persistent effort of an individual to complete a task or to overcome challenge (Duckworth et al., 2007).

Giftedness. Giftedness could be conceptualized into three clusters of traits that included above average ability, creativity, and task commitment. These three traits interacted with one another to help individuals accomplish creative work or exhibit gifted behaviors (DukeTIP, 2010).

Grittiness. Grittiness was a compound non-cognitive trait comprised of resilience behaviors and long-term passion for completing goals (Duckworth & Quinn, 2009).

Growth mindset. Growth mindset was based on the belief that a person’s basic qualities, like intelligence and talent, could be cultivated and improved through effort (Dweck, 2006).

Learning expedition. Learning expeditions were long term, in depth interdisciplinary studies where students completed original research, applied critical thinking and problem solving skills, and practiced character and academic skills to solve real-world, compelling problems (EL Education, 2011).

Non-cognitive traits. Non-cognitive traits were patterns of thoughts, beliefs, or behaviors individuals exhibited and developed over time. These traits included critical thinking
skills, problem solving skills, emotional health, social skills, work ethic, interpersonal skills, and intrapersonal skills like self-control, persistence, academic confidence, and creativity (Garcia, 2014).

**Optimism.** Optimism was the belief that defeat was simply a temporary setback that was not the fault of circumstances. When confronted with hardship, people with optimism perceived it as a challenge that they should strive to overcome (Seligman, 1990).

**Perseverance.** Perseverance was the action of “continued effort to do or achieve something despite difficulties, failure, or opposition” (Merriam-Webster, 2015).

**Resilience.** Resilience was the process of adapting well or bouncing back after facing adversity, trauma, tragedy, or stress (American Psychological Association, 2015).

**Resistance.** Resistance was the refusal to accept something new or different or the ability to prevent something from having an effect (Merriam-Webster, 2015).

**Self-theory.** Self-theory was a research-based model of motivation and personality where individuals’ implicit theories oriented them toward mastery-oriented behaviors or helpless pattern behaviors. In this model individuals exhibiting mastery-oriented behaviors believed intelligence was malleable, and those exhibiting helpless pattern behaviors believed intelligence was fixed (Dweck & Leggett, 1988).

**Technical challenges.** Technical challenges required individuals to address the problem or issue with information or specific skill-set training (Powell & Kusuma-Powell, 2015).

**Thriving.** Thriving was when a person “benefits or gains in some way from the experience and can apply that gain to new experiences, leading to more effective subsequent functioning” (Carver, 1998, p. 251).
Assumptions, Delimitations, and Limitations

In this study, I expected mindset, grittiness, and level of resistance to affect how EL Education administrators interacted with and led their staffs. Furthermore, it was expected that EL schools’ staff members approached challenge, failure, and success with resilience and a growth mindset. As a result, EL Education teachers should leave or transfer less because they felt their social, emotional, and professional needs were honored and met. Because the study employed qualitative research methods to collect data about the assumptions above, the study contained extended descriptions of EL Education administrator experiences and actions. In order to identify patterns in the data, the study employed thematic and narrative coding processes. In addition, I used research-based propositions to help identify transcendent themes across all types of EL Education school settings. The processes for limiting the scope of the data helped to identify administrator actions or beliefs that differ from the usual practice of EL Education principals.

To ensure credible collection and interpretation of the data, the study employed a variety of validation processes (Shenton, 2004; Yin, 2014). The study addressed credibility by triangulating data, by providing thick descriptions of administrator experiences and beliefs, and by member checking the data with participants (Shenton, 2004). The study also demonstrated how the results could be transferred to other schools through the use of multi-case study design. In addition to credibility and transferability, the study explained how ethical concerns around informed consent, researcher position, and confidentiality were addressed. As a result, my work to address credibility, transferability, and confidentiality led me to my anticipated findings about the effects of EL Education administrators’ beliefs and actions on teacher satisfaction and retention.
Summary

In this chapter, I introduced the problem of teacher attrition and explained how it affects schools and school systems financially, culturally, and professionally. I also explained how teacher’s technical and adaptive challenges must be addressed if school systems wished to retain teachers. This study proposed that administrator actions and beliefs could affect the level of teacher dissatisfaction and attrition. Specifically, I found that EL Education administrator beliefs and actions about mindset, level of grit, and resistance to change supported teachers in times of challenge, failure, and success. In the chapter, I shared the significance of the proposed study and provided a glossary of important terms to help readers orient themselves to the research. Finally, I briefly described the study design. The chapter included brief descriptions of the methodology, data collection, and interpretation strategies I used in the study. Furthermore, I included information on how I addressed credibility, confidentiality, and transferability. In the next chapter, I will present the conceptual framework being used to guide this research about EL Education administrator effect on teacher satisfaction.
Chapter 2: Literature Review

Introduction

The attrition of teachers was a serious concern for many school districts. In fact, in South Carolina alone, 10% of public school teachers left the classroom each year due to retirement, personal choice, or transfer to other districts or states (CERRA, 2014a). In addition, only 1,947 new teachers graduated from accredited education programs in the state (CERRA, 2014b). According to the United States Department of Education (2014), 16% of teachers nationally moved schools or left the profession after the 2012—2013 school year. The attrition of novice teachers was specifically noted in a longitudinal study conducted from 2007—2012 by Gray and Westat (2015). Gray and Westat reported that 17% of the teachers who began teaching in 2007 were no longer in the profession at the end of the 2011—2012 school year. The attrition of young teachers was particularly concerning for urban school systems (The National Commission on Teaching and America’s Future, 2016). According to the National Commission on Teaching and America’s Future (2016), half of the teachers in urban school systems left the profession within their first five years in the profession.

The high level of teacher attrition and mobility was the result of a host of factors, notably low pay, ongoing discipline issues, poor student motivation, and lack of administrative support (Ingersoll & Smith, 2003). In addition, the United States Department of Education (2014) noted that over 50% of public school teachers reported they left teaching due to the workload or the working conditions of their schools. However, as stated in the introduction of Chapter One, certain individuals were more prone to teacher burnout and dissatisfaction than others, particularly teachers under 40 working in middle and high schools as well as novice teachers (Farber, 2000; Ingersoll & Smith, 2003). Ingersoll et al. (2014) reported that 45.3% of first-year
teachers left teaching due to dissatisfaction, and they specifically noted concerns with school and working conditions like low salaries, lack of resources, and negative student behavior. In addition, Ingersoll et al. reported that the first-year teachers surveyed were also dissatisfied because of accountability measures, lack of opportunity for development, lack of input in decision making at the school level, and lack of opportunities to lead in the school setting. Findings concerning teacher dissatisfaction pointed to both policy amenable issues as well as concerns over the working conditions within schools and districts (Ingersoll & Smith, 2003). It was clear that teacher attrition and burnout were real problems facing schools today; therefore, school administrators needed strategies that helped teachers to grapple and manage the hard work of teaching and learning in an ever-changing field.

In order to address teacher attrition, school leadership must address concerns with school characteristics and organizational conditions (Ingersoll & Smith, 2003). One way to address school and organizational conditions was to adopt a different approach to teaching and learning. Essentially, educators needed to cultivate positive school cultures where all stakeholders were members of the learning community (EL Education, 2011). EL Education, formerly called Expeditionary Learning (2011), was one model for school improvement that provided structures, professional development, and coaching needed to foster positive learning communities for all. First, the EL Education (EL) model addressed the challenge of student engagement and management mentioned by Ingersoll and Smith (2003) as a contributor to teacher attrition. The EL model challenged students and educators to think critically and to actively participate in learning through formal structures of presentation, critique, and data analysis. Furthermore, the EL model addressed relational and performance character of professionals and students. In EL Schools, teachers and administrators taught, modeled, and discussed what positive collaboration,
appropriate participation, personal responsibility, organization, craftsmanship, and perseverance looked and sounded like. Furthermore, these soft skills were assessed and communicated separately from academic content and skills mastery through Habits of Scholarship. Thus, there was intentional attention to relational and performance character traits needed to be successful in and outside of school (EL Education, 2011). The EL Model also helped school leaders and staffs to build a cohesive vision for teaching, learning, and student achievement. The model encouraged school staffs to focus on support rather than judgment; and as a result EL schools were characterized by self-disciplined, compassionate, and collaborative staffs (EL Education, 2011).

If educational researchers and leaders wished to foster positive learning communities like those found in many EL schools, they should examine their own beliefs and actions in order to effectively guide schools toward continuous improvement (EL Education, 2011). The purpose of this study was to investigate how administrator beliefs and actions around self-theory (mindset), grittiness, and resistance affected a staff’s willingness to change its practice for improved job satisfaction and instruction. In particular, I investigated the experience of administrators at EL Education Schools as they worked with their staffs to develop stronger growth mindset, grit, and resilience and, more importantly, to improve teaching, job satisfaction, and student achievement. Much of the prior research completed in the area of self-theory (mindset) and grit, or tenacity, centered on students, teachers, or adults in the private sector (Duckworth et al., 2007; Duckworth et al., 2015; Dweck, 1986, 2006). Few studies examined how school administrator mindset and tenacity affected the workings of a school; therefore, the literature review contained within this chapter will explore how mindset, tenaciousness, and resistance affected people in general (Teal,
In the sections that follow, I will address the lack of scholarly research in the area of administrator mindset and grittiness in the EL Education school setting.

**The Conceptual Framework**

According to Creswell (2013), educational researchers brought particular beliefs and philosophical assumptions to research studies. These ingrained beliefs about what needs to be studied and how it should be studied informed the framework used when working through the inquiry process. Beliefs about inquiry shaped how researchers formulate research questions and problems, and philosophical assumptions guided how researchers sought out information to answer these questions (Lester, 2005). Creswell wrote there were four different philosophical approaches to research. These included ontological, epistemological, axiological, and methodological approaches.

**Ontology, Social Constructivism, and Social Learning Theory**

In regard to this study, there was a focus on ontology, which Gruber (1993) defined as a description of concepts, relationships, or shared meaning that exists among a community. When researchers conducted qualitative studies, they recognized people had multiple perspectives of reality; therefore, the intent of qualitative research was to describe these different perspectives to readers (Creswell, 2013). Ontology provided the context for the use of social constructivism as part of the conceptual framework for the study (Creswell, 2013). According to the Graduate Student Instructor Teaching and Resource Center (2015), social constructivism emphasized the collaborative nature of learning, or the inclusion of multiple perspectives or realities in the learning process. Within the social constructivist approach, researchers cannot separate learning from the social context in which it happened, and multiple realities or perspectives worked together to guide the learning of the group. Furthermore, while learners performed at a specific
level individually, social constructivists believed individuals learned more complex material or perform more complex tasks when they had guidance from a teacher or work in collaboration with peers.

In addition to the social constructivist theory of learning, elements of social learning theory played a role in the conceptual framework for this study. According to Bandura (1971), new patterns of behavior were acquired through direct experience. Furthermore, behaviors could be adapted through observing the behaviors of others. Thus, by modeling specific behaviors and beliefs, people, and leaders specifically, played an important role in helping others to succeed. Finally, motivation, or the understanding of it, was a crucial component of this conceptual framework. Like social constructivism, the Graduate Student Instructor Teaching and Resource Center (2015) asserted motivation came in two forms. Behavioral motivation was influenced by rewards and consequences. Most individuals understood this as the carrot and stick approach. However, cognitive motivation, or motivation for learning new and challenging material, was often intrinsic or based on the learner’s inward drive. Certain conditions or factors helped to bolster both types of motivation. Behavioral motivation, which was characterized by extrinsic rewards and consequences, was often linked to hygiene factors like pay, work conditions, and job security (Pink, 2009). According to Pink (2009), extrinsic rewards were not long lasting and often did not lead to job satisfaction. However, motivators like work enjoyment, achievement, and personal growth did lead to long-term job satisfaction. These were internal desires and motivators, and they played an important role in the cognitive motivation of a person.

**Brief Discussion of Pivotal Research**

The framework for this study was organized around the effects of the following intrinsic motivators: mindset, grittiness, and resistance to change. According to the preponderance of
literature reviewed, mindset, tenacity, and resistance all affected how successful individuals were. It was assumed, therefore, that these same factors would affect how successfully EL principals countered teacher dissatisfaction and attrition. Furthermore, these non-cognitive traits should affect how EL principals led teachers through challenge and change. Studies conducted by Dweck (1986, 2006, & 2014) concerning self-theory, research concerning grit and perseverance completed by Duckworth and Peterson (2007), and other studies around resilience played a role in the framework for this study.

The Review of Research Literature

According to Machi and McEvoy (2012), advanced literature reviews required researchers to review, analyze, and question the current understandings about a topic in order to identify a new area of research. As a result of this analysis, a researcher should create a thesis position from the credible evidence he or she collected during the review of resources. Thus, a review of the literature should provide a backdrop of the current knowledge of the topic, and it should illustrate a logical case for the thesis position the researcher was taking (Machi & McEvoy, 2012). In this next section, the reader will find a case for the following thesis position: individuals did need a variety of emotional, relational, and environmental requirements to be successful, including positive school environment, mindset, level of grittiness, and technical and adaptive skill level. All were determining factors when individuals faced change and challenge. Furthermore, these factors could determine how successful an EL principal was when attempting to change the practices of his or her staff.

What is Mindset?

In the educational research field there were two kinds of beliefs with respect to intelligence or self-theory: incremental theory and entity theory (Dweck, 1986; Gero, 2013).
According to Dweck (1986), individuals often viewed their work and lives within the framework of one of these self-theories. Growth mindset individuals believed intelligence, or ability, was malleable and could be incrementally grown; however, fixed mindset individuals believed intelligence was stable over time and could not be significantly changed with experience (Gero, 2013). According to Dweck and Master (2008), both types of self-theory appeared in populations with similar frequency. In their study, Dweck and Master found around half of the teachers indicated they were growth mindset individuals and the other half indicated they were fixed mindset individuals. Dweck (2006) began to refer to the two different theories as growth mindset (incremental theory) and fixed mindset (entity theory). According to Dweck, both types of mindset drastically affected how individuals both work and live. It determined if a person developed in the way that he or she wanted. Mindset also determined if individuals accomplished goals of value to them. In this study, I focused specifically on the effects of principals’ mindset as they addressed the issues faced by teachers in an EL learning community.

**Growth Mindset**

According to Dweck (1986, 2006, 2014), the research indicated teachers with an incremental mindset, or malleable beliefs about skills and abilities, were more willing to change practice over time. In essence, they had a growth mindset. Because growth mindset individuals believed intelligence was malleable, they were profoundly impacted by their goal orientation, level of effort and perseverance, and response to setbacks (Gero, 2013). For instance, growth mindset individuals approached challenge, change, and learning with an adaptive motivational pattern of behavior. As a result, they sought out challenging and personally valued mastery (or learning) goals (Dweck, 1986; Gero, 2013). In fact, mastery (learning) goals provided a different context for understanding the inputs (like high effort) and outcomes (like successes and failures)
of goal attainment. Growth mindset individuals viewed the inputs and outcomes of goal attainment as a gauge of their grasp on learning and mastery strategies (Dweck & Leggett, 1988). These individuals sought out challenge and opportunities for increased learning, and they persisted in their efforts over the long term (Dweck & Leggett, 1988; Dweck, 2006). Ultimately, growth mindset individuals gained satisfaction from the effort they must exert in pursuit of a challenging goal (Dweck, 1986). In studies done with children, Dweck and Leggett (1988) found students with a mastery orientation viewed unsolved problems as “challenges to be mastered through effort” versus “failures that reflected on their ability” (p. 258). Thus, mastery orientation and an incremental view of intelligence had a positive effect on people; they increased motivation to improve and pushed individuals to implement new strategies (Gero, 2013). Applying this research in an EL school setting, one would expect that principals with a growth mindset viewed the challenges teachers face as opportunities to learn and master new practices through effort. In fact, the primary focus for leadership teams in EL schools was continuous improvement of teaching and learning (EL Education, 2015). EL leadership teams, staff members, and students operated from a growth mindset framework. They believed that all members of the team could learn and improve as a result of effort (EL Education, 2011). Thus, EL principals were expected to encourage teachers to improve even when they experienced failure. This in turn should help EL leaders to address teacher dissatisfaction because it provided an environment where teachers felt free to take risks and had opportunities to grow personally and professionally. According to Pink (2009), professionals who felt free to take risks developed internal desires to continually grapple and grow professionally. Because EL administrators were expected by the EL network to leverage growth mindset language and processes regularly, they
could encourage teachers to develop stronger internal motivators to grapple and grow through challenge and failure.

According to Gero (2013), an incremental theorist’s goal orientation was a strong predictor of reflective practice. Because they were working toward mastery, growth mindset individuals were more likely to participate in critical reflection, and they viewed failures and setbacks differently than their fixed mindset peers. Hallowell (2011) stated growth mindset individuals learned how to emotionally flip the fear fixed mindset individuals dread when encountering hard work, challenge, and failure. Growth mindset individuals reframed failure by acknowledging the reality of the situation while also practicing rugged optimism. Essentially, growth mindset individuals viewed struggle and even failure with optimism, and as a result, they saw failures as opportunities to exhibit greater effort (Gero, 2013).

The practice of reframing struggle or failure in order to make positive changes in practice could be referred to as reflective action; however, reflective action also involved the practice of reflecting upon successes. An individual’s reflection on his or her successes could build the confidence the individual needed to change practice in the long term. Essentially, reflection upon success built a can do attitude (Fullan, 2011). Fullan (2011) described reflective practice as reflective doing. Individuals needed actual experience with change in order to reflect and later build upon the experience garnered. In fact, Fullan wrote individuals “grasp[ed] change as the process of uncovering new and better practices. . . . It [was] messy at first, but you eventually [got] somewhere, and [got] good at doing it” (p. 82). Therefore, as teachers developed capacity in the area of change action, they began to believe in themselves because they experienced success. The importance of reflecting on success was further supported by the work of Schechter and Michalsky (2013). In their quasi-experimental study of pre-service physics
teachers, Schechter and Michalsky found that reflecting on success and failure collaboratively with other teachers stimulated more revision of existing knowledge structures than reflection upon failures alone. Specifically, the teachers who reflected on both successes and problems outperformed all other groups in the study in pedagogical knowledge and teacher efficacy scales. The results suggested learning from success and failure was critical if teachers wished to “intensify their epistemic activity, stimulate more revision of existing knowledge structures, and ultimately improve their performance” (Schechter & Michalsky, 2013, p. 34). Administrators could leverage reflective practice to guide teachers’ efforts to grow professionally and personally. In fact, in their core practice about cultivating school culture, the EL network outlined how principals should build a professional culture of learning through reflection. Principals in EL schools were expected to reflect regularly toward personal and professional goals as well as school wide goals (EL Education, 2011). According to the EL Core Practices (EL Education, 2011), principals could help engender school-wide reflective practice by openly modeling reflection for staff and students as part of an ethic of self-improvement. Because EL principals took the time to model reflection, teachers saw that reflexivity was a valuable and honored part of improvement. Furthermore, when EL principals encouraged and praised teachers for being reflective, teachers felt more supported in their efforts to use both successes and failures to improve performance. As a result, teachers felt more capable and effective and ultimately more satisfied with their work (Dweck, 1986; Schechter & Michalsky, 2013).

Along with mastery goal orientation and a preference for reflective practice, growth mindset individuals tended to ask and give feedback more readily. Teachers with this kind of mindset viewed evaluation and feedback as an instructive tool rather than as a punishment. In fact, constructive dialog between teachers or between teachers and administrators was
particularly important when developing stronger incremental theory habits in schools (Hall, 2013). According to Hall (2013), administrator-to-teacher dialog helped build the trust needed to engender growth mindset in teachers. Furthermore, teacher-to-teacher dialog broke down divisions between individuals by providing opportunities to share praise and kind, helpful feedback about instruction and assessment with one another. Thus, administrators should leverage collaborative opportunities among the staff so that teaching and learning improved over time. In EL schools, administrators were tasked with creating an environment where all staff members were part of the learning community. They established norms for working together where trust and respect were central components. EL Education principals also modeled protocols that fostered collaborative inquiry about teaching and learning. As a result, teachers and administrators focused collaboration around the examination and evaluation of instructional plans, assessment plans, student work, and achievement data. Ultimately, teachers in EL schools were able to share expertise, build content knowledge, and focus on improvement free from judgment and blame (EL Education, 2011).

**Fixed Intelligence and Mindset**

The fixed view of intelligence has influenced the concept of giftedness in educational settings over time (Renzulli, n.d.; Reis & Renzulli, 2015). According to Renzulli (n.d.), talent and aptitude were traditionally seen as predictors of academic and life success. Typically, this type of giftedness was defined as lesson learning giftedness. Individuals with lesson learning giftedness thrived in learning environments where they experienced structured and deductive learning experiences. In other words, lesson learning focused on the acquisition, storage, and retrieval of new information. Furthermore, lesson learning giftedness was often measured by Intelligence Quotient (IQ) and aptitude tests, and Reis and Renzulli (2015) recommended that
high scores on achievement tests or IQ tests be used to initially identify students as gifted. According to Dweck (2006), fixed mindset individuals supported the use of standardized test scores to measure giftedness because they believed IQ and other aptitude measures could effectively measure fixed ability. Therefore, one measure, like IQ, could measure a person’s success and ability to improve forever. A concentration on giftedness and IQ scores was further supported by Duckworth and Peterson (2007). They stated aptitude was often defined by IQ and was tied to a wide range of achievement outcomes, like GPA, professional and academic societies, career potential, and job occupation. In fact, IQ scores were heavily used as part of admissions processes into colleges like West Point, whose Whole Candidate Score was comprised of Scholastic Assessment Test (SAT) scores and class rank along with leadership ability and physical aptitude (Perkins-Gough, 2013).

The belief in fixed intelligence was the foundation of entity theory (Gero, 2013). Fixed mindset individuals had very structured beliefs about ability, change, failure, success, and struggle. They believed intelligence was fixed and could not change substantially over time (Gero, 2013). Therefore, an individual with sufficient aptitude should be able to do change practice successfully without regard to mindset. As a result, fixed mindset individuals approached hardship and success differently than growth mindset individuals. Fixed mindset individuals avoided challenge and sought out easy accomplishments unlike their incremental theorist peers (Gero, 2013). Fixed mindset individuals reacted in this way because they developed a maladaptive pattern of behavior often characterized by challenge avoidance and low levels of perseverance in the face of challenge (Dweck, 1986). In other words, fixed mindset individuals viewed struggle and exertion of effort negatively because it implied a lack of ability (Gero, 2013). Due to their rigid view of effort and ability, fixed mindset individuals were
reluctant to take risks or to ask for feedback for fear of negative judgment. They saw their work as a lone adventure and believed individuals either do or do not possess the innate ability to teach (Dweck, 2014). As a result, fixed mindset individuals, set performance goals where they were more likely to be given favorable judgments of their competence and skill set (Dweck, 1986). When teachers viewed their work through the lens of fixed mindset, they did not feel they could improve their practice. Essentially, fixed mindset teachers did not grow from successes and failures because they believed their ability to teach was tied to fixed traits. In the same vein, administrators who saw teaching ability as fixed did not believe that teachers could improve with practice, feedback, reflection, and time. Therefore, fixed mindset leaders did not readily push their employees to improve their performance or help to grow job satisfaction in their buildings (Pink, 2009). Furthermore, fixed mindset administrators may struggle to lead in EL schools where the school-wide focus was built on the belief that all individuals were capable of high achievement and improvement through hard work (EL Education, 2011). Therefore, EL administrators must be mindful of how their personal mindset impacted the teaching and learning of students and staff members in the school. Administrator mindset could stretch teachers to improve over time, or it could stagnate improvement in the school setting.

Analysis of Self-Theory / Mindset

While intelligence and aptitude played an important role in a person’s success, the fixed mindset of an entity theorist may stand in the way of improving practice. In the world of fixed traits (like IQ), “success [was] about proving you’re smart or talented. . . . [In] the world of changing qualities—[was] about stretching yourself to learn something new. . . . developing yourself” (Dweck, 2006, p. 15). The willingness to stretch beyond the current bounds of achievement and understanding was what makes growth mindset individuals stand apart.
Growth mindset individuals thrived on challenge, and the bigger the challenge was the more they are willing to stretch (Dweck, 2006). Thus, mindset, whether fixed (entity theory) or growth (incremental theory), crucially affected a person’s willingness to change practice over time. Moreover, it greatly affected how administrators addressed their teachers’ work. This was particularly true in an EL school. EL administrators with a growth mindset could support teacher reflection and improvement over time, and they could encourage teachers to truly enjoy their work even when it was challenging. Growth mindset described in this section would be indicative of leadership espoused by the EL network (EL Education, 2011). Essentially administrator growth mindset encouraged and grew teachers’ internal motivators; it boosted an individual’s job satisfaction and performance (Pink, 2009). Fixed mindset teachers would not be left behind in schools led by growth mindset principals however. When fixed mindset teachers encountered growth mindset school leaders, some moved to a more growth oriented mindset with effort and time according to Teal (2012). After conducting multi-case study research in ethnically changing schools in Texas, Teal reported that fixed mindset teachers adjusted their instruction to meet the needs of the demographically changing student population. Furthermore, in the schools led by growth mindset oriented principals, Teal asserted fixed mindset teachers increased their overall efficacy due to the principal’s efforts to meet their needs. In fact, some of the fixed mindset teachers found in the Teal study shifted to a more growth oriented mindset due to the efforts of the principal. Therefore, EL administrators with growth mindset could address teacher attrition, frustration, and academic growth by encouraging genuine achievement on the part of all members of the learning community (Pink, 2009; EL Education, 2011).
What is Grittiness?

According to Duckworth (as cited in Perkins-Hough, 2013), grittiness was typically determined by two factors. First, grittiness, or tenacity, was often shaped by a person’s ability to be resilient. Second, tenacity was determined by a person’s ability to focus passions over a long term period. According to Duckworth and Robertson-Kraft (2014), grittiness, when defined as resilience plus sustained passion, was particularly important in the school setting. In a study done with novice teachers, Duckworth and Robertson-Kraft found that challenges associated with teaching could be discouraging and led to teacher attrition, especially among novice teachers. However, teachers displaying more resilience and sustained passion over the long term were less likely to leave the classroom during the middle of the year. Furthermore, Duckworth and Robertson-Kraft found that level of grittiness was also a quality predictor of teacher effectiveness. In fact, the grittier teacher more effectively influenced the performance of his or her students. Ultimately, grittiness, like mindset, determined the level of success a person experiences in academics and in life. Leaders could help to encourage tenacity and passion in workers by demonstrating that mastery and improvement demanded effort, grit, and deliberate practice (Pink, 2009). Like growth mindset, perseverance was a central characteristic of an EL school culture. In fact, teachers and administrators focused on student production of high quality work. In order to make high quality, professional products, teachers asked students to revise their work over time through multiple drafts. Like students, teachers were also expected to continually revise their craft over time. EL Education administrators established and maintained the structures necessary to promote professional growth. They leveraged frequent descriptive feedback, coaching, and evaluation to reinforce and institutionalize EL practices throughout the school (EL Education, 2011). EL administrators modeled how extended effort helped educators
to improve instructional practice and student achievement. More importantly, EL principals showed that change was worth the effort, that it was important to the overall improvement of the school, and that the effort was well worth the discomfort that it caused at times. Essentially, administrator grittiness could model how effort brought fulfillment and joy to teachers’ work (Pink, 2009; EL Education, 2011). In the sections that follow, readers will take a closer look at the two determining factors of grittiness: resilience and sustained passion. Readers will also explore how administrators can help instill to resilience and long term passion in their faculties.

The Story of Resilience

In their web article about resilience, the American Psychological Association (2015) asked how people may deal with difficult situations or circumstances that happened in their lives. Some individuals reacted to difficult situations like death, stress, or job loss with dread and uncertainty. In some cases, these individuals underwent drastic changes in outlook and personality, becoming withdrawn and even sullen (Southwick & Charney, 2012). However, other individuals were able to adapt well over time to life’s constant changes and challenges. It was the process of adapting well in the face of adversity that defined resilience, and it was this characteristic that partially defined a gritty person (APA, 2015; Duckworth & Peterson, 2007).

In their study of fishermen in Maine, Johnson, Henry, and Thompson (2014) further defined resilience as a social construct. The data from their qualitative study indicated the following factors helped to shape how people perceive resilience. First, survival played a role in resilience. In this case, individuals were still fishing although they have faced numerous threats and changes over the years. Furthermore, Johnson et al. described resilience as diversification and more specifically as a “whatever it takes” attitude. With changing rules and regulations, fishermen learned to diversify the kind of fish they tried to catch, and as a result fishermen “set
[their] ego aside and [got] in there and [did] whatever it [took]. Today...[they did] everything that nobody else wanted to do” (Johnson et al., 2014). The “whatever it takes” attitude described above was closely related to the concept of “getting by.” According to Johnson et al., fishermen described being resilient as their willingness to knuckle down during the hard times, to watch their expenses and diversify, if necessary, until easier times came. In other words, the fishermen in the Johnson et al. study do whatever it took to get by during downturns in the fishing market.

As addressed in the Johnson et al. (2014) study, socially constructed behaviors and values play an important role in shared settings. Administrators could serve as models of tenacity in EL schools. EL principals could demonstrate how teachers could be resilient in the face of struggle by serving as lead learners in the areas of curriculum, instruction, and assessment (Fullan, 2014). Furthermore, they could provide insight into ways teachers may diversify their practice and choices through descriptive feedback and coaching (EL Education, 2011). According to Hallowell (2011), individuals should spend most of their work time grappling and growing with new skills and content. Furthermore, Hallowell believed that people needed professional connection to complete the work necessary to grapple and grow, and one way to provide professional connection to individuals was through collaborative work. The Australian Institute for Teaching and School Leadership (n.d.) described collaboration in the school environment as a “community working to achieve a common goal through the sharing of practice, knowledge, and problems. Effective collaboration encourage[d] ongoing observation and feedback among colleagues where a culture of professional sharing, dialogue, experimentation, and critique [became] commonplace.” The importance of teacher collaboration in the development of teachers was described by Drago-Severson (2012) in her qualitative study about school climate and teacher development. Drago-Severson reported that all principals in her study thoughtfully
and strategically built a culture of collaboration in the school in order to address teacher efficacy. In the public-school setting, principals in Drago-Severson’s study modeled and encouraged the use of structured discussion protocols for collaboration, and they changed school schedules to allow teachers collaborative time for reflection and sharing. Many of the principals in the study also described how they helped teachers develop collaborative relationships with professionals in other schools. As a result of the principals’ efforts to facilitate collaboration, Drago-Severson explained that principals were able to more easily engender a culture of growth and shared values. Therefore, if administrators helped teachers to identify their strengths and if they developed a strong collaborative culture, then the school leaders could create an atmosphere where teachers creatively worked through problems in a team atmosphere. In essence, teachers were more apt to diversify their practice because they had a support system around them where sharing, experimentation, and helpful critique were the norm. As a result, teachers garnered more enjoyment from grappling, and their work in general, because administrators guided them into the right position with the right team.

Lastly, Carver (1998) stated individuals could respond to difficulty or “physical and psychological downturn” in four different ways: succumbing, survival with impairment, resilience (recovery), and thriving. First, when a person succumbed to hardship, he or she continued on a downward slide due to the compounded effects of additional stress after the initial incident. Second, when a person survived with impairment, he or she survived “but [was] diminished or impaired in some respect” after further trauma occurred (Carver, 1998, p. 246). After explaining the first two responses to adversity, Carver made a specific distinction between resilience, which he described as recovery from hardship, and thriving, which he explained as benefiting from encounters with adversity. When an individual thrived after adversity, he or she
“[benefited] or [gained] in some way from the experience and [could] apply that gain to new experiences, leading to more effective subsequent functioning” (Carver, 1998, p. 251). Thus, people could develop resilience behaviors, thoughts, and actions over time through repeated experiences with trauma and hardship (APA, 2015). The importance of resilience was no different in the school setting. Teachers could learn much from hardship and struggle with the support of administrators who can helped them find the right balance between stress and struggle. In fact, workers benefited from repeated struggle when leaders offered them opportunities to work through surmountable challenges (Hallowell, 2011). Specifically in EL schools, administrators aligned professional development, structured observations, one-on-one feedback, study groups, and instructional coaching to help support teachers’ individual professional growth (EL Education, 2011). Thus, when teachers encountered problems or struggles, EL principals made structures and resources available so that teachers found the right balance between stress and struggle described previously.

Factors Influencing Resilience

The American Psychological Association (APA) (2015) identified a variety of factors that contributed to the level of a person’s resilience. First and foremost, the American Psychological Association asserted that supportive relationships played a critical role in a person’s ability to develop resilience. Supportive relationships gave individuals opportunities to see resilience in action through modeling. Furthermore, supportive relationships provided individuals with reassurance, which bolstered people’s resilience when it was most needed. Hallowell (2011) stated in connected environments people felt more optimistic and upbeat, but more importantly individuals in connected environments felt more secure at work, which in turn led to less absenteeism, more resilience, and improved performance. The importance of
connection was also supported by Johnson et al. (2014). In their study, Johnson and his colleagues reported that the fishermen felt fishing was part of their social identity; therefore, they were less likely to abandon their work although fishing could be hard at times. Thus, connection with the larger community and culture of a place played a vital role in a person’s willingness to keep going even though the work was hard. In addition to relationships and connection, American Psychological Association stated the capacity to make realistic plans, problem solve, and control emotions all affected a person’s level of grittiness. In fact, Hallowell suggested there was a brain benefit from connected environments where people learned from one another. In schools where teachers were supported by their principals and peers, there was a stronger and more positive connection between individuals (Drago-Severson, 2012). Drago-Severson (2012) shared in her qualitative study of the principal’s role in developing positive school culture that teacher collaboration was vital to developing strong schools. According to Drago-Severson, the professional connections people developed through collaboration allowed teachers to safely and bravely talk about practice and to give each other feedback about teaching practice. Furthermore, it allowed teachers and principals alike to develop common goals and language around the work of the team. As a result of collaboration, teachers paid broader attention to the organization’s goals and thought and problem solved more creatively. Furthermore, the connection aligned the work of each individual so that the team worked through struggle together (Hallowell, 2011). Like the principals in Drago-Severson’s study, EL Education (2011) also honored and encouraged strong professional connection and collaboration. In the EL Education Core Practices, administrators were directed to promote effective collaboration through establishing norms for working together, through the use of protocols that foster collaborative inquiry, and through the establishment of structures to facilitate ongoing teacher collaboration.
Due to these mandates, EL administrators helped connect teachers with other innovative and creative thinkers. Furthermore, EL administrators established norms for collaborative work where teachers felt compelled to support their peers. As a result, teachers were more connected to their peers and to the work of the school. In turn, teachers were less likely to leave the profession or school because they had the right supports around them.

**Resilience and Optimism**

Like the skills and attitudes described above, optimism played an important role in the level of grit (or resilience) a person had (Johnson et al., 2014). In the case of the fishermen in Maine, investment in the future was the manifestation of optimism and resilience. Fishermen looked to the future and made long term decisions about their business even during tough times (Johnson et al., 2014). In fact, the optimistic outlook of the resilient fishermen allowed them to think more holistically and creatively when solving problems (Hallowell, 2011). However, a lack of optimism was manifested by a lack of psychological well-being. In the study, the resilient fishermen described the experiences of their less resilient peers. One resilient fisherman stated some of his peers turned to drugs because they were unable to pay for their boats, wharfage, insurance, or house payments (Johnson et al., 2014). At the core of the less resilient fishermen's experience was a sense of pessimism and helplessness. They felt they had a lack of control over their destinies and the inability to change what was happening to them (Seligman, 1990). Seligman (1990) countered these feelings, however. He stated there was a wide variety of traits and characteristics that could not be changed about a person, including eye color or race. However, “there [was] a vast, unclaimed territory of actions over which we [could] take control - or cede control to others or to fate. These actions involve the way we [led] our lives, how we [dealt] with other people, how we [earned] our money - all the aspects of existence in which we
normally [had] some degree of choice” (Seligman, 1990, p. 6). Thus, the fishermen, who felt they could control their destinies, looked to the future for better times and made decisions as such. In essence, they demonstrated more resilience because they reframed the challenges they were facing (Johnson et al., 2014). Leaders could play a special role in countering pessimism; they could build a positively connected environment where workers optimistically reframed challenges (Hallowell, 2011). First, Hallowell (2011) stated effective managers leveraged the power of noticing. In doing so, leaders verbalized what they saw workers doing, and as a result, their employees felt their work and expertise was valued. Like Hallowell, Demeulenaere (2015) believed that noticing the work of others was vitally important. In fact, Demeulenaere reported in his action research that he and the leadership team of the school used noticing to ensure new practices were implemented by teachers across the school. Demeulenaere shared that in order to communicate the focused improvement the leadership team needed to see, the team had to “be selective in what [they] wanted to see, notice, and comment on. Thus, [they] focused on articulating those changes [they] wanted to see, by only noticing and commenting on those actions” (Demeulenaere, 2015, p. 170). Demeulenaere shared that the leadership team used frequent classroom visits to notice the work of their teachers, and then they shared what they saw on the visits with the wider school community. Ultimately, with the help of the leadership team, Demeulenaere found that the most powerful way to affect practice in the school was to describe specific anecdotes or data from the classroom observations. Because the teachers knew the leadership team shared specific notices from the visits, the community of practice began to improve across the school. In fact, Demeulenaere discovered that even the struggling teachers more readily implemented the focused goals and strategies in their classroom due to the frequent visits and specific feedback given to the faculty. Therefore, like the leadership team in
Demeulenaere’s action research, the EL Network expected their school leaders to share specific examples of quality practice with the staff so that the results could be replicated (EL Education, 2011). Due to the feedback and noticing leaders provide, teachers were more willingly to persevere in the face of struggle.

Second, EL Education administrators could help teachers reframe failure and sustain improvement by changing the focus of the faculty from what was not working to what was. According to a qualitative study conducted by West et al. (2005), leaders who successfully led sustainable improvement moved the faculty past the barriers of progress to a realization that things can and must change. According to the data collected by West et al., the heads of these schools often raised the expectations of the staff, and in turn the principals broadened the teachers’ ability to “imagine what might be achieved, and [increased] their sense of accountability for bringing this about” (p. 89). As a result, as the teachers and students continued to experience success, West et al. reported that the staff and students’ self-confidence and academic skills increased over time. In fact, the principals in the study reported that improvement became easier due to ongoing positive growth experiences. Therefore, the data from the West et al. study indicated that reframing failure was key to building gritty and optimistic faculties. As such, leaders, like school principals, should use growth mindset and grit language and behaviors to help employees make the emotional flip when encountering barriers to progress (Hallowell, 2011).

**The Human Body and Resilience**

In their book *Resilience: The Science of Mastering Life’s Greatest Challenges*, Southwick and Charney (2014) went into great depth about resilience and human physiology. Various parts of the human body played a role in the experience and management of stress and
trauma. This included portions of the brain, the nervous system, and the endocrine system. In addition, various hormones and neurotransmitters found in the brain, nervous or endocrine systems all affected the body’s effectiveness to responding to stress and trauma. Southwick and Charney stated certain physiological factors affected how well the body produced and used portions of the brain, nervous system, and endocrine system. For instance, Southwick and Charney noted genetics affected how well the body used hormones and neurotransmitters. Neuropeptide Y (NPY) neurotransmitter helped to decrease anxiety and quickened the body’s ability to return to baseline after being exposed to stress (Southwick & Charney, 2014).

**Resilience and Play**

Environmental factors play a role in how well the body engaged nervous, endocrine, and brain systems to manage stress. According to Stelmach and Nerlich (2015), researchers studied how environmental toxins or factors affected gene expression in the field of epigenetics. In fact, Stelmach and Nerlich explained social scientists were beginning to study how epigenetics linked nature and nurture. Though this field was fairly new, Southwick and Charney (2014) recognized how epigenetics could inform our understanding of resilience and stress vulnerability. In fact, lifestyle choices could affect the hardiness of the body and, therefore, a person’s level of resilience. According to Southwick and Charney, regular physical activity helped to improve mood, boost energy levels, promote better sleep, and manage weight. As a result, exercise helped to manage if not lower stress over time because it bolstered positive physiological and emotional resilience. In addition, physical exercise was linked to improved cognition and reasoning (Southwick & Charney, 2014). According to Gould (2000), physical activity in the form of sports could also help individuals develop moral reasoning. In some cases, sports placed people in dilemmas where they made decisions and acted on them immediately (Gould, 2000).
Thus, as individuals gained more experience playing sports and making decisions with regard to dilemmas in play and interrelations, they possibly could be strengthening reasoning over time (Carver, 1998; Gould, 2000).

While athletic sport may not be appropriate in a professional school setting, principals could leverage competition and play as a way to engage the imagination of teachers. Hallowell (2011) stated imaginative play led to great discoveries and problem solving. In fact, he suggested the most effective leaders fostered play in the organization. Leaders even needed to encourage dissent in the work setting. In EL schools, principals were encouraged to recruit and foster individuals with diverse perspectives and backgrounds so that teachers were surrounded with a variety of innovative and creative peers (EL Education, 2011). Thus, in a culture of play and imaginative engagement, teachers were encouraged to take risks and to offer out of the box solutions. In cultures of play, teachers had permission to be different and to think divergently; they were encouraged to problem solve. Furthermore, imaginative engagement pushed teachers to resiliently work through problems and identify creative solutions when the standard approach was not appropriate or fails (Hallowell, 2011).

Neuroplasticity, Thriving, and Resilience

As cited before, research indicates people could learn to be more resilient or to psychologically thrive, after repeated experiences with stress and trauma (Carver, 1998; APA, 2015). The physiological basis for learned resilience was neuroplasticity (Southwick & Charney, 2014). Fullan (2011) described neuroplasticity as reshaping the brain. In essence, “we [could] engage in repeated new actions and thoughts that actually forge and retain new neural pathways. Thus, the brain [could] change its own structure and function through activity” (p. 4). Southwick and Charney (2014) went further stating that the brain was highly malleable,
and like muscles in the body, it could be strengthened or weakened, depending how much it was used. As a result, people had the power to change how their brains reacted to the stress and ultimately to become more stress resilient. Carver (1998) explained further by saying resilient individuals who thrive acquired new skills to manage the internal and external forces acting upon them. Furthermore, resilient individuals gained a psychological sense of mastery which in turn built their confidence to manage stress and trauma in the future. Finally, Carver recognized that some trauma and stress had social consequences. Resilient individuals who thrived understood how to leverage personal connection during hard times; they grew more resilient when they sought out help from trusted individuals. In the end, the resilient individual who thrived not only bolstered his or her level of resilience, but he or she also strengthened the personal relationships utilized during times of need.

When principals bolstered their resilience along with the resilience of their teachers, they strengthened the personal and professional relationships in the school. These strong personal connections were vital as leaders sought to improve and change professional practice (Hallowell, 2011). More importantly, EL leaders that promoted strong professional relationships helped to define and manage positive working environments for teachers (Hallowell, 2011; Fullan, 2014). By cultivating a positive school culture where teachers supported one another professionally and personally, EL principals bolstered teachers’ resilience in the face of struggle. For instance, EL principals ensured that mentoring, teaming, and peer observation structures were in place to build trust and promote collegial relationships. Furthermore, EL principals fostered and modeled critical attributes of trust, like respect and integrity (EL Education, 2011). In doing so, principals in EL schools provided safe and connected environments where teachers took risks and tried new
strategies without fear of blame. As a result, teachers felt more connected and more satisfied with their work environment.

The Science Behind Optimism

Like the larger construct of resilience, optimism also could grow and change over time through repeated experience (Southwick & Charney, 2014). According to Southwick and Charney (2014), optimism highly engaged the prefrontal cortex, which was the control center for executive functioning and learning. Thus, individuals could teach themselves to be more optimistic with practice and experience. Seligman (1990) asserted that an individual could teach himself or herself to be more optimistic, and in turn more resilient, by learning how to distract and dispute. Resilient individuals thought of something better when a pessimistic belief arose, thus distracting themselves from the negative. Furthermore, resilient individuals also chose to dispute negative or pessimistic beliefs. And, “disputing [was] more effective in the long run, because successfully disputed beliefs [were] less likely to recur when the same situation [presented] itself again” (Seligman, 1990, p. 217). Again, neuroplasticity played a role in augmenting optimism. By disputing pessimistic thoughts, individuals built or strengthened neurons around new beliefs or behaviors concerning optimism (Southwick & Charney, 2014). This was good news for a resilient person because it indicated he or she could continue to grow and thrive over time by thinking more positively. Furthermore, it was good news for administrators. Due to mirror neurons found in the brain, principals could help teachers to dispute negative thoughts through modeling and discussion. In fact, Hallowell (2011) shared that mirror neurons fired in imitative fashion when one person observed another doing something. If an individual was distressed or optimistic, mirror neurons created a version of this
stress or optimism in the observer. Therefore, there was a biological basis for optimism, and it could be modeled and emulated by all individuals.

The power of a principal modeling optimism and persistence was supported by a qualitative study conducted by Wieczorek and Theoharis (2015). In their study, Wieczorek and Theoharis explored how administrators balanced the emotional needs of teachers with the accountability driven mandates of the Race to the Top grant. In the study the principals described the fear and frustration teachers felt over the work load required to successfully meet the requirements of the Race to the Top grant. To counter these feelings of fear and frustration, principals reported that they could not allow teachers to focus on the uncertainty and anger surrounding the Race to the Top work. Rather, the principals in the Wieczorek and Theoharis study reframed teachers’ frustration to help them develop persistence, pride, and enthusiasm in the midst of the grappling with Race to the Top requirements. Furthermore, the principals modeled dogged optimism by frequently highlighting successes of students and teachers. By providing a visual model of persistence and passion for teachers, the principals were able to “support the power of teachers’ persistence and emotional needs to develop a plan of action” (Wieczorek and Theoharis, 2015, p. 297).

Because of mirror neurons, principals demonstrated specific behaviors to develop optimism in their faculties. Administrators could do so by openly disputing pessimistic thoughts in front of teachers and, therefore, demonstrating an understanding of teachers’ struggles and concerns. According to EL Education (2011), one way leaders could build teacher efficacy was by modeling best practices in leadership and instruction throughout the year. In fact, EL leaders were expected to openly model competence in technical and adaptive skills for their teachers, and they did so by openly discussing both success and failure in the face of struggle. When
principals openly modeled reframing failure or when they highlight successes, the principals modeled how to balance the stressful and emotional work of teaching with the instructional skills and behaviors needed to move past frustration (Wieczorek and Theoharis, 2015). Ultimately, by openly modeling dogged optimism, administrators could help to create positive work environments where teachers feel free to try new strategies and implement new plans.

**Grit, Fear, and Failure**

The research and writing in the area of resilience indicated that grittiness plays a critical role in a person’s response to failure and adversity (Perkins-Hough, 2013). More importantly, resilience could be learned over time and bolstered by experiences with trusted individuals (Carver, 1998; APA, 2015). Gritty individuals who thrive learned how to “manage their fears of change and the unknown, their feelings of insecurity and powerlessness” (Hallowell, 2011, p. 92). Gritty individuals who were thriving learned how to make an emotional flip when they encountered fear. Essentially, they reframed the fearful situation; they reframed the fear of failure as an opportunity to learn (Hallowell, 2011). Southwick and Charney (2014) described the reframing process as facing the fear. At times, individuals must learn to view fear as a guide. In fact, a certain amount of fear helped to focus and sharpen decision making, actually increasing performance (Hallowell, 2011; Southwick & Charney, 2014). The key, according to Southwick and Charney, was learning how to control the fear, hence the need to reframe it so that fear of failure was “a platform for developing courage, self-esteem, and a sense of mastery” (p. 57).

**Controlling Fear of Failure**

Learning to control fear of failure was particularly important in a culture of change (Hallowell, 2011). Vaill (1996) described change as the ongoing, ever present force in any
organization. In fact, Vaill asserted that organizational systems were intertwined, and as a result changes in one area affected the effectiveness of other sub-systems. Sometimes these changes could be turbulent, complex, costly, unanticipated, and messy. Furthermore, change was inevitable according to Vaill; therefore, leaders needed ways to navigate the fear and concern so that employees could accomplish the work of change.

In a school setting, fear of change was particularly poignant since teaching could be challenging work. Duckworth and Robertson-Kraft (2014) found that “grit may have an important salutary impact on teacher performance” in the school setting (p. 2). School leaders played an integral role in helping staffs manage fear of failure due to change (Hallowell, 2011). As the leader of the organization, the principal could stand in as the manager of fear. He or she could model the emotional flip that occurred when a person reframed failure due to change. In essence, he or she could model grit in the face of fear. Leaders who modeled grit effectively acknowledge “the reality of the situation, but [they worked] to see its realistic bright side. [They worked] to instill rugged optimism in the culture of” the school setting (Hallowell, 2011, p. 92). Ultimately, when school leaders modeled grit and foster it for their staffs, they could positively impact how teachers and other school members approach and accomplish change action. EL Education administrators had many ways in which they can model grit. For example, they could openly reflect on “their own progress toward personal goals and toward addressing school goals, modeling for staff and students an ethic of self improvement” (EL Education, 2011, p. 79). Furthermore, EL administrators could model gritty behavior by learning alongside the staff, mastering new practices, and demonstrating how to learn and teach effectively in professional development and staff meetings. Finally, EL school leaders could also foster grit in the staff by cultivating a shared ownership of the successes and challenges across the school by putting into
place collaborative structures and practices that reinforce the importance of collegial trust and connection as a foundation for success (Hallowell, 2011; EL Education, 2011).

The Connection between Grit and Giftedness

As discussed in the sections concerning mindset, giftedness was often linked to a person’s aptitude (Renzulli, n.d.). Experts traditionally measured giftedness, or lesson learning giftedness, quantitatively using IQ measures. Giftedness was also linked to many other achievement outcomes like GPA, job occupations, and induction into academic/professional societies (Renzulli, n.d.; Duckworth et al., 2007). According to Renzulli (n.d.), experts could also determine giftedness by considering a person’s creativity and productivity. He called this type of giftedness creative-productive giftedness, which he defined as a person’s ability to solve problems and develop original solutions. In the past there was no single measure of criteria that quantitatively determined the level of creative-productive giftedness (Renzulli, n.d.). Thus, aptitude scores like IQ could not fully measure all types of giftedness, and Duckworth et al. (2007) stated it also could not explain why some individuals accomplished more than their peers with equal intelligence. In addition to having cognitive ability, Duckworth et al. described high-achieving individuals as creative, vigorous, emotionally aware, charismatic, and self-confident. Thus, aptitude was not the sole determining factor in ability, giftedness, and success (Galton, 1892). High achieving, individuals needed “the concrete triple event of ability combined with zeal and with capacity for hard labor” (Galton, 1892, p. 38). Therefore, a leader’s willingness to work hard with zeal and persistence over the long term mattered when it came to supporting teachers through struggle. Teachers’ focused passion for task commitment should be developed over time so that they continuously improved and felt satisfaction from their work (Galton, 1892; Renzuli, n.d.). As such, principals should find ways to help teachers focus passions and ability
in order to engage in creative work and change action. According to EL Education (2011), principals focused teacher passions by encouraging staff members to assume leadership roles in their area of expertise. EL principals promoted shared leadership by developing leadership teams, whose goal was to act as a “collective force to increase the learning and engagement of every student through continuous improvement of curriculum, instruction, assessment and school culture” (EL Education, 2011, p. 83). Furthermore, EL principals promoted shared leadership through establishing structures for shared decision-making. In EL schools, the decision-making model was transparent and results were shared publically. Teachers participated in the decision-making process when they had expertise in the area of study or when they had a passion for its outcome. Though they may disagree with the decision that was made, teachers in EL schools embraced the shared-decision because they had a voice in the process (EL Education, 2011).

**Grit and Focused Passion**

When one considered how creative-productive giftedness applies to grittiness, he or she discovers that grit is more than resiliency. Grittiness is also partly determined by a person’s ability to focus passion over a long period of time (Perkins-Hough, 2013). In fact, the importance of focused passion was a vital component of the work completed by Duckworth and her colleagues (Duckworth et al., 2007; Duckworth & Robertson-Kraft, 2014). According to Duckworth’s et al. (2007) research, gritty individuals who thrive worked strenuously toward overcoming challenges. These individuals maintained effort and interest over many years even when they encountered failure, adversity, or plateaus in performance (Duckworth et al., 2007). In fact, “the gritty individual [approached] achievement as a marathon; his or her advantage [was] stamina. Whereas disappointment or boredom signals to others that it [was] time to change trajectory. . . , the gritty individual [stayed] the course” (Duckworth et al., 2007, p. 1087).
Therefore, talent alone did not ensure a person would spend more time completing a task connected with that talent (Perkins-Hough, 2013). In fact, “grit and talent either [were] not related at all or [were] actually inversely related” (Perkins-Hough, 2013, p. 16). Individuals that were talented in an area but had not developed grit often quit when they met a predetermined threshold of success or when a task actually became unusually challenging for them. However, individuals, who possessed talent in an area and also developed grit, tried to maximize their efforts to get the best outcome (Duckworth et al., 2007). Ultimately, individuals, like school personnel who combined ambition (or focused passion / grit) and talent (or ability), were most likely to succeed (Perkins-Hough, 2013).

While the research of Duckworth et al. (2007) and Perkins-Hough (2013) helped to illustrate how grittiness led to success, Richmond (2015) found that grit was not always a predictive indicator of success. In a study conducting hypothesis testing to determine the influences of general intelligence and non-cognitive factors on the grade point average (GPA) of multi-ethnic students, Richmond shared that GPA was significantly predicted by general intelligence measures. However, Richmond also found that grit was not significantly correlated with the GPA of students in the study. In addition, Richmond indicated that grit was not a better predictor of GPA for whites than Hispanics in the study.

In addition to the data presented by Richmond, other researchers presented how elongated periods of grit and persistence was not always healthy. Mixed-methods research conducted by Miller and Wrosch (2007) indicated that long-term persistence toward unreachable goals could lead to emotional and physical problems. Miller and Wrosch asserted in the findings of their mixed-methods research that goal regulation played a crucial role in adolescent physical and emotional health. The researchers shared that goal disengagement was a significant
predictor in the body’s ability to manage C-reactive protein (CRP) inflammation, which is a marker of systematic inflammation. Specifically, the researchers asserted that when adolescents were unable or unwilling to disengage from unreachable goals, they experienced longer periods of heightened CRP inflammation, which could lead to diabetes and heart disease later in life. Because of the long term effects of CRP inflammation, Miller and Wrosch recommended that adolescents be taught a balanced approach to persistence so that they experience shortened periods of inflammation. Essentially, adolescents needed to be taught when it was acceptable to quit and when it made sense to persist through tough challenge. In doing so, students would be more able to manage the physical affects of long term stress on their bodies.

To help alleviate long periods of stress found in the work places, Hallowell (2011) suggested that leaders should help their employees find their passion. Because school administrators served as leaders in the school setting, they too could help teachers to identify more clearly which of their interests and skills added the greatest value to the organization. In doing so, administrators could assist teachers as they matched their skill sets with the best possible position in the school. In fact, Heather Reisman (as cited in Hallowell, 2011) wrote, “The better the fit, the better the performance. . .they [could] do the job but [there was] room to challenge and stretch them too” (p. 45). Thus, if administrators helped teachers find their best fit in the organization, they ensured teachers were satisfied, even excited, with their work and less likely to leave when times of struggle come.

**Predictive Validity of Grit**

Because gritty individuals persevered and focused passion over time, they tended to be more successful than their less gritty peers (Duckworth et al., 2007). They essentially demonstrated long term task commitment. Task commitment could be defined as focused
motivation (or passion), and it represented the effort individuals put forth in order to solve a particular problem or to perform a certain task (Renzulli, n.d.). Furthermore, task commitment required individuals to demonstrate perseverance, endurance, and dedicated practice; and it was related to one’s belief that he or she could accomplish the task (Renzulli, n.d.). In other words, task commitment was related to growth mindset because it connected ongoing effort and practice with improved performance.

The effects of grit (or task commitment) were illustrated by a longitudinal study completed by Duckworth and Robertson-Kraft (2014). In this study of first year teachers, Duckworth and Robertson-Kraft investigated “the predictive validity of personality qualities not typically collected by school districts during the hiring process” (p. 1). In other words, they wanted to determine if grit, defined as perseverance and passion for long-term goals, explained the variance of first year teacher retention. In their longitudinal study, pre-service teachers who reported multi-year commitments on their resumes were more likely to finish their first year than their peers who did not. In fact, evidence of sustained passion and perseverance in activities on resumes were more predictive of retention and effectiveness than college GPA, SAT score, and leadership ratings from interviews (Duckworth & Robertson-Kraft, 2014). The work of Duckworth and Robertson-Kraft indicated school leaders should consider adaptive traits like grit when they hired teachers if they wished to select an effective candidate.

In an additional study reviewing the predictive nature of grit pertaining to retention, Eskreis-Winkler, Shulman, Beal, and Duckworth (2014) found grit, described as perseverance for long-term goals, better predicted the retention of individuals in the military, workplace sales, high school, and marriage than other factors like intelligence, age, or physical fitness. According to their research data, gritty individuals were less likely to leave their life commitments. Gritty
soldiers were more likely to complete rigorous military training, gritty sales representatives were more likely to stay in their jobs, gritty high school students were more likely to graduate, and gritty men were more likely to remain married (Eskreis-Winkler et al., 2014). Based on the data from this study, it appeared grit, as in the study described above, was a valid predictor of the successful completion of tasks. Furthermore, in the case of this study, it illustrated how the construct of grit applied to a host of life contexts and situations (Eskreis-Winkler et al., 2014).

Therefore, when administrators were recruiting specific teachers, they should seek out individuals with high levels of grittiness if they wanted teachers to remain in the field. In fact, EL Education (2011) explained principals should look beyond the traditional pool of teachers and recruit staff members who had a driving passion for continuous improvement and raising student achievement. As a result, EL principals sought out very specific individuals to join the team. They hired innovative and creative individuals who embody characteristics aligned with the school’s vision. This included high levels of growth mindset, focused passion, and grittiness.

In addition to the connection of grit to the possible retention of teachers, a study conducted by Davidson (2014) indicated grit could also predict a principal’s ability to affect transformational change in schools. According to Davidson, grit was significantly and positively related to self-identified transformational leadership behavior. In fact, on a grit scale of one to five, with five being the highest possible score the elementary principals, who self-identified as transformational leaders had an average grit score of 3.90. Specifically, Davidson identified two grit related behaviors as positive predictors of self-reported transformational leadership. These grit behaviors included “I have overcome setbacks to conquer an important challenge” and “I am diligent” (Davidson, 2014, p. 68). The Davidson study supports the current study’s research proposition that grit could affect a person’s ability to thrive during challenge. More specifically,
the Davidson study indicated that gritty EL Education principals could facilitate transformational change because of their passion for the work conducted in EL schools and their ability to be resilient in the face of challenge.

**Analysis of the Effects of Grittiness**

In addition to talent and aptitude, evidence from previous research about grit indicated that grit played in integral role in the success of a person (Duckworth et. al, 2007; Eskreis-Winkler, 2014; Duckworth & Robertson-Kraft, 2014; Perkins-Hough, 2014). When researchers looked more deeply at the construct of grittiness, they found both perseverance and resilience were important (Duckworth et al., 2007). These achievement-related traits worked hand in hand to influence a person’s work and life (Duckworth & Quinn, 2009). Essentially, they represented the “cumulative effort individuals [invested] in improving skill and, concurrently, increasing productive output” (Duckworth, Eichstaedt, & Ungar, 2015, p. 16). Grit, therefore, was a compound trait comprised of a person’s interests and level of effort (Duckworth & Quinn, 2009).

Furthermore, much of Duckworth’s (Duckworth et al., 2007; Duckworth et al., 2015) research indicated grittiness was a better predictor of achievement than talent. It could be concluded that consistency of interest (focused passion) and perseverance of effort (resilience) were critical determinants of success (Duckworth et al., 2015). As a result, EL principals should model and foster focused passion and resilience, in essence grit, if they wished to move organizations forward during times of change and improvement (Hallowell, 2011).

**Resistance to Change**

According to Fullan (2001), teachers and administrators worked in chaotic conditions. In fact, change was a constant force affecting how school staffs do their work (Vaill, 1996; Fullan, 2001). People felt anxious, confused, and even fearful in cultures of rapid change, and as a result
organizations experienced what Fullan called implementation dips (Fullan, 2001). Fullan (2011) shared that “new skills and understandings have a learning curve” (p. 71). He explained early in the change process leaders and employees should expect difficulties (Fullan, 2001). In fact, Fullan (2002) said the first six months to a year would be bumpy, and leaders would encounter resistance from employees. According to Fullan (2001), individuals undergoing an implementation dip experienced two kinds of problems. First, they could experience a social-psychological fear of the change. Second, they could lack the technical knowledge to navigate the change successfully.

Research completed by Powell and Kusuma-Powell (2015) supported Fullan’s (2001) description of the implementation dip. Powell and Kusuma-Powell specifically researched teachers’ response to professional development, and they stated teachers resisted professional learning because of technical and adaptive challenges. According to Powell and Kusuma-Powell, technical challenges required some type of informational learning. For instance, a technical challenge could include learning a new software product or adopting a new planning model, learning which directly affected the teacher’s behaviors and skills. “Technical challenges [were] generally relatively easy to address and [did] not require a large investment of time or energy” (Powell & Kusuma-Powell, 2015, p. 67). Powell and Kusuma-Powell also described adaptive challenges in their work. Teachers’ reactions to adaptive challenges were related to socio-psychological fear of change described by Fullan (2001). These types of challenges were related to transformational learning, which required individuals to evaluate their beliefs and assumptions about teaching and learning. Transformational learning could even call into question a person’s professional identity. Due to the nature of adaptive challenges, they were often more complex than technical challenges, and adaptive challenges required more time and
effort to address (Powell & Kusuma-Powell, 2015). According to Powell and Kusuma-Powell, many teachers resisted changes brought about by professional learning because they did not see the value of the change or the mission and vision for the change action. According to Bohn (2014), teachers, who were resisting due to adaptive challenge, exhibited a variety of behaviors including a lack of belief that the administration would help them or a lack of confidence in their own ability to improve. Other teachers resisted adaptive challenges because they preferred the traditional methods and believed the change in practices would require too much work on their part. Lastly, some teachers simply lacked the drive or desire to improve. In essence, they lacked motivation (Powell & Kusuma-Powell, 2015).

Resistance was not always a negative, however (Bohn, 2014). “Resistant teachers [could] have a profound effect on the school climate and culture in both positive and negative ways” (Bohn, 2014). Resistors had a powerful influence over the work of an organization, and according to Fullan (2001) a resistor's influence could be used to actually navigate change action successfully. He suggested redefining resistance as a positive force. Effective administrators who redefined resistance understood that a resistor’s voice offered a different perspective to problems; they understood the organization could learn from people who disagreed with the change action initially. Fullan even stated conflict and disagreement around change action was fundamental to its success in the end. In fact, according to Reeves (2010) educational systems, who sought to improve continuously, welcomed resistance when it was based on an ethic of hypothesis testing. An ethic of hypothesis testing occurred in schools when advocates and resisters commit to exchanging alternative hypotheses and ideas rather than personally attacking the ideas of their peers. EL Education (2011) also suggested divergent views helped to strengthen a culture of inquiry among the staff. EL administrators wanted to identify and
encourage diverse perspectives and sought out individuals with different backgrounds to work in their schools. At the same time, EL administrators established collaboration norms and structures so that all perspectives of the team were heard and honored. As a result, teachers in EL schools understood that different perspectives are important and helpful in the team’s efforts to continuously grow and improve.

**Administrator Role in Resistance**

If administrators recognized the positive impact of resistance, they often practiced impressive empathy (Fullan, 2011). They accepted the perspective of the resistor, and they found ways to relate to the resistor. In essence, administrators who practiced impressive empathy put themselves in the shoes of the resistor and attempted to see the change action through the resistor’s eyes. In doing so, effective administrators understood that a person’s resistance was not fixed. Rather, some people resisted change due to the circumstances or situations. Maybe resistors lacked information for understanding the change action; maybe they lacked the technical skill to make a switch in practice. When leaders believed behavior was situational, they provided the appropriate adaptive and technical supports to help individuals move through change action (Fullan, 2011). Appropriate supports included tailored professional development (Kwakman, 2003). In fact, survey data from Kwakman’s (2003) study indicated teachers more willingly participated in professional development when the learning met the personal, task, and work environment needs of the individual. EL Education supported the notion of personalized professional development in their Core Practices (EL Education, 2011). The Core Practices (2011) proposed principals should provide the necessary resources needed for individual teachers to expand their personal content knowledge and instructional practices. EL Education principals were expected to individualize professional growth by establishing small
study groups on specific topics needed by teachers, leveraging student-centered coaching models, and using structured observation tools so that teachers received the support they needed to improve practice, both individually and collectively.

Furthermore, the manner in which teachers participated matters. According to the survey data, teachers participated more in professional reading, sharing ideas with colleagues, and collaborative planning than they did in reflection of performance. Reeves (2009) stated the learning alone was not enough. Teachers must also participate in deliberate practice. Teaching, like all cognitive skills, must be practiced if it was to improve. A variety of administrative supports could help teachers practice more deliberately. These included expert coaching, administrator feedback, and self-assessment. More importantly, teachers needed the time to apply feedback immediately if administrators wished to see improved performance. Fullan (2011) called the cycle of learning and applying practice deliberative doing. In fact, Fullan believed teachers and administrators must act their way into a new way of thinking if they wished to make real changes to professional behaviors. Administrators could facilitate the deliberative doing process by building the capacity of their staffs. Capacity building focused upon individual and group learning; it worked specifically to fill in the gaps caused by adaptive and technical challenges described above (Fullan, 2014; Powell & Kusuman-Powell, 2013). Fullan (2014) asserted that administrators could build the capacity of their staffs by selecting a small number of core priorities, providing opportunities for people to practice new behaviors in connection with these priorities in a climate of non-judgmentalism, and establishing a reflective process that highlights the relationship between the practice and the results. In EL schools, principals narrowed the focus of professional learning by aligning the professional development to the goals and learning targets identified on the school’s instructional work plan (EL
According to Smith and Newman (2014), when an EL school’s work plan was aligned to the needs of the teachers, all stakeholders were more engaged in the work of the school. In fact, teachers had greater support, and there was more focused accountability for achievement results. Ultimately, the professional learning and change action moved from a central focus for administrators in an EL school. Rather, the work plan became the work of the whole staff and led to continuous improvement on the part of all members of the school.

**Change and an Accountability Culture**

As appealing as capacity building was, teachers and administrators were required to practice it in a high stakes accountability culture. According to Fullan (2011), the educational system in the United States had been in a “constant state of urgency” since the release of the National Commission on Excellence in Education report, *A Nation at Risk*, in 1983. The No Child Left Behind (NCLB) legislation was one of many reform movements put into place to address the needs described in the *A Nation at Risk* report. The NCLB legislation required students to be tested in grades three through eight in reading and math in order to prove they had achieved adequate yearly progress in their test scores. Furthermore, by year 2014 the law required all students to not only improve their scores but also to score proficient on basic tests. If schools failed to reach annual yearly progress two years in a row, it faced increasing escalating consequences, which included possible closure (Fullan, 2011). Accountability-driven reforms, like the NCLB legislation, “[used] assessment of performance, punishment, and rewards” as a means to drive practice changes. It assumed rewards and punishments were required to improve performance and increase productivity on the part of students and teachers (Pink, 2009). Research indicated, however, that extrinsic rewards and punishments did not improve performance over time. In fact, extrinsic rewards and punishments “[produced] less of
the very things they [were] trying to encourage. . . . When used improperly, extrinsic motivators [could] have another unintended collateral consequence: they [could] give us more of what we do not want” (Pink, 2009, p. 47). Pink (2009) stated extrinsic motivators ultimately encouraged short-term thinking, limited creativity, and dampened motivation at the expense of the change action. Fullan (2014) went on to explain that accountability reforms like NCLB actually limited how much influence an administrator had on the performance of his or her teachers and students. “To be explicit, ‘standards and accountability’ [were] exceedingly weak strategies for driving reform” (Fullan, 2014, p. 24). On the other hand, accountability could be effective when it was married to capacity building described in the section above. When the two come together, staffs became increasingly committed to the change action, to the team, and to the system’s mission and vision as a whole. For example, Fullan (2010) described how capacity building in conjunction with accountability produced improved scores in literacy, numeracy, and graduation rates in York Region District Schools located in Toronto, Canada. For instance, at Crosby Heights, a K-8 school in the district, the percentage of students meeting standard in reading, math, and writing all improved when capacity building and accountability were paired. In fact, in all three subject tests most students met or exceeded standard in the school. Therefore, it appeared staff members were more able to achieve the results needed for accountability when accountability measures like testing were married to principals’ effort to focus capacity building on individual and group needs (Fullan, 2014). According to EL Education (2011), EL principals helped to build teacher capacity by providing frequent and descriptive feedback to teachers through the learning walks structure. In learning walks EL principals and teams of teachers regularly participated in protocol-driven walkthroughs in classrooms to identify and define qualities of effective instruction. They used these walkthroughs to identify patterns of
instructional strengths and weaknesses across the school. EL Education principals and teachers then gave timely and specific feedback to the whole staff about what was observed during the learning walk. The school team then used the data from the learning walk to make adjustments to professional learning and the school’s work plan based on the needs of the faculty.

**Non-Cognitive Traits: Understanding the Overarching Construct**

The constructs of mindset, grit, and resistance to change were all part of a larger view of competence being studied (Duckworth & Yaeger, 2015). In the past, researchers primarily quantified cognitive traits concerning numeracy and literacy when measuring student competence. For example, schools typically used IQ and standardized tests in the areas of reading, math, and sciences to quantify student giftedness (Renzulli, n.d.; Brunello & Schlotter, 2011). However, researchers more recently have begun to study the effects of non-cognitive attributes on the success of students and adults (Brunello & Schlotter, 2011; Duckworth & Yeager, 2015). More specifically, Duckworth and Yaeger (2015) stated the larger category of non-cognitive traits encompassed a variety of competencies including: goal-directed effort (IE: grit and mindset), healthy social relationships (IE: emotional intelligence), and sound judgment and decision making (IE: open-mindedness).

Interest in the effects of non-cognitive traits was not solely an American phenomenon. The European Commission (2007) produced a framework outlining key competences helping individuals to be flexible in the rapidly changing and interconnected world. The framework included skills in cognitive areas like language, numeracy, literacy, metacognition, and information technologies. However, non-cognitive traits also were threaded throughout the reference framework designed by the European Commission. The European Commission (2007) stated “critical thinking, creativity, initiative, problem-solving, risk assessment, decision-taking,
and constructive management of feelings” all played a critical role in the Reference Framework (p. 3). More specifically, in the learning to learn (metacognition) section the framework addressed grit and mindset. This part of the framework stated individuals with a positive attitude in the area of learning to learn included an individual's motivation and confidence to succeed as well as his or her ability to overcome obstacles or struggles when necessary (European Commission, 2007).

**Methodological Issues: Defining the Constructs**

Due to the wide variety of specific traits falling under the non-cognitive construct, the definition or description of non-cognitive traits was quite expansive and problematic to define (Duckworth & Yaeger, 2015). The term cognitive, as described above, was typically defined as intellect or subject matter achievement. Non-cognitive, however, was often the default term used for all other traits not typically measured in the school setting and included the character and work traits described in the section above (Duckworth & Yaegar, 2015). Duckworth and Yaegar (2015) believed the non-cognitive construct was be too broad to be useful. Furthermore, they contended that the label non-cognitive traits misled readers, indicating these features of human behavior were void of cognition. In fact, according to the researchers all psychological functioning required some cognitive abilities, which included executive functioning, working memory, and long term memory.

In addition to the very broad category of non-cognitive traits, some elements of personality and character had multiple meanings. Specifically, resilience, a component of grit, had a variety of definitions in the literature. Luthar et al. (2000) stated there was little consensus concerning a widely accepted operational definition for resilience. Furthermore, there were substantial variations in the ways researchers measured resilience. Resilience could be
characterized by a person’s ability to positively overcome challenge, or it could be defined as recovery from trauma. Resilience also referred to the positive outcomes people at risk experience after trauma happened. In addition, Luthar et al. asserted researchers conceptualized resilience as a personal trait and as a dynamic process people underwent, thus interchanging the terms in the research. For example, Johnson et al. (2014) listed five qualitative indicators of resilience that addressed both process and traits values. One might categorize three of the indicators as process (survival, diversification, and getting by), and one could categorize the two additional indicators as personal traits (social identity and optimism). On the other hand, while Carver (1998) restricted his resilience definition to process, he further refined it by stating there was a difference between resilience and thriving. Resilience indicated a return to a prior state after trauma, and thriving was a “better-off-afterward experience” according to Carver (1998, p. 247).

Lastly, Rashid (2011) stated western cultures predominantly informed the definitions of resilience, thus ignoring how resilience was viewed and manifested in outside communities and cultures. The belief systems and cultural contexts of the individual played an important role in how a person reacted and overcame trauma. As one can see, there was wide variety of definitions for resilience and non-cognitive traits; therefore, researchers should seek ways to clarify what should be included in the definitions for this construct.

**Methodological Issues: Quantitative Measurement of Constructs**

Duckworth and Yaegar (2015) identified common approaches to quantifiably measuring non-cognitive traits, including self-report questionnaires, surveys, or performance tasks. According to Duckworth and Yaegar, researchers most often used self-report and teacher-report questionnaires and surveys to collect quantitative data about personal qualities. Researchers used survey type measures because they were easy to administer and were often predictive of the
overall measured outcome. Furthermore, questionnaires and surveys gave researchers a perspective of a construct longitudinally by asking individuals “to integrate numerous observations of thoughts, feelings, or behavior over a specified period of time ranging from ‘at this moment’ to “in general” (Duckworth & Yaegar, 2015, p. 240). On the other hand, while quantitative measures like surveys and questionnaires offered reliable data, Duckworth and Yaegar asserted no measure of a construct was perfect. For instance, there were issues with the validity of a survey or questionnaire due to the reading and comprehension levels of the individuals. Furthermore, individuals taking the survey could misinterpret the language or intent of the questions, and as a result the validity of responses could be called into question. In addition, when questionnaires and surveys were used to evaluate educational programs between schools, Duckworth and Yaegar reported that reference bias became an issue due to non-shared frames of reference around the construct being studied. For instance, in schools with stricter standards for teacher performance, teachers rated themselves more stringently on self-efficacy measures than their peers in more collegial environments. Lastly, Gero (2013) stated the self-report design of the survey used in her study could call into question the internal validity of the measure. “Despite the survey instructions that ‘there [were] no right or wrong answers,’ and the assurance that responses [would] be kept strictly confidential, teachers may be influenced by what they [perceived] to be desirable answers” (Gero, 2013, p. 143).

Like surveys and questionnaires, performance assessments presented a variety of limitations (Duckworth & Yaegar, 2015). Kane (2008) explained measurement errors were due to many sources of variability. Kane referred to the sources of variability as noise, and he stated “constructs that generalize observed scores over a broad range of conditions of observation (e.g., context, time, test tasks) necessarily [involved] many potential sources of error” (p. 3). Thus,
researchers found that situational influences, like environmental noises or overcrowding, created bias and led to misleading conclusions about group variation and ability at times. Furthermore, because performance tasks yielded a single score, they were more likely to generate a random error due to unpredictable behavior (Duckworth & Yaeger, 2015). Kane further supported the possibility of error for a single score on a performance assessment. He described how repeated measurements on a person likely yielded different values each time he or she was assessed. Thus, the variability among performance task scores indicated random error in measurement due to outside influences or participant understanding at the time.

While various quantitative studies (Gero, 2013; Yeager, Miu, Powers, & Dweck, 2013; Eskreis-Winkler et al., 2014; & Duckworth & Robertson-Kraft, 2014) yielded a plethora of useful data for review concerning non-cognitive traits, other researchers stated qualitative measures presented better data about personal experience, behaviors, or beliefs (Johnson et al., 2014). For instance, when studying resilience, Johnson et al. (2014) stated researchers could quantify resilience by asking yes or no questions concerning the state of fishing (e.g.: Are people fishing in the community?). Yes or no questions could even quantify how many individuals were participating in the behavior or action. “However, whether there were enough fishermen ‘still fishing’...would be more difficult to quantify and would likely differ for each community” (Johnson et al., 2014). According to Johnson et al., qualitative methods like interviews and participant observation gave researchers more detailed data on fishing practices and diversification strategies in the fishing communities. Furthermore, the researchers could use interviews and observations to determine the conditions under which the fishermen do their work. In addition, Johnson et al. indicated researchers could use the descriptive data gathered in
the interviews and observations to describe more fully the consequences of the diversification on the fishing community.

**Methodological Issues: Sampling**

Researchers contended with a number of challenges when doing studies about non-cognitive traits (Duckworth & Yaeger, 2014). In addition to concerns with defining constructs and selecting appropriate methods (quantitative versus qualitative), researchers stated sampling also presented concerns (Rashid, 2011; Gero, 2013). For example, Gero (2013), who studied how mindset affects teachers’ willingness to participate in professional development, stated there could be issues with the external validity of her study due to the use of a voluntary survey. In this case, there could be sampling bias because of unidentified differences between those that chose to complete the survey and those that did not. Furthermore, the use of an online survey could have unintentionally narrowed the participation of some teachers, particularly those that were not as technologically savvy. Ultimately, Gero believed the low response rate on the survey may have made it challenging to generalize the results of the survey to a larger more diverse population. Unlike in quantitative studies like Gero, qualitative studies like that of Johnson et al. had smaller sampling sizes. In qualitative studies the researchers studied a small number of sites or individuals; however, they collected extensive data about each site or participant. For example, Johnson et al. (2014) studied resilience in the fishing cultures of four different fishing towns (sites) in Maine. Although the number of sites was small, the researchers were able to collect extensive data (e.g. direct quotes, observational notes, interviews) that would help to elucidate resilience in the context of the fishing industry.

Rashid (2011) presented additional sampling issues in her qualitative study about resilience and immigrant women. She identified sample selection and diversity as limitations of
her study about resiliency experiences of immigrant women in Canada. She also explained that the majority of her participants volunteered because they were comfortable and willing to be interviewed in English. Rashid described how language shaped how individuals expressed emotional experience and how language proficiency impacted how individuals interacted with the world around them. Because the experience of a proficient English speaker may differ from a person who was less proficient, Rashid’s findings did not apply to immigrant women who cannot speak English. Furthermore, participants were non-refugee immigrants. The stressors and resilience experiences of non-refugee participants could be drastically different from those escaping humanitarian issues in their place of origin. As a result, Rashid was concerned that she may not be able to generalize the data collected from non-refugee participants to a larger population, particularly to the experiences of refugees. In fact, Rashid shared that “given the small sample size, this study [could not] represent the entirety of experiences of Canadian woman immigrants” (p. 228).

The Need for Purposeful Sampling

When reviewing the limitations described in the studies above, it was evident researchers should use practices that led to more purposeful sampling (Creswell, 2013). According to Creswell (2013), purposeful sampling was terminology used most often in conjunction with qualitative research. When using purposeful sampling practices, researchers attempted to match the type of sampling used to the kind of study they would like to conduct. For instance, in a phenomenological study, researchers chose participants based on their experience with the phenomenon. On the other hand, researchers completed an ethnographic study selected individuals with specific cultural or social characteristics (Creswell, 2013). Lastly, researchers conducting narrative studies often selected certain individuals because they were convenient to
study. For instance, participants may be in a similar geographic region as a researcher, or they may know someone connected to the researcher. All participants in a narrative study, no matter how or why they were picked, should have stories or anecdotes to share about their lived experiences (Creswell, 2013).

An example of purposeful sampling used in a narrative study included snowball sampling (Rashid, 2011). Creswell (2013) suggested researchers use snowball sampling when they identified “cases of interest from people who know people who know what cases are information rich” (p. 158). For example, in the Rashid (2011) study, the researcher specifically stated she recruited her five participants through a word of mouth strategy. Ethnographic studies also used snowball sampling (Johnson et al., 2014). In the Johnson et al. (2014) study, the researchers drew data from 18 structured interviews and 26 oral history interviews. Initially, the researchers identified participants with the help of the Maine Sea Grant Marine Extension staff and other community leaders. Later in the study, however, the first participants identified other additional individuals for the study, thus snowballing into a larger group of participants based on the connections between people.

**Synthesis of Research Findings**

As one reviews the literature, there were three important themes. These themes supported the purpose of the study, which addressed how an EL administrator’s mindset, grittiness, and level of resistance affected a staff’s willingness to change their practice for improved job satisfaction and instruction. First, self-theory (mindset) seemed to affect how individuals approached challenge, success, and failure (Dweck & Leggett, 1988; Dweck, 2006; Dweck & Master, 2008; Gero, 2013). According to the research, growth mindset individuals (or individuals with a growth mindset) were more capable of overcoming setbacks, failures, and
challenges (Dweck, 1986; Gero, 2013). Furthermore, growth mindset individuals used reflection as a learning tool. They reflected on successes and failures, and as a result of their reflection, these individuals stimulated more revision of existing understanding (Schechter & Michalsky, 2014). In essence, growth mindset individuals learned to reframe failure; they understood how to learn from challenge. However, fixed mindset individuals saw difficulty as a setback and avoided it since possible failure may imply lower levels of ability (Hallowell, 2011; Gero, 2013). Therefore, the previous research indicated that principal mindset could affect how teachers approach their work. Either they strived to overcome challenge, or they avoided it in fear of failure. The authors also indicated administrators in EL schools had a variety of core practices in place to nurture growth mindset in themselves and their faculties (EL Education, 2011).

Second, authors referenced in this literature review suggested grittiness could also determine the difference between success and failure in a person (Duckworth et al., 2007; Eskreis-Winkler, 2014; Duckworth & Quinn, 2009). Grittiness in this review was a compound non-cognitive trait comprised of resilience behaviors and long-term passion for goals (Duckworth & Quinn, 2009). While the definition of the larger construct of grittiness was established in the literature completed by Duckworth and her colleagues, there was still some confusion concerning the understanding of resilience (Luthar et al., 2000; Duckworth et al., 2007; Duckworth & Quinn, 2009; Duckworth & Robertson-Kraft, 2014; Eskreis-Winkler et al., 2014; Duckworth et al., 2015). Luthar et al. (2000) explained that since resilience is defined in a variety of ways, its effect on an individual's ability to overcome challenge and trauma was confusing. At times researchers referred to resilience as a personal trait and at other times as a process individuals experienced when overcoming trauma. In fact, Carver (1998) more specifically described the resilience process as thriving. According to Carver, thriving
individuals not only overcame trauma and stress, they also learned from their experiences.

Moving forward in this study, I defined resilience as Carver did as, the act of thriving in the face of obstacles, trauma, and/or failure. Therefore, the reader can default to this definition of resilience as opposed to other definitions for resilience discussed in the methodology section. Resilience, defined as thriving in the face of obstacles, was critical when making sense of the principal’s role. According to EL Education (2011), effective EL leaders found ways to help teachers thrive although teaching, learning, and changing practice were hard. It was the principal’s job, however, to find ways to make the path toward thriving clearer and less cumbersome for teachers.

Finally, while growth mindset and grittiness helped an individual to thrive during a challenge, an individual’s resistance to change also played a role in his or her ability to thrive during change action (Vaill, 1996; Fullan, 2001; Reeves, 2010). As stated previously in the sections about resistance to change, resistance could be both a positive and negative force in change action, and a variety of factors contributed to a person’s level of resistance to change (Bohn, 2014; Powell & Kusuma-Powell, 2015). These factors included a person’s capacity to overcome technical and adaptive challenges (Powell & Kusuma-Powell, 2015). Furthermore, a level of resistance could be related to mindset and grittiness. For instance, if a person had a growth mindset and higher levels of grittiness, the research indicated he or she were more willing to learn from technical and adaptive challenges over time. The person actually thrived during the change because he or she was less resistant to change in general (Dweck, 1986, 2006; Duckworth et al., 2007; Hallowell, 2011; APA, 2015; & Powell & Kusuma-Powell, 2015). Due to the impact of these non-cognitive traits, it was vital for leaders to find ways to foster growth mindset and grittiness if they wished to focus resistance to change in a positive way (Fullan,
In a school setting, principals could foster these traits by practicing impressive empathy, providing appropriate professional development support, and modeling growth mindset and grittiness when resistors challenged change action (Kwakman, 2003; Fullan, 2011; & Hallowell, 2011). As indicated in the literature, EL principals provided a variety of structures for fostering growth mindset and grittiness in individual teachers. These structures included personalized professional learning, shared leadership roles, and frequent descriptive feedback. All of these structures helped teachers to be invested in the continuous improvement plans found in EL schools (EL Education, 2011). In the following study, readers will explore how EL Education principals have developed these traits in their staffs so that teams thrived at both times of success and failure.

**Critique of Previous Research**

When reflecting on the review of literature as a whole, there were multiple studies concerning mindset and grit. Much of the published works in this area presented data about the effects of mindset and grittiness on the success of private sector workers, students, and teachers (Duckworth et al., 2007; Duckworth & Robertson-Kraft, 2014; Duckworth et al. 2015; Dweck, 1986, 2006, 2014; Dweck & Leggett, 1988; Dweck & Master, 2008). Moving forward, it would be helpful for researchers to examine the effects of an administrator's mindset and level of grittiness on successful change action in a school.

In addition to the concerns described above, there was a need for additional research in the areas of both growth mindset and focused passion for goals over time, which was a component of grittiness (Duckworth & Yeager, 2015). Some studies surrounding mindset and grittiness attempted to quantify these non-cognitive constructs (Dweck, 1986; Eskreis-Winkler et al., 2014). However, Duckworth and Yeager (2015) stated quantitative studies were limited in
their ability to fully illustrate non-cognitive traits. Quantitative studies highlighted if the constructs were manifested in the person or not; however, quantitative studies did not provide researchers with rich detail about the effects of non-cognitive traits in a person (Johnson et al., 2014; Duckworth & Yeager, 2015). Qualitative studies, however, could provide researchers with more detailed descriptions of non-cognitive traits because they drew upon the personal experiences of individuals (Johnson et al., 2014). For example, multiple qualitative studies surrounding the concept of resilience indicated conversations with individuals gave researchers a deep and detailed understanding of non-cognitive traits (Rashid, 2011 & Johnson et al., 2014). Therefore, to gain a deeper understanding of mindset and grittiness, researchers should develop more qualitative studies employing the same interview methods used in resilience research (Rashid, 2011 & Johnson et al., 2014).

Like methodology, sampling practices also limited the usefulness of studies (Creswell, 2013). Qualitative studies explored in this literature review had small sample sizes, and these samples were not always representative of all cases (Crouch & McKenzie, 2006; Rashid, 2011). For instance, Rashid (2011) suggested sample diversification could be problematic. In her study, Rashid explained English language proficiency levels and refugee status could have affected her results. “The stressors and resilience experiences of immigrant women who came to Canada as refugees [were] likely different to the sample accrued for this study” (Rashid, 2011, p. 227). Given the small sample size and lack of diversity, it was possible that Rashid’s results were not representative of the larger immigrant women population in Canada. When reflecting upon the sampling issues explained above, additional research focused on the role of school leadership would help researchers more fully explain how mindset and grittiness affected schools.
Furthermore, this research could provide additional perspectives of the effects of growth mindset and grittiness not currently represented in the wider range of research in this area.

**Summary of Literature**

The literature reviewed in this study indicated that a variety of factors determined how individuals handled the pressure of change, challenge, and frustration. First, those with a growth mindset handled challenge, success, and failure more readily (Dweck, 1986, 2006). Second, grittier individuals were more capable than their less gritty peers of reframing failure and persevering over long periods of time to achieve a goal (Duckworth et al., 2007). Lastly, teachers did not have to face change action alone. The data from the research addresses how school leaders played a crucial role in helping teachers face the challenge of change more confidently (EL Education, 2011; Bohn, 2014). While in the midst of change, administrators helped their faculties by practicing impressive empathy where they recognized and related to the perspective of the resistor (Fullan, 2011). Furthermore, EL leaders provided appropriate professional learning opportunities to help teachers confidently overcome technical and adaptive challenges (Kwakman, 2003; EL Education, 2011; Smith & Newmen, 2014; Powell & Kusuma-Powell, 2015). Finally, EL principals modeled grittiness and growth mindset behaviors in order to demonstrate how teachers could positively approach change and improvement (EL Education, 2011; Hallowell, 2011).

As the reader progresses through this study, he or she will follow the leadership journey of principals in EL Education Schools. Specifically, readers will see how these administrators helped their faculties to grapple successfully with the implementation of EL Education structures in their schools. In the next chapter, the reader will discover the structure of the study used to gather the qualitative data needed to describe more fully the experiences of these individuals.
Chapter 3: Methodology

Introduction

The purpose of this chapter is to explain the research methodology and inquiry methods used to address the research questions outlined below. In this chapter the reader will review the purpose of the study and guiding research questions that helped to shape the study’s focus. Furthermore, the reader will encounter the theories that focused the data collection and interpretation processes. In addition, the reader will discover how the target population was selected and what the expected findings for the study were. Lastly, I will address ethical issues surrounding the study as well as limitations to the research.

Guiding Components of the Study

Context of the Study

Due to the concerns around teacher attrition previously discussed in Chapter Two, it was vital that school system leadership teams addressed teacher dissatisfaction with school culture and organizational conditions (Ingersoll & Smith, 2003). Leadership could begin to address these challenges by growing teachers’ technical and adaptive skill sets through professional connection, development, and reflection (Hallowell, 2010; Powell & Kusuma-Powell, 2015). EL Education was one example of a school improvement approach that addressed teachers’ technical and adaptive deficits. At the time of this research, more than 150 pre-K through 12th grade urban, rural, or suburban schools used EL Education methods. As a result, more than 4,000 educators had access to a thriving professional network focused on engaged teaching and learning. Through professional development, coaching, and online tools provided by EL Education, teachers and school leaders were able to refine technical and adaptive skills in the areas of curriculum design, instruction, school culture, leadership, and assessment practices (EL
Furthermore, in EL Education (2011) schools, adults, and students “operated] from a growth mindset - a belief that everyone [was] capable of high achievement and that learning [came] as a result of effort” (p. 52). Thus, in EL Education schools there was a culture of effort, perseverance, and reflection that empowered all individuals to strive for success. It was in this type of setting that the study took place.

**Purpose of the Study**

When one considers the results of teacher dissatisfaction, it was clear school leadership should provide the necessary scaffolds needed to bolster teachers’ technical and adaptive deficits. School leaders could begin to provide these types of scaffolds by examining their own beliefs and actions in terms of self-theory (mindset), grittiness, and resistance to change (EL Education, 2011). The purpose of this qualitative study was to investigate how administrator beliefs and actions around self-theory (mindset), grittiness, and resistance affected a staff’s willingness to change its practice for improved job satisfaction and instruction. I specifically studied the experiences of EL Education school leaders as they worked with their faculties to foster growth mindset and grittiness while improving teaching and learning in their schools.

**Research Questions**

The overarching research question is: What are the experiences of EL Education school principals as they work with teachers to overcome challenge, stress, and dissatisfaction? The following sub-questions helped to guide the research process.

- **Sub-question 1**: What experiences do administrators find stressful for teachers?
- **Sub-question 2**: What aspects of EL Education do administrators perceive as challenging for teachers?
Sub-question 3: How does administrator mindset and grittiness affect teachers’ willingness to change practice?

Sub-question 4: How do administrators work with their staffs to develop stronger growth mindset and grittiness?

Nature of Qualitative Research Design

Introduction

According to Creswell (2013), qualitative research was a set of interpretive practices used by researchers to make meaning of the phenomenon they observed in the world. As a process, qualitative research was intensive and time consuming; however, qualitative methods gave researchers opportunities to study the phenomenon in their natural setting. In addition, qualitative research embodied several other key characteristics; including rich descriptions of the phenomenon, socially constructed meaning, complex reasoning, and emergent research design. In this research project, I focused on describing the experiences of EL Education school leaders, particularly as they worked to bolster growth mindset and grittiness in their faculties. Therefore, the qualitative research process helped me to effectively discover and present the variety of administrator perspectives found in the EL Education school setting (Creswell, 2013). In order to ensure that my research was trustworthy, I addressed credibility by triangulating my data through the use of multiple types of evidence. Furthermore, I provided thick descriptions of the setting and leader at each site and member checking to ensure that the data collection and analysis were representative of what the participants reported. Lastly, I addressed how my findings could be generalized from one case to a similar case.
**Natural Setting**

Qualitative researchers typically conducted their research in the field where participants experienced the phenomenon they wished to study (Creswell, 2013). Thus, researchers studied behaviors of individuals in the setting where they naturally occurred. The natural setting for a qualitative study could be a school, clinic, or neighborhood. As researchers conducted the study, they did not manipulate the setting or control the behavior of participants in any way. By studying behaviors in their situational context, researchers began to understand how participants’ behaviors and decisions manifested without external constraints (McMillan, 2012).

**Rich Description**

In qualitative studies, researchers carefully recorded every detail in order to understand fully and describe the behaviors being studied. In qualitative research, researchers used words, quotes, and pictures to paint a complete picture of the setting and to reflect the complexity of the human behavior being studied (McMillan, 2012). Researchers attempted to paint the complete picture by collecting data about the multiple perspectives found in the setting (Creswell, 2013). Furthermore, McMillan (2012) stressed researchers’ focus on the authentic perspectives of individuals. Therefore, the focus of qualitative research was a researcher’s efforts to reconstruct reality as subjects experienced it, and as a result, researchers were more able to develop a holistic account of the phenomenon being studied (McMillan, 2012; Creswell, 2013).

**Socially Constructed Meaning**

The importance of multiple perspectives also affected how qualitative researchers constructed meaning and understanding. In fact, qualitative research was characterized by the belief that individuals socially constructed meaning and understanding about a phenomenon as they interacted with the world (Gillaspy, 2015). Individuals had their own way of describing the
topic or problem based on their individual lived experiences, and these multiple, authentic experiences helped researchers to develop the rich descriptions described above (McMillan, 2013). Furthermore, qualitative researchers honored diversity of thought and understanding rather than seeking to only find commonalities among subjects (Stake, 2010). Therefore, researchers used a variety of interpretations about a topic or phenomenon in order to understand fully what the topic or phenomenon entails (Stake, 2010; Creswell, 2013).

**Complex Reasoning**

According to Creswell (2013), qualitative researchers used complex reasoning throughout the study in order to socially construct meaning in their studies. In order to construct meaning, researchers used both inductive and deductive reasoning. At times, researchers organized the data into more abstract units of information from the bottom up, thus using inductive logic to group the data they collected. McMillan (2012) stated researchers used inductive logic by identifying more refined and developed themes in the data as they worked with the data. At times, Creswell described how researchers collaborated with participants in order to shape the themes that emerged from the process. Researchers used open ended questioning to discover shared perspectives and meaning and thereby sought out complexity in thinking versus narrowed views of the content (Teal, 2012). Although inductive thinking drove many qualitative studies, Creswell stated qualitative researchers did not use inductive logic solely. Throughout a qualitative study, researchers also often used deductive logic to continually check themes against the data they were collecting. By using deductive logic, researchers ensured the themes were valid and credible.
Emergent Research Design

According to McMillan (2012), qualitative researchers often did not know enough at the beginning of the study to appropriately select the precise research design needed. As researchers conduct qualitative studies, they learned more about the setting, people, and other sources of information available in order to discover what should be done to create the rich descriptions described above. Therefore, Creswell (2013) wrote the initial plan was not fully described by the researcher until later. In fact, McMillan suggested that a full account of the methods be included retrospectively after the data had been collected. Thus, the design of qualitative research often remained flexible and evolved as the study continued (McMillan, 2012; Gillaspy, 2015). In essence, the design used a discovery-oriented approach that evolved over time based on the data collected from a small purposeful sample (Sackett, 2010).

The Research Design

I believed this study fits the definition of a case study as described by Yin (2014) because I chose to investigate the experiences of principals in the natural setting of their particular school. According to Yin, a case study was an empirical inquiry where researchers investigated a contemporary phenomenon or case in depth in its natural setting. In doing so, researchers more fully investigated the context in which the case lived. Furthermore, case study methodology was most appropriate because I bound the study to a specific group of individuals in a very specific setting (Teal, 2012; Creswell, 2013).

Binding the Case

In order to identify common experiences among school leaders, I chose to do an intrinsic case study at multiple sites (Yin, 2013). In my study, I bound each case to principals in EL Education (EL) schools. Highly functioning EL Education schools were characterized by a
culture of growth mindset and grittiness. In fact, in their *Core Practices* book, the authors wrote that students and adults in EL schools operated “from a growth mindset—a belief that everyone [was] capable of high achievement and that learning [came] as a result of effort” (EL Education, 2011, p. 52). Thus, by binding the study to specifically EL schools and principals, I was able to discover how these types of administrators helped teachers change practice (Yin, 2014). In addition, I gained insight into how EL Education principals’ mindset, grittiness, and leadership affected teacher practice (Creswell, 2013).

**Type of Case Study**

In the present study, I proposed that the experiences of EL principals were unique and worthy of closer exploration due to the mindset culture inherent in most EL schools (Creswell, 2013). Therefore, this study employed a method of intrinsic case study with a focus on multiple cases. Baxter and Jack (2008) wrote that researchers use multiple case study methods when they would like to understand the similarities and/or differences between cases. Therefore, a researcher should analyze the data within each setting or across settings. In my research, each individual principal had a different school setting that could change how he or she led and whom he or she led. Through a multiple case study, this report presents similar and contrasting results across various EL Education school settings (Baxter & Jack, 2008).

**Data Collection**

**Sampling Method**

In order to select the EL principals involved in the study, a purposeful sampling method was employed. Creswell (2013) stated various considerations played into which approach qualitative researchers selected. The considerations in my study included which principals will be selected to participate, the specific type of sampling strategy a researcher will use, and the
size of the sample needed. Specifically, the study employed non-probability sampling because it
allowed me to select cases that provided information-rich data about the phenomenon (Sackett,
2010). Furthermore, according to Statistics Canada (2013), researchers using non-probability
sampling assumed that specific characteristics were evenly distributed throughout the population.
Due to this assumption, researchers proceeded with their qualitative case study because they
believed any sample would be representative and accurate of the population. Non-probability
sampling was an appropriate sampling strategy because EL principals were expected to lead in
very specific ways. According to EL Education’s (2011) core practices, school leaders were
expected to build a school wide vision focused on student achievement and continuous
improvement. As such, all EL principals were tasked with cultivating a positive school culture
focused on growth for all individuals. Because growth mindset and problem-solving orientation
were integral characteristics found in EL principals, they were able to “model and actively foster
the critical attributes of trust necessary for achievement: respect, integrity, competence, and
personal regard for others” (EL Education, 2011, p. 79). Because these specific leadership traits
were expected and fostered in EL school leaders, I am confident that my small sample
specifically chosen for the case study was representative of EL principals in the network
(Statistics Canada, 2013).

Instrumentation

According to Sofear (2002), instrument development was as critically important in
qualitative research as it is in quantitative studies. There were a variety of instruments that
qualitative researchers could choose to use in a study; however, all instrumentation was
categorized into four basic categories: observations, interviews, documents, and audiovisual
materials (Creswell, 2013). In addition to these four basic categories, Yin (2014) included
archival records and physical artifacts in the basic list, but he also included less used collection methods like psychological tests, proxemics, kinesics, and life histories. Furthermore, during the process of data collection a researcher must decide how much data he or she needed and how he or she limited the data collected. Yin gave researchers two suggestions to help them to decide how to limit the data. He shared that researchers should collect confirmatory evidence, or evidence from two or more different sources for most of the main topic being studied. This again highlighted the need for data from a variety of sources. Yin also suggested including evidence from major rival explanations. Thus, when conducting case studies, it was important to use a variety of methods described above in order to ensure validity and reliability. In this study, I used the following methods for collecting data: person-centered interviewing, public and in-house documentation, and two online discussion boards.

**Person-centered interviewing.** According to Rashid (2011), person-centered interviewing engages the interviewee as an expert who can inform the researcher about the phenomenon being studied. Throughout history people used person-centered interviewing as a structure for a basic mode of inquiry to make sense of experience (Seidman, 2006). To conduct person-centered interviews, researchers could choose to conduct semi-structured or open-ended interviews with the participants (Creswell, 2013). During the interview process, researchers could collect participants’ stories and histories so they understood the perspectives and experiences of the individuals being studied. Seidman (2006) explained that telling stories was part of the meaning making process for most people. When individuals recounted experiences, they pulled the details from a stream of consciousness. Typically, these stories followed a pattern with a beginning, middle, and end; and in order to retell the experience, the individual reflected on his or her experience. As a result, the individual made meaning from the experience
by sharing the specific details in a particular order. Therefore, “every word that people [used] in
telling their stories [was] a microcosm of their consciousness” (Seidman, 2006, p. 7). These
microcosms gave the researcher detailed, personal, and information rich data illustrating the
phenomenon being studied (Yin, 2014).

In my study, I used semi-structured interviews to gather data about EL principals’
experiences. DiCicco-Bloom and Crabtree (2006) defined a semi-structured interview as a set of
predetermined open-ended questions. The open-ended questions allowed me to ask additional
questions based on the dialogue between the interviewee and myself. Thus, semi-structured
interviews allowed me to generate rich data about the perceptions and values of the study
participants (Newton, 2010). As suggested by Newton (2010), I first confirmed participants’
demographic information when I began the semi-structured interview. Then, I asked participants
questions that targeted their experiences in fostering growth mindset and grittiness in their
faculties. The interview protocol included open-ended questions formed from the sub-questions
found in this study. These protocol questions served as the core of each interview conducted,
and the questions invited interviewees to open up and share more of their personal experiences
than when first prompted (Creswell, 2013). In order to ensure that participants openly shared
their experiences, I took advantage of opportunities to probe for additional information; however,
I carefully constructed the probing questions so that I did not impose my opinions or beliefs
about the topic onto the interviewee (Newton, 2010).

Each participant engaged in one 45-minute semi-structured interview. Each participant
was interviewed individually to delve more deeply into their experiences as principals in EL
schools. By interviewing the administrators individually, I was able to co-construct meaning
with the principals as we discussed their perceptions of leading with growth mindset and
grittiness (DiCicco-Bloom & Crabtree, 2006). All interviews took place over Skype or FaceTime due to the geographic location of some principals. I taped and transcribed each interview in order to begin the analysis process. If I had additional questions after the first interview, I sent follow-up questions for participants to answer via email (Yin, 2014).

**Documentation and focus groups.** In order to collect valid data, Creswell (2013) suggested triangulating the data through the use of multiple and different sources, methods or theories to provide corroborating evidence. By triangulating the data, researchers shed light on the themes or perspectives common across cases. In my study, I triangulated the data that I collected in the interviews with public and in-house documents and responses on two online discussion boards. According to Yin (2014), documents were useful because they could be viewed repeatedly and gave very specific information to the researcher, including names and dates of events. Since the documents were created and provided by participants, they were unobtrusive and gave researchers a different perspective of leadership actions on the part of each school leader. I asked participants to send me a mixture of the following public or in-house documents: interview questions, EL Education work plan, professional development plan, EL Education implementation review reports, and faculty meeting agendas.

Each of the five EL Education principals also participated in two focus groups in order to corroborate evidence collected during the person-centered interviews. Barlow (2010) described focus groups as “carefully moderated group discussions designed to gain perspectives on a defined subject” (p. 496). As suggested by Creswell (2013), I used an online discussion board, which was called Muut.com, to complete the focus group protocol. Using an asynchronous approach allowed participants to be questioned over a longer period of time, resulting in more thoughtful and open exchanges among participants.
Operationalization of Variables

Babbie (2013) defined operationalization as “the development of specific research procedures (operations) that [resulted] in empirical observations representing those concepts in the real world” (p. 133). Operationalization was intimately connected to conceptualization, which was the process of refining the definitions of abstract concepts found in a study. Therefore, operationalization was the actual process researchers used to study abstract concepts defined earlier in the research. In my study, I have refined the abstract concepts of mindset, grittiness, and administrator effect in the literature review contained in Chapter Two. Below, I will outline how I refined my methods to study these abstract concepts by closely examining range of variation and level of measurement.

Range of variation. According to Babbie (2013), researchers should be clear about the range of variation that interested them when they began to select participants or collect data. More specifically, researchers must decide which attributes of individuals or concepts should be combined to facilitate data collection. In my research, I considered the following ranges of variation among the individuals in my study. First, variations in school setting were important. Two schools were charter schools, and three were public schools. Furthermore, schools ranged in size, from the smallest at 212 students to the largest at 900 students. Second, variations in experience would be important. Three of the schools were start up schools in the network, which meant they opened and hired teachers with EL Education as an established practice. Two of the schools were established schools and were transitioning faculty and practices to the EL Education Core practices. Lastly, there was variation in teacher retention at start up EL Schools versus transition schools.
Level of measurement. Babbie (2013) stated variation of attributes were calculated by different levels of measurement. The different levels of measurement entailed the researcher’s determination of how fine the distinctions were among the various possible attributes given to a variable. According to Korzilius (2010), there were a variety of ways to measure these distinctions between variables. For instance, when variables were exhaustive and mutually exclusive, or in essence the categories differ between variables, then researchers should use nominal measures. Furthermore, when a researcher could logically rank variables in a particular order, he or she should use ordinal measures. On the other hand, the researcher should use standard intervals to measure variables whose logical distance between attributes could be meaningfully expressed. Finally, if variables have a true zero point and could be measured using standard intervals, researchers should use ratio measures (Korzilius, 2010; Babbie, 2013). In my study, I used two levels of measurement depending on the variable being addressed. For instance, when categorizing schools by type, whether public or charter, I used a nominal measure. However, when I categorized variables by number of years in EL network or the amount teacher retention from year to year, I used a ratio measure since a true value of zero is possible (Babbie, 2013).

Data Interpretation Procedures

Introduction

In educational studies, researchers often referred to the process of collecting and examining of data for patterns in data analysis (Sackett, 2010; Rashid, 2011; Creswell, 2013; Yin, 2014; Gillaspy, 2015). Creswell (2013) listed a variety of approaches researchers used when beginning data analysis. Some researchers analyzed data across multiple units within a case while others may report on the entire case. Other times, the researcher chose to analyze and
compare data across multiple cases. No matter the analysis process a researcher used, the process should always help researchers to describe the case in detail. In fact, the analysis process should help researchers identify patterns in themes, issues, and/or concepts to study across cases or units (Creswell, 2013; Yin, 2014). In addition, Baxter and Jack (2008) stated it was important for researchers to limit the scope of the study when they are analyzing data so they were feasibly able to complete the research.

The basic descriptions of analysis found above formed the basis of this section. However, Wolcott (2009) indicated there are issues with the actual word analysis. He differentiated between the process of analysis and interpretation. For instance, researchers who analyzed data in the narrowest use of the word apply a set of standard procedures for observing, measuring, and communicating with others about the phenomenon being studied. Interpretation, on the other hand, was a process of sense-making. When researchers interpret, they used intuition, past experience, and emotion in order to reflect on the data and make sense of what they observed. In the sections that follow, I will explain how I interpreted data by identifying patterns and themes across cases and limiting the scope of the study.

**Identifying Patterns in the Data**

Merriam (2002) found that early interpretation of data was key to successfully completing qualitative research. In fact, she found it should happen simultaneously with data collection. When researchers collected and interpreted data at the same time, they were able to make adjustments along the way to collection and interpretation methods. Furthermore, researchers could also “test” the themes they identified against the future data they collected during the study. Yin (2014) also suggested playing with the data along the way in order to identify new patterns or insights from the data, particularly when one was trying to compare and
contrast data from two different cases. In essence, data interpretation allowed researchers to condense, cluster, sort, and link data over time.

**Early techniques.** While data interpretation can be challenging, Sackett (2010) asserted there are a variety of early analysis/interpretation techniques that would help novice qualitative researchers make sense of the data that was collected. For instance, Sackett shared that some researchers used summary forms after each participant interview to summarize data. Furthermore, the researcher could use a field journal or notebook to record observations or reflections about the data as it was collected. For instance, Gillaspy (2015) discussed using a researcher’s journal to record data about the informal conversations that occurred before, during, and after her class. In the case of my study, I first coded the data freely to allow major themes to emerge from the data. As I saw themes across cases, I recorded these initial impressions in my researcher’s journal.

**Word tables.** After I completed the initial coding, I used a word table to organize the initial codes by the theoretical propositions I identified in my literature review (Yin, 2014). Yin (2014) asserted that propositions help to yield analytic propositions. In the case of my study, three major propositions helped to focus my interpretation process. First, self-theory affected how individuals approached challenge and failure (Dweck, 2006; Dweck & Leggett, 1988; Dweck & Master, 2008; Gero, 2013). Second, grittiness was sometimes a determining factor in success and failure (Duckworth et al., 2007; Eskreis-Winkler, 2014; Duckworth & Quinn, 2009). Finally, an individual’s resistance to change could affect his or her ability to thrive during challenge (Vaill, 1996; Fullan, 2001; Reeves, 2010). I continued to keep interpretative notes in my researcher’s journal and on researcher memos to track relationships between data during the interviews and focus group questions. In addition, I secondarily organized codes under each
proposition using Smargorinsky’s (2008) coding model around principal actions and beliefs. Smargorinsky suggested coding human behavior into three categories: setting, goal-directed behaviors, or tool-mediated actions. The Smargorinsky code model helped me to identify the types of principal actions that affected teacher satisfaction in their building. After completing the initial coding and organization into word tables based on the propositions, I conducted one last interpretation of the data around the study’s sub-questions. These sub-questions were: What experiences do administrators find stressful for teachers? What aspects of EL Education do administrators perceive as challenging for teachers? How does administrator mindset and grittiness affect teachers’ willingness to change practice? How do administrators work with their staffs to develop stronger growth mindset and grittiness? I again used word tables to organize the data.

Lastly, Smargorinsky (2008) asserted all the data collected would not fit the codes and categories researchers identify, and it was not acceptable to disregard data solely because it did not fit my schema for interpreting the data. Doing so could possibly produce impressionistic results. Therefore, researchers must contend with contrary evidence as it could provide important insight into the effects of administrator growth mindset and grittiness. In the present study, I highlighted alternate evidence in the word tables to identify possible explanations for the lessening of teacher dissatisfaction and attrition.

Limitation of the Research Design

Introduction

Creswell (2013) argued qualitative researchers should question if they published a true account of what was observed and documented about a phenomenon or group of individuals. Here Creswell referred to the researcher’s process of validating the results against certain
criteria. In quantitative studies, researchers sought to verify data with proof of internal and external validity and reliability. In qualitative studies, however, researchers sought to verify data with proof of trustworthiness. Shenton (2004) shared four specific criteria qualitative researchers can use to help ensure trustworthiness or validity of their data. These criteria include credibility, transferability, dependability, and confirmability. Yin (2014) also discussed the use of construct validity to address the trustworthiness of results in addition to other measures such as external validity and reliability. Due to the variety of validation strategies available, Creswell urged researchers to use strategies with which they were most comfortable. Furthermore, he stated researchers should reference the validation terms and define them as part of the study. In the sections that follow, I will define credibility and transferability; and I will explain how I addressed both to ensure credible results.

**Credibility**

Like internal validity, credibility addressed how congruent a researcher’s findings were with reality (Shenton, 2004). Shenton (2004) asserted that credibility was one of the most important measures of validity in qualitative research. Credibility was crucial because humans were the primary instrument of data collection and analysis in qualitative studies. Researchers interpreted what they observed or discussed; thus, they could not separate prior experience or understanding totally from the data collection process (Merriam & Tisdell, 2016). In essence, when proving credibility, researchers must show how they accurately recorded the phenomenon or problem being studied (Shenton, 2004). There were a variety of strategies researchers could use to help align research results in the real world including triangulation of data, pattern matching, explanation building, negative case analysis, iterative questioning, researcher’s reflective commentary, member checks, and thick description of the phenomenon (Creswell,
2013; Shenton, 2004; Yin, 2014). Furthermore, researchers could ensure credibility by bracketing their experiences with the phenomenon (Al-Busaidi, 2008). In order to bracket experience, researchers should be aware and open about their biases about the phenomenon (Creswell, 2013). In my research, I addressed my experience and possible bias in the section that follows about researcher’s position. Academic researchers could also ensure credibility by carefully constructing interview questions (Purdue Online Writing Lab, 2015). The Purdue Online Writing Lab (OWL) (2015) suggested researchers should avoid biased and leading questions that encouraged participants to respond in a certain way. Furthermore, researchers should avoid double-barreled questions where one question was embedded in another. When presented with double-barreled questions, participants may not answer one of the questions. Also, participants may disagree with part of the double-barreled question and give a skewed response due to the question construction. Furthermore, the writers of the OWL website suggested researchers use succinctly stated questions because wordy questions could confuse participants and lead to unreliable answers.

**Triangulation.** In order to ensure the credibility of the data, I triangulated the data. Creswell (2013) wrote researchers triangulate data by using multiple, different sources or methods to provide corroborating evidence in a study. The main source of data in this study came from the person-centered interviews described previously. However, I also used documentation and two online focus group discussions to help identify the evidence needed to show my findings are credible.

**Thick Description.** Researchers included thick description in order to show how their data is credible (Shenton, 2004). In this study, thick descriptions of administrators’ growth mindset and grittiness were included in Chapter Four. Shenton (2004) stated detailed
descriptions of the phenomenon help to “convey the actual situations that have been investigated and, to an extent, the contexts that surround them” (p. 69). Therefore, I have included direct quotes from interviews and focus group discussions and detailed descriptions of the setting and documents used in the data collection process. In the end, I used strong action verbs and quotes to show how details from each case interconnect (Creswell, 2013).

**Member checking.** Lastly, I employed member checking to ensure the credibility of the data. Creswell (2013) asserted member checking was a crucial technique for proving credibility. According to Creswell, researchers used member checking when they asked participants to review the data, analyses, interpretations, and conclusions of a study in order to assess the accuracy and credibility of the account. In fact, Creswell suggested asking participants to examine rough drafts of research and provide critical feedback to the findings. In this study, I asked participants to review and validate interview transcripts (Gillaspy, 2015; Rashid, 2011). Due to the location of the participants, they used online tools, like Google Documents or email, to comment and edit the transcripts as they saw fit.

**Transferability**

As stated previously, Shenton (2004) asserted transferability is similar to external validity or generalization. In quantitative studies, researchers were concerned with how easily and often results of the study could be applied to a wider population. Yin (2014), however, believed case studies had an unclear comparative advantage. According to Yin, qualitative researchers wished to explain how and why a phenomenon happens rather than addressing effectiveness questions like quantitative research often did. Furthermore, the results of case studies were often indicative of a small number of environments or individuals. Thus, there were real concerns with the transferability of qualitative results to other populations or settings. In order to combat these
concerns, Shenton suggested conducting “similar projects employing the same methods but conducted in different environments” (p. 70). I have addressed the concerns with transferability listed above by using the multiple-case study design. According to Yin, the strength of multiple-case study methods was that they employed “replication” design. Essentially, I replicated my findings by using the same exact data collection and coding methods with each case in the study. By repeating the procedures outlined in this chapter at each site, I gathered more inclusive data that in the end painted a more detailed picture of the phenomenon across cases (Shenton, 2004).

**Ethical Issues**

Patton (2015) asserted qualitative inquiry was highly personal due to the methods researchers employed. In qualitative research, researchers used naturalistic inquiry; they sought out data in the real world where people lived and worked. As such, “qualitative inquiry may be more intrusive and involve greater reactivity than surveys, tests, and other quantitative approaches” (Patton, 2015, p. 496). Due to the personal nature of qualitative inquiry, a researcher could encounter a set of ethical issues when he or she disseminated the findings of his or her study (Merriam, 2009). Thus, researchers should consider a variety of ethical considerations when designing a study, collecting and interpreting data, and reporting the findings. These considerations include informed consent, confidentiality, risk assessment, and reciprocity. Furthermore, researchers should consider how hard they must push to gain access to sensitive information (Merriam, 2009; Patton, 2015). The American Psychological Association (n.d.) listed other ethical considerations for researchers including the purpose of debriefing of results, publication credit, plagiarism, use of reviewers, and deception in research. By considering and writing about a variety of these issues, researchers verify that they had complied with ethical standards and actions when conducting their research (American Psychological Association, n.d.).
Therefore, I have focused below on informed consent and confidentiality to address possible ethical issues. I also have addressed my position as researcher so that I may explain my personal and professional perspective shaping the research process.

**Informed consent.** According to Patton (2015), informed consent involved specific protocols and opening statements in interviews that covered a variety of issues. First, informed consent explained what the purpose of the study is, who the intended audience is, and what topics would be addressed in the interview. In addition, I also explained what kinds of risks and/or benefits were involved for individuals if they chose to participate in the study (American Psychological Association, 2010; Patton, 2015).

Patton (2015) stated interviewers often provided the information listed above prior to an interview. In fact, Patton suggested researchers provide participants with informed consent information twice, once in advance and then again at the start of the interview. By doing so, Creswell (2013) explained researchers gained support from the participants when they take the time to explain the purpose, procedures, and ethical considerations of the study. In order to form this trusted relationship with participants, I provided participants with the informed consent documentation prior to the study and at the beginning of the first interview. The documentation included a simple, straightforward description of the purpose of the study and topics being addressed in the interview (Patton, 2015). The informed consent also explained the types of school documents and written communications needed for evidence, as well as a description of the procedures for the online focus groups. As suggested by the American Psychological Association (2010), I also obtained informed consent from research participants to record their voices for data collection purposes prior to the start of the interview.
Confidentiality. In the informed consent documentation, I also explained how participant responses would be used and disseminated in the study (Patton, 2015). Kaiser (2009) asserted that researchers addressed internal confidentiality when they described how the results would be shared. In internal confidentiality researchers attempted to explain specifically how they kept the identities of participants confidential while also conveying accurate, detailed accounts of the participants, their work, and their environment. Due to the use of rich descriptions in qualitative research, Kaiser believed confidentiality breaches via deductive disclosure were a particular concern. Thus, researchers should address deductive disclosure in the informed consent process.

To address concerns with deductive disclosure, Kaiser stated researchers should give participants specific information about data use and confidentiality during the informed consent process. Kaiser confirmed information about confidentiality should be included in the informed consent documentation and be part of ongoing conversations with participants. In fact, she suggested talking with participants about confidentiality before, during, and after interviews. In the informed consent documentation described above, I outlined the intended audience and use of data. At this time, I would like to share my results with the wider EL Education network and with other professional leadership associations. My hope was that the results of my study may give aspiring leaders strategies for making changes in school culture. I emailed the consent form to each participant and reminded them of the consent at the start of each interview.

In addition, the confidentiality of online documents and discussion boards should be addressed. The Research Integrity Office (n.d.) at the University of Nevada in Reno suggested a variety of options for keeping online data confidential. First, all electronic files will be located on a password-protected computer. The Research Integrity Office suggested researchers should not leave computers with consent forms and electronic documentation unattended. Therefore, I
used password-protected files and forums in Google Forms, Muut.com, and Dropbox on my personal password-protected computer. These tools allowed me, as the manager of the documentation, to narrow who viewed the posted topics, who posted to the group, who joined the group, and who had access to a form link (Google, 2015). By narrowing the access individuals had to the forms and discussion threads, people’s identities and statements were kept confidential.

**Researcher’s position.** According to Creswell (2013), writers addressed reflexivity when they positioned themselves and their writing. Researchers showed their level of reflexivity by describing their background and how it affected their interpretation of the data in a study. In doing so, the researcher addressed the biases, values, or experiences that he or she brought to the qualitative research. Berger (2015) asserted there are three types of researcher’s positions often found in qualitative research. These include: (1) reflexivity when the researcher shared the experience with study participants, (2) reflexivity when the researcher moved from being an outsider to an insider during the research process, and (3) reflexivity when the researcher had no personal experience with the phenomenon being studied.

Due to my experience and position, I have familiarity with the phenomenon I am investigating. Berger (2015) called this a shared experience position, and it was tied to the first position described above. As the researcher, I shared similar experiences with the individuals in the study. We all serve as leaders in EL Education schools. Furthermore, we all have access to network resources and professional development focusing on the practices and core beliefs of EL Education. I also have visited one of the schools in the case studies as part of site visits made possible through the EL Education network. Furthermore, some of the school principals in the study served in public schools rather than charter schools. I shared similar experiences with
these individuals as we worked to marry district initiatives to EL Education work plans and practices. According to Berger, researchers should be able to use shared experience to gain deeper insights into the struggles and successes of individuals. Therefore, because of my position I was more sensitive to the specific language and practices EL principals used to foster growth mindset and grittiness in the faculty. As stated by Berger, I should be “able to hear the unsaid, probe more efficiently, and ferret out hints that others might miss” because I shared common experiences with others in helping to lead an EL Education school (p. 223).

Specifically, my experience in the EL network gave me insight into EL Education’s vision for quality school leadership. For instance, EL Education (2011) outlined in their core practices that school leaders should build a cohesive vision focused on continuous improvement. In fact, EL Education leaders were expected to improve student achievement by developing teachers’ technical and adaptive skills. They were expected to build structures for shared leadership and collaboration across the staff. Principals in EL Education schools should embody these skill sets because leadership was a core practice in the EL Education school improvement model. Thus, my experience with the phenomenon played a helpful role during the interview and interpretation process (Creswell, 2013). I was able to more effectively and efficiently identify EL Education leadership best practices during the interpretation process. Furthermore, I also was able to identify behaviors and practices that were outside the norm of the network since EL Education clearly defined leadership in their core practices. Thus, as stated by Creswell (2013) my experiences as an EL administrator shaped how I collected and interpreted data. Therefore, I continually situated myself in relation to the data so that my experiences did not create undue bias.
Summary

In this chapter, I have described the use of case study methodology to explore the experiences of administrators in EL schools who fostered growth mindset and grittiness in their faculties. Because I studied participants in their natural setting, I obtained detailed and thorough descriptions of principal experiences in specifically EL schools. Furthermore, because I studied principals in a variety of EL school settings, I was able to compare and contrast practices of principals across the network and identify practices that other school principals may use to transform their own school cultures.

In this chapter, I have also described the specific sampling, data collection, and data interpretation procedures I used. By using non-probability (purposeful) sampling, I gained insight into the perspectives of principals across the different kinds of EL schools. Furthermore, by using interviews, documents from the school, and online focus groups, I triangulated my data so that I could present the most accurate information possible in the results section found later in this dissertation. In addition, because I used narrative interpretation coding strategies and because I limited the scope of my study to specific contexts and propositions, I was able to compare and contrast the experiences of administrators.

In the final sections of this chapter, I addressed the limitations and ethical issues of the study. Through the use of triangulation, member checking, and thick description, I demonstrated how my results were credible. Furthermore, the multi-case design helped to ensure that my data was transferable to other like settings. Finally, I addressed how I controlled the ethical issues of the study. Lastly, I specifically addressed my shared experience position and how it helped me to interpret the data effectively. In the upcoming chapter, I will describe the research design and research findings in more detail.
Chapter 4: Research Findings

Introduction

The purpose of the present qualitative study was to investigate how EL Education, formerly Expeditionary Learning, administrators’ beliefs and actions around self-theory (mindset), grittiness, and resistance affected a staff’s willingness to work through challenge and change. I specifically investigated the experiences of EL Education school leaders as they worked with their faculties to foster growth mindset and grittiness while improving teaching and learning in their schools. This multi-case study answered the following research question: What are the experiences of EL Education school principals as they work with teachers to overcome challenge, stress, and dissatisfaction? I organized this chapter into the following two sections: (1) research design and (2) research findings. Section one will discuss the sampling, instrumentation, and data interpretation procedures used to conduct the study. Section two will address the study’s research sub-questions: (1) What experiences do administrators find stressful for teachers? (2) What aspects of EL Education do administrators perceive as challenging for teachers? (3) How do administrators work with their staffs to develop stronger growth mindset and grittiness? (4) How does an EL Education administrator mindset and grittiness affect teachers’ willingness to change practice?

Research Design

Participants

In this study, the criterion for sampling required employment as a principal in an EL Education school. I gained an initial list of 150 schools from the EL Education website (EL Education, 2015b). With the help of an EL Education school designer, I identified 25 qualified
principals to invite to take part in the study. The 25 principals were selected based on a variety of factors including whether their school was a mentor school and/or a credentialed school. Furthermore, I considered the amount of time the school was in the network, and I considered the location of the school to ensure a variety of locations across the United States. After identifying the 25 principals, I then sent these possible participants an email invitation to be part of the study, and five principals consented to participate. These five EL Education principals made up the five cases included in the research. A detailed description of each case site can be found in Table 1.

Table 1

*Overview of Case Study Sites*

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Age of School in Years</th>
<th>School Type</th>
<th>Years in Network</th>
<th>Student Population</th>
<th>Start Up EL School or Transition School</th>
<th>EL Education Credentialed / Mentor School</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE Principal</td>
<td>11</td>
<td>Public - Grades 9-12</td>
<td>11</td>
<td>400</td>
<td>Start Up</td>
<td>Yes</td>
</tr>
<tr>
<td>SE1 Principal</td>
<td>41</td>
<td>Public - Grades 6-8</td>
<td>2</td>
<td>900</td>
<td>Transition</td>
<td>No</td>
</tr>
<tr>
<td>SE2 Principal</td>
<td>101</td>
<td>Public - Grades K-3</td>
<td>10</td>
<td>470</td>
<td>Transition</td>
<td>No</td>
</tr>
<tr>
<td>W1 Principal</td>
<td>17</td>
<td>Charter - Grades K-8</td>
<td>17</td>
<td>388</td>
<td>Start Up</td>
<td>Yes</td>
</tr>
<tr>
<td>W2 Principal</td>
<td>6</td>
<td>Charter - Grades K-8</td>
<td>6</td>
<td>212</td>
<td>Start Up</td>
<td>Yes</td>
</tr>
</tbody>
</table>
The principals included in the multi-case study research were from multiple regions of the United States. One school was located in the northeastern portion of the United States; two schools were located in the southeast; and two schools were located in the west. Furthermore, the administrative experience level for each case was different. Table 2 outlines the leadership experience for each principal.

Table 2

*Overview of Leadership Experience*

<table>
<thead>
<tr>
<th>Participant Pseudonym</th>
<th>Experience as Educational Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE Principal</td>
<td>Dean of Faculty</td>
</tr>
<tr>
<td></td>
<td>Principal at multiple sites</td>
</tr>
<tr>
<td></td>
<td>19 years of experience as an administrator</td>
</tr>
<tr>
<td></td>
<td>12 years as principal at current site</td>
</tr>
<tr>
<td>SE1 Principal</td>
<td>Assistant Principal</td>
</tr>
<tr>
<td></td>
<td>Principal</td>
</tr>
<tr>
<td></td>
<td>10 years of experience as an administrator</td>
</tr>
<tr>
<td></td>
<td>3 years as principal at current site</td>
</tr>
<tr>
<td>SE2 Principal</td>
<td>Instructional Coach at an EL Education School</td>
</tr>
<tr>
<td></td>
<td>Principal</td>
</tr>
<tr>
<td></td>
<td>7 years of experience as an educational leader</td>
</tr>
<tr>
<td></td>
<td>3 years as Principal at current site</td>
</tr>
<tr>
<td>W1 Principal</td>
<td>Community Based Curriculum Director</td>
</tr>
<tr>
<td></td>
<td>Educational Director</td>
</tr>
<tr>
<td></td>
<td>3.5 years of experience as an educational leader</td>
</tr>
<tr>
<td></td>
<td>1.5 years of experience as the Educational Director at current site</td>
</tr>
<tr>
<td>W2 Principal</td>
<td>Director of Graduate Studies</td>
</tr>
<tr>
<td></td>
<td>Educational Director</td>
</tr>
<tr>
<td></td>
<td>7 years as an administrator</td>
</tr>
<tr>
<td></td>
<td>6 years of experience as the Educational Director at current site</td>
</tr>
</tbody>
</table>

**Instrumentation**

*Semi-structured interviews.* Each EL Education principal participated in one semi-structured interview using Skype or Apple Facetime. The semi-structured interview took 45
minutes to an hour to complete. Each participant was interviewed individually in order to delve more deeply into their experiences as principals in EL Education schools. I recorded each interview using Quicktime to facilitate the transcription of interviews. If there were additional questions after the initial interview, I sent follow-up questions for participants to answer via email (Yin, 2014). The semi-structured interview protocol was included as Appendix A.

**Documentation and focus groups.** According to Yin (2014), documents were useful because they gave researchers a different perspective of leadership actions on the part of each school leader. I asked participants to send a mixture of the following public or in-house documents as part of the data collection process. The documents the EL Education principals sent included staffing interview questions, EL Education work plans, professional development plans, EL Education implementation review reports, and faculty meeting agendas. To conduct the focus groups with participants from various parts of the country, I used an online discussion board called Muut.com to complete each focus group protocol. The following open-ended questions were discussed:

**Focus Group 1 Protocol**

1. Do you speak with teachers about your own level of grittiness and growth mindset? What does that discussion sound like? What do you share?

2. How do teachers respond, if at all, to your personal story of mindset and grittiness?

**Focus Group 2 Protocol**

1. What strategies or protocols have you found useful, if any, when helping teachers to overcome a challenge in your school?

2. How did you implement these strategies in your school?

3. How did your teachers respond to these strategies?
Data Interpretation Procedures

Coding and data tables. As discussed in Chapter Three, I began the interpretation process by freely coding the interview data, focus group data, and documents to allow major themes to emerge. After completing the initial coding process, word tables were employed to organize the data. I began by organizing data around the three literature review propositions and secondarily organized the codes using Smargorinsky’s (2008) coding model of principal actions. See Tables 3 - 5 for a detailed view of the organization of the word table for each proposition with the initial themes identified across cases.

Table 3

*Proposition 1 Word Table*

<table>
<thead>
<tr>
<th>Goal-Directed Behaviors</th>
<th>Setting</th>
<th>Tool-Mediated Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on Strengthening School</td>
<td>Culture of Revision</td>
<td>Differentiated Professional Development</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of Reflection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Storytelling</td>
</tr>
</tbody>
</table>

*Note.* The table is based on the first proposition: Self-theory can affect how individuals approach challenge and failure.

Table 3 was organized around the first proposition of the study, which asserted self-theory affected how an individual approached challenge and failure. When organizing the data using the Smargorinsky (2008) model as a final guide, the following principal actions and decisions demonstrated there was a climate of positive self-theory, or growth mindset, in the schools. The researcher found principals used the following goal-directed behavior to support teacher growth: strengthening the practice across the school. Furthermore, principals created a culture or setting of revision in the schools in the study, which supported a culture of positive self-theory or growth mindset. Finally, the principals used the following tool-mediated
behaviors to support the positive culture of growth: reflective action, storytelling, and differentiated professional development.

Table 4

Proposition 2 Word Table

<table>
<thead>
<tr>
<th>Goal-Directed Behaviors</th>
<th>Setting</th>
<th>Tool-Mediated Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused Work</td>
<td>Grit = Perseverance</td>
<td>Storytelling</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Using Examples of Failure</td>
</tr>
</tbody>
</table>

Note. The table is based on the second proposition: Grittiness can be a determining factor in success and failure.

Table 4 was organized around the second proposition of the study, which described how grittiness could be a determining factor in the success and failure of an individual. When categorizing the data using the Smargorinsky (2008) model, the data indicated the following principal behaviors and actions illustrated how grittiness was a determining factor in success and failure in EL Education schools. For instance, a goal for the EL Education principals was to focus the school’s work around very specific points of growth, which helped to focus the gritty work of the teachers. Furthermore, the data revealed that EL Education principals worked to foster a culture where grittiness equated to persistent action. Finally, the data showed that each case used the following tool-mediated behaviors to strengthen grittiness among teachers: storytelling and using examples of failure to reframe teachers’ frustration around challenging work.
Table 5

*Proposition 3 Word Table*

<table>
<thead>
<tr>
<th>Goal-Directed Behaviors</th>
<th>Setting</th>
<th>Tool-Mediated Behaviors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focused Work</td>
<td>Culture of Growth</td>
<td>Differentiated Support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Honor the Struggle</td>
</tr>
</tbody>
</table>

*Note.* The table is based on proposition three: An individual’s resistance to change may affect his or her ability to thrive during challenge.

Table 5 was organized around the final proposition of the study, which asserted that an individual’s resistance to change could affect his or her ability to thrive during challenge. When organizing the data using the Smargorinsky (2008) model as a final guide, the principal’s efforts to focus the work of the school was again a goal-oriented behavior for the cases. In addition, the data illustrated how each case developed a culture of growth, which fostered a setting where resistance did not overcome teachers’ abilities to thrive during change. Finally, the data indicated the principals in each case used the following tool-mediated behaviors to help reduce resistance: honoring the struggle of individuals and differentiating support for teachers.

After organizing the data using the research propositions and Smargorinsky’s (2008) coding model, a final interpretation of data was conducted using the study’s research sub-questions. The sub-questions included: What experiences do administrators find stressful for teachers? What aspects of EL Education do administrators perceive as challenging for teachers? How does administrator mindset and grittiness affect teachers’ willingness to change practice? How do administrators work with their staffs to develop stronger growth mindset and grittiness? In the section that follows, there will be a discussion of the findings and themes found across cases during the data interpretation process.
Research Findings

As described in the previous paragraph, I conducted a final interpretation of the data using the research study’s sub-questions. In the sections that follow, the themes are identified under each sub-question.

Sub-Question One and Two: Struggles

The first two sub-questions used to frame the final data interpretation process were as follows: (1) What experiences do administrators find stressful for teachers? and (2) What aspects of EL Education do administrators perceive as challenging for teachers? To address the research sub-questions above, the researcher specifically asked participants in the semi-structured interviews to describe activities and EL Education Core Practices that teachers find stressful. The specific questions asked in the semi-structured interview were:

1. What part of the Core Practices do you perceive as challenging for teachers, if any?
2. What part of the Core Practices do you think teachers find stressful, if any?
3. Why do they find these practices stressful?
4. What strategies do you use to support teachers with this stress?

I also reviewed documents and online focus group responses for corroborating evidence supporting the perceptions that principals shared in the interviews. Upon the final interpretation of the data, the following sub-themes were identified around the struggles EL Education administrators perceive as stressful for teachers: student grit, expedition creation and revision, and reporting student achievement. The findings for each sub-theme have been described below in detail.
Sub-theme One: Student Grit

The administrators’ perceptions. Student grit was defined as a student’s ability to “demonstrate perseverance and responsibility for learning as they [worked] through multiple drafts” of a high quality product (EL Education, 2011, p. 25). Administrators in the study specifically discussed frustrations and concerns with student lack of grittiness in regards to work and character. The W2 Principal revealed, “we’ve been a little frustrated with some of the lack of perseverance, grittiness with some of our students.” The W2 Principal later explained:

You are always going to get stuck. . .between the kids, [the] people [that] are motivated and the people who aren't. If you can change the whole culture, then you can get it up to 80-90% sort of success. Then you have 10-20% that you really have to fight because they are just not motivated to do anything. I would say those are the big ones.

The NE Principal echoed the same concern around student grit when sharing, “[Grit] is something that I see is of significant need among a sector of our kids. It is something that I'm pretty intentional in working with staff about how to address.”

In order to address the lack of student grit described in the schools above, principals shared how their schools built grittiness as part the school’s character program. For instance, the W1 Principal discussed the school’s response as follows:

The one that was closest for us is perseveres when things are hard. . . . That's a value as a school that we explicitly talk about with kids, and kids recognize other kids for embodying that, and teachers recognize kids for embodying that. We try over time to develop what are the characteristics [of perseverance], what does that look like,. . .When a kid's doing that in the classroom on a regular basis.
The W2 Principal also described how the school tackled student grit although the efforts to address it proved challenging. During the interview, the W2 Principal reported:

Next year we are going to do strength but the primary piece to that is perseverance.

Because we are seeing it, we are seeing it both in character and academics, in enough places that we've realized we need to really focus on this. It's a very difficult one because it's very nuanced, particularly in the character piece.

In addition, the SE1 Principal identified the need to grow student character, specifically self-direction and discipline, in the school’s EL Education work plan. The SE1 school work plan outlined the following leadership/faculty learning target as a goal for growth around self-direction: “I can facilitate learning which is framed in terms of self-discipline and becoming a self-directed learner.” Furthermore, the EL Education work plan for the SE1 Principal’s school indicated the school needed to work on tracking character. For instance, the SE1 Principal included the following professional learning target on the school’s EL Education work plan: “I can facilitate my students in tracking, reflecting on, and sharing their progress toward habits of scholarship.” According to the faculty and leadership learning targets in the SE1 school’s work plan, the focus for the school was to continually push all students to demonstrate perseverance and responsibility for learning as they work to create high-quality work through multiple drafts.

Sub-theme Two: Learning Expeditions

The administrators’ perceptions. According to the EL Education (2011) Core Practices, learning expeditions were a central structure to curriculum in EL Education schools. EL Education defined a learning expedition as “long-term, in-depth studies [that offered] real-world connections that [inspired] students toward higher levels of academic achievement” (p. 17). Learning expeditions required students to complete original research, to apply critical
thinking and problem solving skills, and to practice character and academic skills to solve real-world, compelling problems. Furthermore, learning expeditions were interdisciplinary units of study that integrated skills of reading, writing, listening, speaking, numeracy, and research. According to Core Practice 2, which outlined how to develop learning expeditions, teachers constructed and continually refined and assessed expeditions for quality through school-wide critique and feedback structures.

According to the data collected in interviews, documents, and focus group discussion boards, EL Education administrators indicated that the process of creating, implementing, and refining expeditions could be stressful for teachers. For instance, the NE Principal identified concerns with expeditions being compelling for the students during the interview. The NE Principal shared the school continually needed to make “sure that we are still fundamentally expeditionary and staying in having expeditions, which remain compelling and relevant.”

Furthermore, the NE Principal discussed the struggles the school had to construct interdisciplinary expeditions. This principal described specific concerns around fitting in math as follows: “I think math has been probably, within the disciplines, our biggest challenge; to try and one, not have our humanities culture overwhelm our math culture, and two, finding ways for math to be deeply and meaningfully integrated into expeditions.” In addition, while the NE Principal’s school made great strides in the area of science, the principal reported, “We don’t have deep, fabulous math products. . .[the products are not] more than data analysis, which is fine but is not at the center of an expedition. It's ancillary value.”

In respect to expeditions, the SE1 Principal believed the faculty struggled to implement the expedition structure across all classrooms. In fact, one goal on the SE1 Principal EL Education work plan was for 30% of students at the school to participate in a learning
expedition. The SE1 Principal described the struggle of all teachers to implement elements of learning expeditions as follows in the interview:

The turtles have really struggled with project work. . . . The turtles are using projects after the curriculum is taught and assessed, so it has no basis for us being able to say your kids did better with the three-dimensional lens on student achievement, they did better with the mastery of skills and the assessment as a result of their deep project work. We can't say that now, because it's implemented after they test. I would say that project work has been difficult for a lot of them.

The principals in the study also believed revision of learning expeditions was a concern. For instance, the EL Education work plan from SE2 Principal indicated teachers struggled to align learning expeditions with district curriculum. As such, the school included a specific goal on the school’s work plan to address alignment. The goal in the SE2 Principal’s work plan addressed the following:

To help support teachers with the integration of a district-mandated Lucy Caulkin’s Units of Study ELA curriculum with learning expeditions. Teachers will need support in planning expeditions that integrate the ELA standards addressed in the units, aligning their instruction, and understanding the role of workshops, guided reading, and complex texts.

The W2 Principal’s EL Education Work Plan also listed a number of teacher and leadership learning targets that addressed the revision of learning expedition plans. For instance, the W2 Principal’s work plan included the following learning targets as areas of growth concerning expedition revision: (1) “I can collaborate with my colleagues to develop a process for making changes to the expedition in the future;” (2) “I can collaborate with my colleagues to make school wide decisions about necessary revisions to the expedition map;” and (3) “I can revise my
expeditions if necessary to ensure content standards in science and social studies are addressed and ensure diverse experiences for students.” The SE2 Principal’s work plan also identified the need for structured ways to revise expedition products. One learning target found on the SE2 EL Education work plan stated the team should “utilize protocols to engage all staff in evaluating final products for quality, real-world application, and service learning.” In addition, the SE2 work plan also shared that the team should “utilize protocols to engage all staff members in expedition revision process.” The researcher’s experience in an EL Education school provided her an understanding that work plan learning targets indicated areas of growth needed in certain EL Core practices. Therefore, in the W2 and SE2 Principals’ schools, the data from their documents indicated that teachers needed protocols and structure to effectively revise their learning expeditions for quality.

Sub-theme Three: Reporting Student Achievement

The administrators’ perceptions. According to EL Education’s (2011) Core Practice 24, EL schools shared information about student achievement in multiple ways including: assigning grades, communicating habits of scholarship, hosting exhibitions of learning, hosting student-led conferences, curating portfolios, and leading passage presentations. Furthermore, it was expected that students were continually engaged throughout the assessment practice. Through strong practices in assessing and communicating student achievement, EL Education asserted students should understand what they have learned and why. Furthermore, students should be able to speak to their own strengths and struggles in the process of learning.

Four principals in the study expressed the stress the teachers and they felt around the process of reporting student achievement. For instance, in both charter schools (W1 and W2), the teachers used standards based grading. Specifically, the W1 Principal described how
teachers struggled to identify which standards to include on reports. The W1 Principal reported how much time and effort it took to revise the standards based report card.

Some work that we've recently done... is just the way we communicate student achievement out, so we've done PD work for the last two years, looking at our report cards, our standard based report cards. In fact, it's taken probably about... three and a half years, to really revise those report cards where I honestly don't feel there's going to be many revisions this fall.

The W1 Principal also shared, “Oh my goodness, everything should be on the report card, so that mindset really had to shift. It took us 3 years to get there.” The W1 Principal recognized that “having the opportunity to revise is wonderful, but at the same time, it [was], ‘Ugh, can we be done?’” The struggle with standards based grading was echoed by the W2 Principal. The W2 Principal described how difficult it was for teachers to identify an actual overall score for a standard after multiple assessment opportunities.

If you have one standard, you might assess that standard 10 times. If you get all different scores what do you do? Average of them? Now you are not really doing standards based grading. If they got a three or a met standard on one of the scores, does that mean that's good? That they then met standard or what if it was the first time you assessed it and the last time you assessed it they got a one? Then they are not, they are actually going downhill but what if it's the reverse? It's super confusing.

Standards based grading in math specifically was addressed in the faculty meeting agendas for the W2 Principal’s school. The team was working through struggles of marrying the use of percentages and standards mastery. According to the agenda, the team discussed a possible cross-walk from a range of percentage scores to a particular score on the standards based report
The principals also expressed concerns with grading and reporting grades for student character. The W1 Principal believed her school, like others in the network, questioned the feasibility of grading student character. The W1 Principal asserted, “The challenging part for it was the character piece, and it's been a conversation within the network the last couple of years. As far as how do you measure character, should we be assessing character?” The question of how to grade character also was found in the SE2 Principal’s work plan. The rationale for the overall character goal listed on the SE2 school’s EL Education work plan was as follows:

However, this goal will support the [SE2 School] in articulating and implementing consistent district-wide set of Habits of Scholarship that are derived from those 10 Design Principles yet are manageable in number for teachers and students. Habits are explicitly taught, reflected on, tracked, and eventually assessed and shared out.

The leadership team also included goals about ways to manage the tracking and reflection of habits of scholarship (HOS) on the SE2 EL Education work plan. For instance, under the leadership learning targets, the SE2 work plan included the following goal: “Create school-wide HOS rubric for one HOS.” The need for a structured way to track habits of scholarship was also apparent in the W2 Principal’s documents. According to the W2 Principal’s faculty meeting agendas, the school team discussed how effectively the teachers were tracking habits of work (HOWs). The leadership team questioned if teachers were using reflection folders, planners, or portfolio reflections. Furthermore, according to the faculty meeting agenda, the W2 School team specifically discussed how the teaching team was “working toward making a connection between HOWs and academic achievement” and how teachers were “tying HOWs to earning test retakes.” Lastly, the SE1 principal’s professional development calendar indicated the faculty had ongoing professional development throughout the year pertaining to communicating student
achievement, specifically the way to communicate grades and habits of scholarship. In my role as an administrator, I recognized that principals included the continual discussion of student achievement in their faculty meetings and professional development times to respond to struggles teachers had to report out student achievement in academics and character.

Sub-Question Three: Developing Growth Mindset and Grittiness

In order to investigate how EL Education administrators fostered the cultures of growth mindset and grittiness, the following sub-question guided the research study: How do administrators work with their staffs to develop stronger growth mindset and grittiness? To address the research sub-question, participants were asked in the semi-structured interview how they addressed growth mindset and grittiness with teachers. The specific questions I asked in the semi-structured interview to discover this data were:

1. How would you define growth mindset?
2. How would you define grittiness?
3. Do you believe that mindset and grittiness affect how you lead? Why or why not?
4. Do you discuss growth mindset and grittiness with your faculty?
   a. When do you discuss growth mindset and grittiness with your faculty?
   b. How often do you discuss growth mindset and grittiness with your faculty?
   c. Have you done any formal professional development with your faculty about growth mindset? How about grittiness?
   d. What was your faculty’s response?

In addition, I asked the following questions in one of the online focus groups to ascertain administrator and teacher actions around the topic of growth mindset and grittiness:
1. Do you speak with teachers about your own level of grittiness and growth mindset? What does that discussion sound like? What do you share?

2. How do teachers respond, if at all, to your personal story of mindset and grittiness?

Finally, I reviewed documents for corroborating evidence supporting the administrators’ use of growth mindset and grittiness to grow these traits in teachers. Upon the interpretation of the data, the following sub-themes were identified: created a culture of revision, focus on strengthening school practice, and development of the idea that grit equals perseverance. A detailed description of the findings under each sub-theme is included in the sections that follow.

**Sub-theme One: Created a Culture of Revision**

The administrators’ experiences. After interpreting the data around EL Education administrator actions to strengthen growth mindset and grittiness in teachers, the data indicated administrators worked to cultivate a culture of revision across the schools in the study. For instance, the W2 Principal expressed in the interview that it was an expectation for teachers in the W2 school to continually grow, in other words to have a growth mindset. “Just like for the students, for the staff, it's just expected that you are always trying to improve to various degrees.” In fact, the W2 Principal indicated the leadership team addressed growth and revision with the whole staff continuously. “At every staff meeting it's just kind of, how can we do this better? Whatever the topic is.” The W2 Principal also described the structures the school put into place to facilitate ongoing teacher growth and revision of practice through goal setting and reflection. The W2 Principal stated, “We meet with [teachers] at the end of the year and then we reflect on the year, and they set a goal for the next year, and then at the beginning of the year we'll meet again and go over that goal. We can help shape that goal a little bit as well in the conversation.” As a result, the W2 Principal believed teachers developed skills overtime to...
improve their practice. In fact, according to the W2 Principal, improvement was a team effort. The teachers in the W2 Principal’s school “sort of develop skills that will help improve whatever you are looking to improve” in the school’s work plan or professional development plan.

This culture of revision was also noted in the W1 Principal’s school. In fact, in the hiring documents for the W1 school, teachers were expected to “thrive in a diverse, intellectually challenging environment where reflection and improvement of professional practice are regarded as hallmarks of individual and group growth and development.” The W1 Principal further explained revision was a foundational component of the culture at the W1 school. “We are a school of revision, and so understanding that is a privilege, too, that we get to do that” (W1 Principal). The W1 principal admitted that revision, particularly the amount of time it may take, was not always easy. The W1 principal described teachers’ reactions and frustration over the required multiple revisions. The W1 principal reported teachers have said, “Ugh, can we be done?” However, the W1 Principal also explained that the teachers felt “working through [revision] and having the opportunity to revise [was] wonderful.”

The importance of ongoing improvement was also noted by the NE Principal. The NE Principal defined growth mindset as “a belief that you can get smarter with hard work, and that your intelligence, in all its dimensions, is not finite but is malleable depending on inputs and effort, in focused effort.” Thus, for this principal there was a sense that people must focus ongoing efforts to revise and improve practice. This definition of growth mindset was corroborated in the NE Principal’s professional development plan. The NE school’s professional development plan indicated that the “Context Driving 2015-2016 Priorities [was to] Preserve, Deepen, [and] Grow.” The NE Principal explained that in healthy environments where teachers revised their practice, they depended on collaboration and connection. The principal reported:
[Teachers] feel supported and connected to other colleagues so even when they have a
crappy day or the lesson stinks...[they have] colleagues who they can vent comfortably to
and not be judged, and also feel, that encouragement of someone saying, ‘It's all right.
We'll get through it. How about this,’ and give them ideas that can help them pull through
as well as just being safe emotional support.

Therefore, according to the NE Principal, teachers willingly and openly supported one another
through the ongoing revision of practice process.

The SE1 Principal also defined growth mindset as ongoing improvement, and specifically
discussed leveraging both strengths and weaknesses as part of the improvement process. The SE
1 Principal described growth mindset as having “a willingness and the perception to look at, not
necessarily where you're falling short but what you've done successfully and how can you build
on that.” As a school family, the SE1 Principal reported that growth mindset allowed the team to
do the following:

That willingness to be able to look positively at both your strengths and your staircases,
and then determine in a very intentional manner what are you going to do next. And, what
resources and supports do you need, and where you're going to get them from, and how
you're going to monitor your progress as you go along?

Thus, the SE1 Principal helped develop a structured growth process at the school where
individuals honored success and failure. The data also indicated that a culture of revision is
foundational and ongoing at the SE1 school. It drove the improvement decision making process,
and as a school family they continued to work on the concepts of growth mindset and grit to
strengthen the improvement process. In fact, the SE1 Principal stated, “Our work on grit and
growth mindsets is ongoing as we are seeking to change adult behaviors and practices.”
The SE2 Principal also described a culture of revision at the SE2 school. The SE2 principal asserted in one of the focus groups that storytelling around successes and failures “reinforced the culture of revision we were developing along with goal-setting and quality feedback.” In addition, like SE1 Principal, the SE2 Principal explained how the culture of revision and ongoing improvement was strengthened by focusing on learning from successes and failures. The SE2 Principal described the process as follows:

Baby steps. One bite at a time with that growth mindset. We're not going to be perfect. . . . I think I instill the idea in my teachers that it is okay to make mistakes. I want you out there trying new things. You don't have to, and this is something I had to conquer as a teacher.

Thus, the SE2 Principal explained how she used growth mindset and grittiness to encourage and push teachers to take baby steps toward improvement.

Sub-theme Two: Strengthening School Practice

The administrators’ experiences. In addition to fostering a culture of revision in schools, the EL Education principals in the study indicated they also built capacity in teachers by focusing efforts on strengthening instructional practice across the school family. For instance, the SE1 Principal described how the leaders in the school engendered growth mindset and grittiness in teachers by scaffolding professional development and focusing the work toward a school-wide implementation of EL Core Practices. The SE1 Principal reported:

As with many things, our skill sets are in different places which necessitates scaffolding of professional development and support for our teachers and staff. We are better now than we have ever been before because everyone believes in the vision and are beginning to see positive outcomes as a result of our work.
According to the SE1 Principal, the teachers’ response to the administrator’s efforts to strengthen the EL Core Practices has been as follows: “Most often than not, that's a very, very positive instance. The teachers want to grow professionally. We know that.” And, as a result, teachers who believed in the EL model and wanted to improve in their practice of the model began to outnumber those that did not. The SE1 Principal explained:

I think that that's growing in our school. Our rabbits are increasing, and they are multiplying. Our turtles are, in some cases, getting run over by the herds of rabbits, and so either they are transforming themselves or they are finding new locations where they need to be.

This same laser light focus and support of the EL Core Practices was described by the SE2 Principal. “Our staff, I would say solidly, our staff loves the EL model. They love it. They love to be challenged by it, but they feel like what they gain from it is still worth the challenge” (SE2 Principal). Therefore, the SE2 Principal shared that her staff often sought out opportunities to strengthen practice - to demonstrate grittiness and growth mindset in the implementation of EL Core Practices. The SE2 Principal explained, “I have the type of faculty that they're looking for innovative best practices to try and to get the most out of.” According to the NE Principal, the focus for improvement of the whole staff was not just an administrative concern; it was also a focus for the whole school family. The NE Principal asserted the teachers in this EL school were motivated to collaborate and share ideas. The principal reported:

Again, if they get better then that's going to help make my life easier because we work with the same kids. We're all trying to work on this or that pathway, or this or that habit of work among our students. It helps us all when we're being incredibly giving as staff.
The data indicated there was even a focus on strengthening practice as part of the initial hiring process for schools. For instance, in the hiring documents for the NE Principal’s school, the leadership team included the following questions: (1) “What book are you reading right now professionally?” and “How are you growing as a result of your reading?” In addition, the NE Principal’s professional development documents indicated the long-term vision for the faculty was to “cultivate and sustain excellent, Expeditionary Learning teachers.” The SE2 Principal also addressed the team approach to strengthening practice in the school’s hiring protocol. In the protocol, the SE2 Principal listed the following scenario based question:

At our school, we collaborate with grade level teams twice a week and during half-day planning sessions throughout the year. What do you believe are the qualities of a strong professional learning community? Share an example of a time that you changed and grew professionally due to collaborating with peers.

In addition to the hiring protocols, the W2 Principal’s EL Education Work Plan listed a number of teacher and leadership targets around improved implementation of the EL Core Practices around instruction. For instance, the W2 Principal and leadership team included the following faculty target: “I can improve my proficiency in the lesson structures and protocols listed above using personal reflection and feedback from colleagues.” The W2 Principal listed the rationale for the faculty learning target in the EL Education Work Plan as follows:

Support teachers in ensuring engagement and achievement for all students through decisions about lesson format and thoughtful lesson design. . . . The rationale for this goal is to push them out of their comfort zone and to give them the space and time to work together to get to the creative level in these lesson formats.
Again, the focus for the W2 Principal was strengthening the practice of all teachers, to push them beyond their current practice to improve learning for all students.

**Sub-theme Three: The Grit Equals Perseverance Norm**

*The administrators’ experiences.* The data elicited from the EL Education principals about grittiness focused on the persistence component of the compound trait of grittiness. For instance, the W1 Principal defined grit as follows: “I like to use the word perseverance. I know grit is a hot word right now in the education arena, but it's that perseverance and resilience that pushes through the hard times.” The NE Principal defined grit as a trait related to resilience. The principal explained:

> Resilience implies there is some adversity that you are resilient against to make forward. I think grittiness is perceived more as an inherent trait that relates to your ability to stick with hard things until you've achieved a desired outcome, not giving up no matter what's in front of you.

Furthermore, the SE2 Principal defined grit as “Perseverance, tenacity, not giving up.” Along with persistence, the SE1 Principal felt that grit also was measured by a person’s ability to cope when tasks or approaches went a different way than planned. The SE1 Principal reported:

> I think that's anchored in this whole notion of perseverance and being able to have the tenacity and the persistence to stick with a task, an approach, a program, a model, but also the ability to be able to cope with things as they sometimes turn in directions that you did not intend for them to do so.

The W2 Principal also discussed how the leadership team broached the topic of grittiness with teachers when implementing new teaching protocols. The W2 Principal called his school’s
continual work toward an improvement goal the “yet” factor. The W2 Principal described the continual work as follows:

What's the idea that I can't do it? Is really I can't do it yet. Just adding the yet. It's getting that idea that of course you can't. Nobody can do anything right away, that's the whole point of learning. That's the whole point of growth. . . . That's the whole point of experiences.

The yet factor was also evident in the meeting agendas for the W2 school. The W2 Principal expressed it was healthy for teachers to grapple, like students do, when attempting to change practice or implement a new strategy. When addressing a new round of peer observations, the W2 Principal felt it was “okay if [teachers felt] uncomfortable. Teachers can grapple too! We’ve seen great lessons where the teachers are uncomfortable because this is new.”

In addition to student grit concerns and working with teachers on the yet factor, administrators also discussed how the credentialing process brought to light the school’s grittiness. Components of the credentialing process for EL Education schools included a portfolio of work around student mastery of skills, student character, and implementation of Expeditionary Learning. In addition, schools had to address in detail how they measured growth in the area of student high quality work (EL Education, 2016). Specifically, the SE2 Principal described how working with teachers to complete the credentialing process helped to bolster the level grittiness and growth mindset in all staff members.

Our latest conversations about it have been about how going through this reflection has motivated us and made us feel like yes, all this hard work over the last ten years has been worth it. We've continued to grow and we're doing amazing things.
Per the SE2 Principal’s experience, growth over time was confirmed and applauded in the credentialing process.

**Sub-Question Four: Changing Practice**

In order to investigate how EL Education administrators used growth mindset and grittiness to lead change action around the EL Education Core Practices in their buildings, I used the following sub-question to guide the research: How does administrator mindset and grittiness affect teachers’ willingness to change practice? To address the research sub-question, I specifically asked participants in the semi-structured interview how EL Education administrators worked to engender stronger growth mindset and grittiness in teachers. The questions asked in the semi-structured interview to discover this data were:

1. How do you encourage teachers to change practice, if at all?
2. What would you describe as your biggest challenge, if any, in helping teachers overcome resistance to change?

In addition, the researcher asked the following questions to ascertain the types of strategies administrators used to help teachers overcome challenges as well as the teachers’ responses to the strategies:

1. What strategies or protocols have you found useful, if any, when helping teachers to overcome a challenge in your school?
2. How did you implement these strategies in your school?
3. How did your teachers respond to these strategies?

Finally, I reviewed documents for corroborating evidence supporting the administrators’ use of growth mindset and grittiness to support teachers during challenges. After the interpretation of the data, I identified the following sub-themes: transparency in change action and storytelling.
Sub-theme One: Honoring Teachers’ Struggle

Administrators’ experiences. The data indicated the EL Education administrators in the study provided scaffolds to their teachers during challenge through a variety of methods. One such way was to foster relational trust with faculties by openly and transparently honoring the struggle and grit needed to complete the task at hand. The W1 Principal helped grow relational trust among the staff by being an active listener when times were hard. “I think a lot of it has to do with being a good listener, and as an administrator, having the grit to not say something right away.” As a result, the W1 Principal had a clear picture of the struggle, and gave voice to teachers’ concerns and the grit needed to move forward at any point in the year. The W1 Principal explained this process by stating:

Also, because I feel that we give staff opportunity to look at the target or the norms to say, "What's going to be hard to meet today? What norm might be challenging for us today?" Depending if it's in May, which norm is going to be hard? It might be a little bit different then than a norm in August, so really having that open dialog together.

Like the W1 Principal, the W2 Principal discussed how the leadership team at the school honored teacher struggles. The principal reported:

If there is some resistance. . .we actually have to talk openly about, we need to fix this. I know you guys don't really want to because it's going to take time and effort but it doesn't matter, we have to, to make it better. Then they are like, "Yeah." Again, because they already have bought into the growth mindset.

Other times, however, principals changed practice based on the pulse of the school. For instance, the NE Principal indicated on the school’s EL Education work plan for the school that the leadership team “routinely take(s) the pulse of the faculty and students about a pressing
school culture issue and addresses/revises [it] as necessary.” In essence, the leadership team modeled the grittiness in revision needed to successfully overcome a challenge and in doing so this administrator built the respect and personal regard needed to lead individuals through change action. Therefore, the W1, W2, and NE Principals honored the thoughts and perspectives of their teachers in the midst of change and challenge. As a result, these principals openly discussed and modeled for the faculty the grit and growth mindset needed to proceed with or revise the change.

Other administrators described how they used specific protocols to facilitate the transparent discussion and decision making around change. For instance, the SE1 Principal described how his team made the decision about the student advisory model called CREW. The SE1 Principal described an example of the school’s decision making process by stating:

This past year we tried to move from three days a week to five days a week, and I tried to utilize the same model that we used when we were becoming an EL school, which is take a staff assessment on it, to see where we are and if we're ready. If I didn't have 80% or higher...on the survey, then we were not going to move forward. We were not at 85%, we were right at...58% and some change, so we didn't get to do it.

The SE1 Principal attributed this decision to his efforts to model relational trust.

What I'm trying to model to them is relational trust. That I listened to the faculty, and that I went into the red book and showed them why was that important, so that we're not just adding two more days of crew that turns into something other than crew.

Like the SE1 principal, the SE2 Principal described how protocols helped the faculty problem solve as a team. The principal reported:
We use established protocols as tools to help teachers and teacher teams overcome struggles and challenges at school. For example, when a grade level has hit a wall with developing an expedition, we have implemented a tuning protocol to help the team broaden its vision and find solutions. When our staff has faced a challenge...we have utilized the “Back to the Future” protocol, causing us to articulate the results we are hoping for and making a plan to get there.

By providing teachers with structured protocols to work through challenge, these two administrators modeled the growth mindset / grit actions and language needed to work through problems.

In addition to using structured ways to move teachers through change, principals also shared how important it was to share the why of change with their faculties during times of change. The SE1 Principal asserted teams should start with describing the why first. Then he outlined the change process as follows:

We've got to be able to get them to see why first, what next, how, and then what does it look like, as far as the implementation standpoint. Once we're able to work them through those phases, then we tend to do better.

The SE2 Principal reported that these conversations sometimes led to changes in direction when it came to change action. “Honoring that conversation and sometimes saying, ‘You're right. This isn't worth it, you guys can find your own way to show, collect data to show growth in writing’.”

The W2 Principal described how the leadership team addressed the why of change in the second focus group protocol. The principal reported the school team worked to identify the “issue/problem first. Then [they] investigate possible solutions: brainstorm with staff, check other local schools/personnel, check other EL program leaders/staff, and look for PD.”
Sub-theme Two: Leveraging Storytelling

Administrators’ experiences. The data collected and interpreted also indicated the five administrators in the study used storytelling to demonstrate how their mindset and grittiness led to personal and professional growth. The W1 Principal shared in the second focus group protocol:

I do share with my staff struggles that I have persevered through to reach success and at times failure, but always growth. . .professionally and personally. This discussion will hopefully connect with what a teacher is going through at the time and will support [him or her] as they move ahead and change their mindset if needed.

Like the W1 Principal, the SE1 Principal shared how personal examples of growth mindset and grittiness were useful when helping the faculty move through change action, particularly in the context of a transition school. The SE1 Principal reported:

Frequently, I share personal stories and scenarios (past and present) of grittiness and needing to embrace a growth mindset. Some teachers were really moved by these examples and as a result, adjusted their practices. Others are continuing to grapple with their current position and practices which continues to impact teaching and learning.

The SE1 Principal later reported how encouraging storytelling has been for the staff. The principal shared:

I have found comfort in sharing struggles with my staff. This encourages them to do the same because they see the human side of their leader. When this is coupled with student affirmations and real stories, it makes for a powerful and meaningful learning experience.

The SE2 Principal echoed a similar response on the part of teachers. The SE2 Principal reported in a focus group:
They were really positive. I think most of them could see just like I shared with you, a personal connection of how they wish they had had [grit or growth mindset] more in their own life or with their children.

The W1 Principal also felt that sharing stories of struggle bridged the gap between school administrators and teachers in the midst of challenge, thus strengthening the relational trust needed to facilitate change action.

I have always had the belief in making sure there is a bridge between leadership and staff and not a chasm that could leave more room for misunderstandings. Sharing struggles and the pathway (some smooth, some not so smooth) to success builds that bridge.

By sharing personal connections with struggle, success, and failure, these administrators embodied reflection for growth.

Rather than focusing on their own success and failure, other participants shared the experiences of students or other teachers to illustrate the power of growth mindset and grit. The NE Principal discussed in the focus group the following:

In my weekly newsletter to staff, I do often try to lift up examples of grittiness and growth mindset within the faculty for others to be aware of and celebrate. To sustain quality practice and investment amidst the difficult daily grind of teaching often rife with frustration and feeling you’re not getting “there,” it is crucial for faculty to routinely be exposed to examples of peers or students' grittiness or growth mindset paying off.

Furthermore, the NE Principal reported, “I often share examples of students demonstrating these traits. . . . Our faculty exhibits these traits fairly routinely and inherently. I do not have to spend much time selling my faculty on the value of these traits.” In fact, the NE Principal believed that
teachers more willingly internalized growth mindset and grittiness when they heard about the experiences of their peers. The NE Principal asserted:

From peers, I think teachers may benefit most from stories where kids do work that amazes even the teacher, that is humbly conveyed by the teacher, including warts and all description of process numerous flops. . .but which concludes with kids clearly doing amazing work that matters and which kids never thought they could do.

Like the NE Principal, the W2 Principal leveraged the experiences of others through storytelling to help teachers overcome struggles. “On the storytelling theme, we do occasionally have PD where we talk about personal stories of growth and/or grit. These are part of on-going PD/conversations that maintain our culture of excellence as staff.”

Possible Alternate Evidence

While the data indicated that administrator beliefs and actions around growth mindset, grit, and resistance alleviated teacher stress and dissatisfaction during times of change, there was evidence in a handful of cases that showed other strategies were effective when combating teacher dissatisfaction. For instance, two administrators mentioned using assertive demands when other strategies did not work. The SE1 Principal described the following in the interview:

I have known which teachers are in certain locations professionally, and how to approach them. Some of our teachers can pretty much be given a task and they will go forward and really perform that task at a very high level. Others will need an awful lot of support and some assertiveness in helping to shape their work.

In addition, the W2 Principal shared:

Again, try to get them to reflect initially, ideally and have them lead the conversation but often times the reason there are problems because they can't or haven't. Sometimes it's just
laying it out and saying, “Look, we have very high standards, here is what we expect.

Here is what I've noticed. How can you fix this? Let's make a plan?” Sometimes they respond okay to that, other times very poorly.

While both principals indicated using assertive demands with teachers to change practice, they both described using demands as a last effort to push teachers toward change.

Other principals stressed that they hired individuals with growth mindset and grittiness in mind; therefore, many of their teachers functioned well even during times of stress. As a result, they did not have to provide much staff development to intentionally address growth mindset, grit, and resistance. Rather, administrator actions were more nuanced. The W2 Principal described, “Again, most of my teachers are really high functioning. None of this is crisis type of stuff. It's all very refining and nuanced.” Furthermore, the NE Principal shared that since he hired his teachers with EL in mind, “Most all of our adults are pretty gritty. It's not something I think there's not enough of in my staff that makes me be explicit about trying to cultivate that.” Therefore, in the NE school the faculty and administrative team had not done specific professional development or direct study of growth mindset or grit. The two transition schools (SE1 and SE2) did explicit learning around the topics of growth mindset and grit, however. The SE2 Principal shared, “a couple years ago we did some explicit PD work around the growth mindset and Carol Dweck's work primarily to reinvigorate student led conferences.” In addition, the SE1 Principal outlined the following:

Our first 2 years [were] anchored in growth mindset. This past year we spent a lot of time on Camille Farrington's work, trying to make certain that they understood those academic mindsets and where children are. Like if children don't feel like they belong. . .or they don't feel like they could succeed, or that their work is going to improve with effort they're
not going to do it. To do all that, yes, you've got to be able to understand what a growth mindset is. You've got to be able to look at that child and see the best in them.

In addition, the SE1 Principal’s school work plan indicated the leadership team would “facilitate and support professional learning on personal bias, relational trust and growth mindset” with staff regularly.

**Conclusion**

In this chapter the researcher compiled qualitative data to discover how five EL Education administrators leveraged growth mindset, grittiness, and resistance to change to support teachers through the stressful work of teaching and learning. The data for the study was collected through semi-structured interviews, two online focus groups, and a review of documents. The principals came from a variety of settings, including large public high schools and small charter schools. In addition, these principals had a variety of leadership experiences and tenures. Through three rounds of data interpretation, the researcher found three significant findings regarding the principals’ beliefs and actions around growth mindset and grittiness to address teacher dissatisfaction.

First, the EL Education principals in this study perceived that teaching and learning in EL Education schools was stressful for teachers at times. While the EL Education administrators identified a variety of factors that seemed to place stress on teachers, they all identified three common areas of stress for teachers. First, the EL Education principals in the study felt teachers were concerned with the lack of student grit and motivation in academics and character. In addition, the principals also described how teachers experienced stress over accurately reporting student achievement on academic standards and student character, and they reported how teachers felt stress over the creation, implementation, and revision of learning expeditions.
Second, there were significant findings around the principals’ responses to these stressors. Specifically, the data indicated EL Education principals did leverage growth mindset and grittiness in a variety of ways to help teachers overcome the stress around student grit, student achievement, and learning expeditions. First, the data illustrated how the EL Education principals nurtured a culture of revision to support teachers’ ongoing efforts to improve. In addition, administrator grit and growth mindset helped to strengthen the profession norm that instructional practice should continue to improve across the school, and administrator belief about grit helped to develop a common definition of grittiness across the school.

Finally, the third significant finding in the data indicated that administrators in the study used two specific methods to alleviate teacher dissatisfaction during times of change or stress. First, EL Education administrators leveraged specific actions to honor teachers’ struggles during times of change or stress. These actions included active listening and the use of discussion protocols to openly address resistance to change or fear of failure. In addition, the data also illustrated how the EL Education principals in the study used storytelling to successfully lead teachers through struggle and change. The administrators shared they used personal experiences as well as successes and failures of others to illustrate the power of growth mindset and grittiness in change action.

The following chapter will present conclusions about the study outlined in this paper. It will begin with an overview of the study’s purpose and structure, and it will then give a summary of results and present a discussion of findings outlined in this chapter. Finally, Chapter Five will present implications of the results for practice and will make recommendations for future research in the area of leadership, growth mindset, and grittiness.
Chapter 5: Discussion

Introduction

This chapter outlines a summary of the research study conducted around the experiences of EL Education principals. The chapter includes an overview of the problem, purpose, and research questions. There is also a review of the methodology and a summary and discussion of the findings related to each of the research questions. Additional sections share the findings in connection to previous research, and implications for practice are suggested as a result of the findings. Finally, there are recommendations for future research.

As described in previous chapters, teacher attrition and movement were serious concerns facing school systems. In fact, the United States Department of Education (2014) reported that the number of public school teachers leaving the profession almost doubled from 1988 to 2013. In the 2011-12 school year alone, more than 200,000 teachers left the education field, and 90,000 of these teachers had less than 10 years of experience. In addition, more than 250,000 teachers moved from the public school setting to charter or private schools. Ingersoll and Smith (2003) reported teachers were leaving the profession for a variety of reasons. These factors included personal or family issues, school staffing actions, or dissatisfaction. In addition, Ingersoll and Smith indicated other factors, like low pay, ongoing discipline issues, and lack of administrative support contributed to teacher dissatisfaction. Likewise, the United States Department of Education (2014) reported unmanageable workload and low pay contributed to teachers leaving the field. Due to the stressors described above, Farber (2000) and Pas et al. (2012) asserted teachers, especially those under the age of 40, were more prone to burnout due to the stresses of teaching. Teachers increasingly worked hard to accomplish the task; however, they did not feel
satisfied with their progress. In fact, the chronic stress weakened professionals’ ability to innovate and creatively work through problems (Hallowell, 2011).

The Study’s Purpose

In order to address the concerns with teacher dissatisfaction and attrition, school leadership teams must address concerns with school characteristics and organizational conditions, like collaboration, pay, and shared leadership structures (Ingersoll & Smith, 2003). One way to address school and organizational conditions was to adopt a different approach to teaching and learning by cultivating positive school cultures where teachers were supported, collaborative members of the learning community (EL Education, 2011). The study and results presented in previous chapters demonstrated how principals in EL Education, formerly Expeditionary Learning, schools specifically built positive school cultures to address teacher dissatisfaction and resistance to change.

The Study’s Structure

Five EL Education principals from around the country participated in this multi-case study. Each case included a one-on-one semi-structured interview and two online focus groups. In addition, the five principals provided various public and in-house documents describing hiring, professional development, and leadership practices used within their respective schools. The interviews, focus groups, and documents provided triangulation of the data around the following research question: What are the experiences of EL Education school principals as they work with teachers to overcome challenge, stress, and dissatisfaction? The following sub-questions also helped to guide the research process.

- Sub-question 1: What experiences do administrators find stressful for teachers?
• Sub-question 2: What aspects of EL Education do administrators perceive as challenging for teachers?

• Sub-question 3: How does administrator mindset and grittiness affect teachers’ willingness to change practice?

• Sub-question 4: How do administrators work with their staffs to develop stronger growth mindset and grittiness?

Summary of Results

The goal of this study was to determine how EL Education administrators’ beliefs and actions around self-theory (mindset), grittiness, and resistance affected staff willingness to change their practice for improved job satisfaction and instruction. After reviewing the interviews, documents, and focus group entries around EL Education administrator experiences, the data indicated that work and life in EL Education schools was stressful for teachers at times. In fact, the principals identified three specific areas of concern for teachers. According to the EL Education principals involved in the study, teachers had concerns about student grit and motivation. In addition, the principals revealed teachers struggled to implement and revise high quality, interdisciplinary Learning Expeditions across the school. Lastly, the principals reported teachers struggled to accurately and fairly report student achievement. Specifically, teachers struggled with grading character and developing consistencies for standards-based grading.

In reaction to these concerns, administrators leveraged growth mindset and grittiness in various ways to help teachers overcome stress around these topics. First, each participant described how he or she nurtured a culture of revision to help teachers more willingly revise instructional and assessment practices. The EL Education administrators in the study used goal setting, reflection, discussion protocols, and hiring protocols to help engender a culture of
revision in the school. For instance, the W2 administrator met with teachers at the beginning and end of each year to review growth around professional goals. In addition, the culture of revision was described in the principals’ hiring documents. In the W1 school’s hiring process document, there was specific mention of reflection and continual improvement as hallmarks of the professional environment at the W1 school. At other schools, the administrators described how teachers leveraged collaboration and reflection with one another to engender ongoing growth. Lastly, to encourage ongoing revision, principals honored the teams’ successes and honored the teams’ struggles when working through change action. In the EL Education schools in the study, the teachers and principals openly discussed what worked and what needed to change when making decisions about next steps. In fact, the SE1 Principal described how his team looked positively at strengths and weakness to make decisions about what to do next in their implementation of the EL Education model. As a result, success and failure were a vital part of the decision-making and improvement processes in the schools.

Second, administrator grit and growth mindset also helped the principals in each case to develop a norm for strengthening instructional practice throughout the school. Because teachers’ technical and adaptive skills varied across the schools, the EL Education administrators in the study used a variety of techniques to foster the institutional norm for improvement of instructional practice across the school. For instance, the EL Education administrators in the sites scaffolded professional development and focused work specifically on areas of weakness. In addition, the principals in the study discussed how collaboration among teachers helped to strengthen practice. For example, in the NE school, teachers were motivated to share ideas and to collaborate so that the work of teaching and learning became easier for all members of the team. Essentially, teachers wanted to grow professionally together since they all worked with
the same set of students. Furthermore, the EL Principals in the study included questions in hiring protocols to identify individuals who seek out professional growth opportunities. For instance, the SE2 hiring documents described how weekly collaboration was part of the professional practice at this school. The hiring documents then included scenario questions where it asked prospective teachers to share when they had grown due to collaborating with peers. After reviewing the data, administrators in the study fostered a growth mindset and grit-oriented environment where all teachers continued to improve. The administrators’ use of growth mindset and grit did not automatically change teacher practice; however, administrator efforts to model and foster growth oriented environments strengthened the common belief that school teams never truly arrive. All members of the team were called to improve no matter their current level of effectiveness. In fact, there was an emphasis on continued growth across all teachers in the work plans of all schools in the study, both the well-established EL Education schools (NE, W1, W2, SE2) and the relatively new EL Education school (SE1). Teachers did not respond negatively to the constant push to improve. Rather, principals in the study shared teachers were encouraged and excited to continually grapple and grow. So, while the work was challenging and while it required teachers to stretch professionally, educators in these schools did not shy away from opportunities to innovate. The teachers actually sought out opportunities to grapple. The SE2 Principal described this pointedly when stating, “our staff...loves the EL model...They love to be challenged by it, but they feel like what they gain from it is still worth the challenge.”

Thirdly, administrators in each case described how they worked with their staffs to develop a common sense of grittiness for staff and students. Upon reflection of the data, principals placed a strong emphasis on the persistence component of grittiness. Each of the
principals described or defined grit as a person’s resilient and persistent action to overcome challenge, but the language of grit varied across schools in the study. Some principals focused on the idea of perseverance (W1 Principal), while others focused on the idea of resilience (NE & SE1). Specifically, the SE1 Principal shared that grittiness was the teacher’s ability to cope when plans turn directions or do not go the way he or she intended. Closely tied to resilience was the idea of tenacity, which was the focus for two principals (SE2 and W2). Both the SE2 and W2 Principals described how they focused their language of grittiness around the idea of not giving up. The W2 Principal specifically shared how he leveraged the word “yet” to help teachers overcome resistance when the team was trying to change or adjust instructional practices. While the language or definitions may vary slightly across schools, the data in the study indicated administrators broached the subject of grit with teachers particularly when introducing or implementing new teaching strategies. Furthermore, the principals shared how they used evaluation structures, like the credentialing process, to bolster reflection and grittiness among the faculty.

Lastly, the EL Education administrators described how they fostered grittiness and growth mindset by honoring teachers’ struggles and leveraging storytelling. The principals reported how they promoted active listening, particularly during times of change or struggle. For instance, the W1 Principal waited to respond during times of challenge in order to obtain a full picture of the teachers’ concerns around a change in practice. In addition to active listening, the EL Education administrators described how their teams openly discussed resistance to change and what the team would need to accomplish to overcome it. During these discussions, administrators in the study made a special effort to share the why of change to help counter resistance, and they adjusted change action based on the pulse of the school. In fact, some
administrators revealed they would completely stop change action if the school was not adaptively ready for it. In other cases, the EL Education principals used specific discussion protocols to facilitate a transparent decision making process. Finally, the EL Education administrators described how they leveraged storytelling to successfully lead teachers through change action. The EL Education principals shared how they used personal stories of success and failure as well as stories from the student or teacher perspective to illustrate the power of growth mindset and grittiness in change action.

**Discussion of Findings**

In the following section of this chapter, I discuss the importance of the findings described in Chapter Four. This section is separated into two parts: Stress in EL Education Schools and The Principal Effect.

**Stress in EL Education Schools**

After reviewing data around administrators’ perceptions of teachers’ stress, the data indicated teachers in EL Education schools experienced stress for similar reasons as their peers in other public and charter school settings. As described in the introduction, classroom factors and workload did affect EL Education teachers. Specifically, the data illustrated the stress on high-quality work through multiple revisions played a significant role in the stress level for teachers and administrators in EL Education schools. Students were expected to create work that was intended for public audiences through multiple drafts and critique. Furthermore, teachers were expected to give students access to multiple rounds of feedback from various sources to improve the work. Data in the study indicated teachers were also expected to leverage revision and reflection to continually refine their own as well. Therefore, there was an emphasis of revision and a culture of excellence around work product on the part of students and teachers,
and this focus on excellence added a layer of stress in multiple areas of work for teachers and administrators. The principals in the study believed teachers consistently worried over student lack of grit, and as a result they continued to revise their efforts to address student character through instruction and assessment. Furthermore, principals shared how teachers continued to revise or write Learning Expedition plans to make them more compelling and relevant while also addressing multiple disciplines. Lastly, principals believed teachers experienced stress around grading, particularly when they focused on character or standards based grading. The principals in the study shared how their teams continued to refine and revise grading practices to ensure that the results were an accurate reflection of student performance. In all three cases, the concern with excellence drove the continued revision and reflection of teacher work product. As a result, there were times when teachers expressed frustration over the constant grappling with student grit, Learning Expeditions, and grading. For instance, the W1 principal reported teachers have said, “Ugh, can we be done?” However, the expectation to revise and improve did not stop teachers in these schools from improving practice. Rather, the W1 Principal also explained that the teachers felt “working through [revision] and having the opportunity to revise [was] wonderful.” In the sections that follow, I explain in more detail the administrators’ perceptions of teacher stress in the three areas of student grit, Learning Expeditions, and grading.

Stress over Student Grit

According to the EL Education (2011) Core Practices, schools were expected to provide students opportunities to produce high-quality student work that were rigorous and demanding for all students. In order to produce the high-quality products, students must “demonstrate perseverance and responsibility for learning as they [worked] through multiple drafts” (EL Education, 2011, p. 25). In the EL Education Core Practices, the authors highlighted the
importance of perseverance in work when describing the habits of scholarship for students. In fact, the habits of scholarship at EL Education schools should include indicators around study skills, time-management skills, self-awareness, and persistence. Therefore, in EL Education schools students were expected to show ownership of their own learning through continual assessment and improvement of the quality of their work. In fact, EL Education asserted classrooms should be “characterized by a culture of striving for excellence” (p. 52). Therefore, in EL schools administrators and teachers consistently and persistently pushed students to positively grow in academics and character.

While a culture of excellence was strongly supported by the administrators, the principals did suggest the constant push for excellence in student work caused stress on teachers. For instance, the W2 Principal believed the school team had been frustrated with the lack of perseverance and grit in students. The W2 Principal reported:

No matter how good your expeditions are, no matter how good your literacy program is, you are always going to get stuck at that sort of 50th percentile between the kids, [the] people [that] are motivated, and the people who aren't. If you can change the whole culture, then you can get it up to 80-90% sort of success. Then you have 10-20% that you really have to fight because they are just not motivated to do anything. I would say those are the big ones.

In addition, the NE Principal shared, “[Grit] is something that I see is of significant need among a sector of our kids. It is something that I'm pretty intentional in working with staff about how to address.” The NE Principal is not the only principal who stated the school was working as a team to engender stronger grit among students. The SE1, W1, and W2 principals indicated in their interviews or on their schools’ work plans that the school specifically planned to address
the lack of student grit. Therefore, like their peers in other school settings, EL Education teachers had concerns around student performance and poor student motivation; as a result, the lack of student motivation made it challenging for teachers to support students’ creation of high-quality important work (EL Education, 2011; Ingersoll & Smith, 2003).

**Stress over Learning Expeditions**

Data from the Teacher Attrition and Mobility survey conducted by the United States Department of Education (2014) indicated the manageability of workload was a factor for teachers leaving the profession. A large component contributing to teacher workload in EL Education schools was the design and implementation of Learning Expeditions. The EL Education (2011) Core Practices described Learning Expeditions as the signature curricular structure in EL Schools. Learning Expeditions are long-term, in-depth studies of authentic problems that require original research, critical thinking, and problem solving. The Core Practices also described how Learning Expeditions were constructed. “Learning expeditions are constructed or customized by individual teachers or teaching teams and refined and assessed for quality through school-wide structures that involved leadership and faculty in critique and support” (EL Education, 2011, p. 17). When reviewing the data, there were two concerns around expeditions that proved difficult for teachers. First, teachers struggled to make expeditions truly compelling and interdisciplinary. The NE and SE2 principals both indicated their teachers struggled to implement expeditions that were both compelling and relevant for students, and they reported it was a struggle to fit mathematics and literacy into the expeditions in meaningful ways. Teachers also questioned how to implement all the elements of the expedition, which included guiding questions, field work, service learning, experts, celebrations of learning, case studies, and projects.
Second, data indicated teachers struggled to create truly interdisciplinary expeditions. The NE Principal specifically mentioned how his team struggled to meaningfully implement math standards as part of Learning Expedition plans. The NE Principal shared, “I think math has been probably, within the disciplines, our biggest challenge; to try and one, not have our humanities culture overwhelm our math culture, and two, finding ways for math to be deeply and meaningfully integrated into expeditions.” Furthermore, another principal explained how it was challenging to flex traditional assessment practices to allow for meaningful acquisition of knowledge and skills in Learning Expeditions. The SE1 Principal communicated the struggle as follows:

The turtles have really struggled with project work. . . . The turtles are using projects after the curriculum is taught and assessed, so it has no basis for us being able to say your kids did better with the three-dimensional lens on student achievement, they did better with the mastery of skills and the assessment as a result of their deep project work. We can't say that now, because it's implemented after they test. I would say that project work has been difficult for a lot of them.

Thus, teachers in the SE1 school struggled to replace traditional assessment practices with compelling projects and authentic performance tasks, or in other words flexed traditional curriculum structures and sequences to implement Learning Expedition project work. The teachers’ struggle to replace some traditional assessment with projects and case studies added to the stress around workload commonly described by teachers across school settings.

**Stress over Reporting Student Achievement**

After interpreting the data across cases, reporting student achievement in the area of character was perceived as the most stressful for teachers. The principals particularly described
how consistency in documenting and tracking Habits of Scholarship across the school caused stress. For instance, the W1 Principal reported, “The challenging part for it was the character piece, and it's been a conversation within the network the last couple of years. As far as how do you measure character, should we be assessing character?” In addition, principals in multiple cases indicated in their EL Education work plans and meeting agendas how they worked with teachers around the teaching of Habits. Specifically, the W2 Principal wanted more clarity on how the teaching team was “working toward making a connection between Habits of Work and academic achievement” and how teachers were “tying Habits of Work to earning test retakes.” Thus, there seemed to be system-wide questions around the tracking of Habits of Scholarship. How often should it be done? What manner of tracking were teachers using? Should there be a consistent rubric across schools or classes? According to the data, the lack of consistency around tracking the Habits caused stress particularly as teachers worked to fairly and accurately assess student growth in character.

**The Principal Effect**

Qualitative research, like the study described in this paper, was characterized by the belief that people socially construct meaning and understanding about a phenomenon as they interact with the world (Gillaspy, 2015). In other words, people learned from each other and developed similar responses and behaviors to stimuli based on shared experiences. Learning and growing from shared experiences was supported by EL Education (2011) in the Core Practices around leadership. School leaders were expected to join with teachers and students to maintain a school culture characterized by self-discipline, compassion, and collaboration. Therefore, administrators, who acted as lead learners and fellow members of the learning environment, played a special role in how teachers responded to the stressors described above (Fullan, 2014).
According to Hallowell (2011), leaders, in this case EL Education principals, fostered focused passion, resilience, and growth mindset if they wished to move organizations forward during times of change and improvement. In essence, the principals in the study modeled the attributes needed to build a professional culture of learning (EL Education, 2011).

The five administrators in this study did foster focused passion, resilience and growth mindset to help their staffs move forward during times of change or frustration. Each EL Education principal modeled and fostered the attributes needed to build strong professional cultures of learning where teachers worked to overcome concerns with student grit, Learning Expeditions, and reporting student achievement. The principals used four specific actions to model or foster growth mindset and/or grittiness in their faculties during times of change or stress. These actions included: (1) meeting teachers where they are, (2) fostering resilience and passion around high quality work, (3) using examples of failure to encourage continued learning and growth, and (4) involving teachers in the change action process. In the sections that follow, I explain how the principals achieved this work in more detail.

**Effect One: Meeting Teachers Where They Are**

Individuals with high levels of growth mindset approached challenge, change, and learning with an adaptive motivational pattern of behavior (Dweck, 1986; Gero, 2013). In fact, Gero (2013) reported growth mindset individuals viewed the world with a mastery orientation. As a result, growth mindset individuals viewed problems and challenges as opportunities to gain mastery through effort. In this study, all five cases focused their work with a mastery orientation, and as such, worked specifically to build teachers’ capacity around the EL Education Core Practices, which described the network’s vision for highly effective schools. The Practices included specific learning targets around the stressors administrators described in this study.
These stressors included Learning Expeditions, culture and character (grit and growth mindset), and tracking student achievement. In all cases, the EL Education administrators honored the different places individuals were concerning these stressors, and in response, these principals focused and scaffolded professional development to support the school-wide implementation of the EL Core Practices. The principals’ efforts to scaffold professional development were particularly important in the transition schools, like the school led by the SE1 Principal. The SE1 Principal shared:

As with many things, our skill sets are in different places which necessitates scaffolding of professional development and support for our teachers and staff. We are better now than we have ever been before because everyone believes in the vision and are beginning to see positive outcomes as a result of our work.

As a result of this principal’s mastery orientation, the teachers in this long-established school internalized the Core Practices as their own. The SE1 Principal explained:

I think that's growing in our school. Our rabbits are increasing, and they are multiplying. Our turtles are, in some cases, getting run over by the herds of rabbits, and so either they are transforming themselves or they are finding new locations where they need to be.

The principals’ focus on continuous mastery emboldened their whole staff to do the same, to see the challenges of implementing the Core Practices as opportunities to grow and improve. In the W2 School, the teachers asked regularly, “How can we do this better? Whatever the topic is.” Not only were the teachers asking what can get better, they saw the challenge of improvement as an honor. The SE2 Principal stated, “Our staff, I would say solidly, our staff loves the EL model. They love it. They love to be challenged by it, but they feel like what they gain from it is
still worth the challenge.” Ultimately, because principals modeled and discussed mastery orientation often, they developed a strong culture of revision across the staff. For instance, the W1 Principal shared, “We are a school of revision, and so understanding that is a privilege, too, that we get to do that.”

Effect Two: Fostering Resilience and Passion

Carver (1998) believed individuals responded to physical or psychological difficulty in four ways: succumbing, survival with impairment, resilience (recovery), and thriving. Of the four ways, the most productive for a person to overcome stress was to thrive. When an individual thrived after adversity, he or she “[gained] in some way from the experience and [could] apply that gain to new experiences, leading to more effective subsequent functioning” (Carver, 1998, p. 251). When reviewing the data, the key factor helping individuals to move from resilience (recovery) to thriving was passion for the EL Education model. Duckworth and Robertson-Kraft (2014) found that challenges associated with teaching could be discouraging and at times led to teacher attrition, especially among novice individuals. However, teachers displaying more resilience and sustained passion over the long term were less likely to leave the classroom during the middle of the year. Thus, the key for thriving in schools was sustained passion for the work, and according to the EL Education principals, this passion was rooted in a culture of excellence (EL Education, 2011).

The question is how EL Education administrators engendered passion and resilience, in other words grittiness, when the work of implementing the Core Practices proved to be challenging for teachers. In reviewing the data, principals openly discussed the need for resilience when work became challenging. When combined with the principals’ efforts to support all teachers, the environment for thriving was created. Thus, the principals successfully
married definitions of resilience with the passion for excellence to engender grit in their teachers. A poignant example of this came from the W2 Principal’s school. The principal indicated that the W2 school family leveraged the idea of “yet” when they encountered challenge. The W2 Principal described when he would use the idea of “yet” as follows:

What's the idea that I can't do it? It is really I can't do it yet. [It is] just adding the [word] yet. It's getting that idea that of course you can't. Nobody can do anything right away, that's the whole point of learning. That's the whole point of growth. That's the whole point of getting older. That's the whole point of experiences.

The W2 Principal also honored the importance of grappling when leveraging the “yet.” The W2 Principal shared it was “okay if you feel uncomfortable. Teachers can grapple too! We’ve seen great lessons where the teachers are uncomfortable because this is new.” In addition to discussing the yet factor, EL Education principals in multiple settings helped to engender grittiness (passion + resilience factors) in their staffs by conducting specific professional studies around the topics of academic mindsets and grit. Furthermore, in response to the teachers’ concerns with waning student grit, the principals worked with their staffs to address student persistence when academic and character work became challenging. Again, there was an underlying focus on excellence in all work that teachers produce, and as such, the passion for continued excellence bolstered levels of grit in administrators and teachers. The teachers willingly continued to work for success because they felt empowered by their ability to overcome the struggle along the way. According to the SE2 Principal,

Our latest conversations about [credentialing] have been about how going through this reflection has motivated us and made us feel like yes, all this hard work over the last 10 years. . . . We've continued to grow and we're doing amazing things.
Effect Three: Using Examples of Failure

In order to help teachers overcome concerns and fears around the Core Practices, the EL Education principals actively used examples of failure to encourage continued learning and growth. Carver (1998) shared that resilience can be learned over time and bolstered by experiences with trusted individuals. Specifically, EL Education administrators strengthened teachers’ abilities to thrive by modeling an emotional flip when the team encountered failure or hardship (Hallowell, 2011). In fact, EL Education (2011) explained in the Core Practices that administrators should openly reflect on their own successes and failures, thus modeling for staff a passion for self-improvement. It was no surprise, therefore, that all of the principals in the study reframed failure as an opportunity to iterate rather than a reason to quit. The EL Education principals accomplished the reframing by sharing stories of personal struggle and failure. In addition, they celebrated times when students or teachers overcame failure to grow and learn.

Storytelling proved useful and powerful because it built a connection between the EL Education administrators with their staffs. The SE1 Principal reported:

I have found comfort in sharing struggles with my staff. This encourages them to do the same because they see the human side of their leader. When this is coupled with student affirmations and real stories, it makes for a powerful and meaningful learning experience.

In addition, the W1 Principal expressed the stories built a bridge between the staff and the principal. The W1 Principal stated, “sharing struggles and the pathway (some smooth, some not so smooth) to success builds that bridge.”

These stories connected the teachers with students and their peers. The EL Education principals found power in celebrating examples of other people’s growth mindset and grittiness.
According to the NE Principal, sharing these stories was essential to sustaining the level of practice and investment needed to overcome the daily grind of teaching. According to the NE Principal, because teaching and learning was “often rife with frustration and feeling you’re not getting there, it is crucial for faculty to routinely be exposed to examples of peers’ or students' grittiness or growth mindset paying off.” In reflection, stories of grit and growth mindset were powerful tools for the administrators in the study, whether experiences from the administrator themselves or from teachers and students. The simple act of openly sharing and reflecting upon success and failure helped these leaders model for the staff how mindset and grit has facilitated the completion of challenging tasks.

**Effect Four: Involving Teachers in Change Action**

Leaders in EL Education schools were expected to build cohesive, school cultures focused on excellence and equity (EL Education, 2011). As such, EL Education (2011) promoted shared leadership protocols and structures to ensure equity across the school. In fact, all stakeholders were expected to “engage in data-based conversations linked to school improvement, and the school [used] a clear process for making, communicating and implementing decisions” (EL Education, 2011, p. 83). In effect, the teachers and administrators in EL Schools worked together to increase student achievement and teacher capacity, thereby growing a culture of excellence across all people in the school. However, to successfully foster an environment where teachers openly and freely iterated their own practice, they needed strong professional connection (Hallowell, 2011). Strong connection was particularly important when faculties were facing times of high stress or change. In fact, Hallowell (2011) suggested there is a brain benefit from connected environments where people learn from one another. In schools where teachers were supported by their principals and peers, they paid broader attention to the
organization’s goals and think and problem solve more creatively. Furthermore, the connection aligned the work of each individual so that the team worked through struggles together more successfully.

It is apparent that connection and shared leadership were vital when helping teachers overcome stress and struggle in EL Education schools. In fact, all five EL Education principals fostered connection and grit in the staff by cultivating a shared ownership of the successes and challenges and implementing a shared decision making model. Administrators used specific protocols to engage teachers in the decision-making process. In highly trusting environments where the teachers’ voices were honored, administrators even changed the direction of the change action based on the outcome of the decision-making protocols. The SE1 Principal reported:

This past year we tried to move [CREW] from 3 days a week to 5 days a week, and I tried to utilize the same model that we used when we were becoming an EL school, which is take a staff assessment on it, to see where we are and if we're ready. If I didn't have 80% or higher. . .on the survey then we were not going to move forward . . . We were right at 60%. [The survey proved] 58 and some change, so we didn't get to do it.

Other administrators used the tuning protocol or goal setting protocols to focus the work of the faculty. In both of these protocols, the teachers in the SE2 Principal’s school articulated the results they wanted at the end of the change action, and they refined their actions to reach their goals. Essentially these principals understood how important it was to make the change action transparent for teachers when the journey was tough. In fact, the SE1 Principal shared:
We've got to be able to get them to see why first, what next, how, and then what does it look like, as far as the implementation standpoint. Once we're able to work them through those phases, then we tend to do better.

Therefore, principals at EL Education schools fostered grit during change by cultivating a shared ownership of the successes and challenges across the school. Sometimes this included putting into place collaborative structures and practices that reinforced the importance of collegial trust and connection as a foundation for success (Hallowell, 2011; EL Education, 2011). By allowing teachers to understand and question the why of change, the EL Education principals strengthened the collaborative connections needed to overcome challenge as a team.

**Implications of the Results for Practice**

In many school settings, teachers reported they left the profession for a variety of professional factors. These factors included staffing concerns, low pay, student discipline concerns, lack of administrative support, and concerns with student motivation (Ingersoll & Smith, 2003). Furthermore, teachers identified issues with the amount of workload they encountered when teaching (United States Department of Education, 2014). Compounding the concerns with motivation, pay, and administrative support, Powell and Kusuma-Powell (2015) believed teachers also had technical and adaptive deficiencies that hindered their ability to navigate change action. The teachers either lacked the skill or technical knowledge to innovate or problem solve, or they feared change particularly in terms of their own practice. What if the teacher did do well in the change? How did they look to peers or leaders in the school?

Teachers with adaptive challenges to change action essentially possessed a fixed mindset (Gero, 2013). Teachers without adaptive skills avoided change and saw difficulty as a setback (Hallowell, 2011; Powell & Kusuma-Powell, 2015).
When I looked across the cases, principals indicated teachers in the EL Education environments had the same stressors as teachers in other types of schools. All principals perceived the lack of student motivation, in their terms student grit, as a major concern. In addition, there were concerns with workload in terms of Learning Expeditions, and teachers technically struggled with ways to consistently grade, particularly character. With that being said, administrators in the EL Education schools leveraged growth mindset and grittiness in a variety of ways to help teachers. Specifically, they used EL Education structures, Core Practices, and protocols to nurture revision and improvement across all members of their staffs. In the sections that follow, I outlined how administrators in other school settings can leverage beliefs and actions around growth mindset and grit to navigate the change action journey with their faculties, particularly when teachers and staff members express high levels of frustration and dissatisfaction.

**Implication One: Addressing Adaptive Deficiencies**

According to the EL Education (2011), student achievement improved when administrators make a concerted effort to develop the technical and adaptive skills of teachers in each classroom. In fact, EL Education (2011) expected school leaders to develop growth mindset and grittiness in teachers by providing “necessary resources to develop every teacher’s content knowledge and instructional repertoire, ensuring school-wide excellence” (p. 81). Thus, principals can address the adaptive deficiencies, or fixed mindset beliefs, of teachers by improving technical skill concerns they have around instruction and assessment (Powell & Kusuma-Powell, 2015). To overcome teachers’ technical deficiencies, principals in the study used a variety of resources including time, professional development, coaching, and opportunities for shared leadership. Specifically, school leaders differentiated and scaffolded
professional development for staff based on technical and adaptive needs. Furthermore, principals addressed adaptive, fixed-mindset deficiencies of teachers by changing the language of failure used with faculty and staff. Hallowell (2011) called this process the act of reframing failure. Principals freely and openly talked about failure and struggle and shared specifically how to grow from failure to produce a better product or action. Principals also used the word “yet” in discussion with teachers when these individuals were struggling to succeed in a task. Changing the language around failure modeled for fixed-mindset individuals how they can adjust practice and use the experience to thrive in the classroom. Changing language around failure also helped individuals not to be afraid of failure, to see it as an opportunity to grow, and therefore lessening the stress and dissatisfaction often attached to professional failure or mistakes.

**Implication Two: Practicing Impressive Empathy**

According to the EL Education (2011) Core Practices, administrators helped to facilitate change and cultivate a culture of growth and grittiness by modeling and actively fostering “the critical attributes of trust necessary for achievement: respect, integrity, competence, and personal regard for others” (p. 79). Fullan (2011) further explained that trust was essential when developing a culture of change and improvement. Fullan asserted principals should build trust with staff and in turn foster growth mindset and grittiness in staff by practicing impressive empathy (Fullan, 2011). According to Fullan, principals used the voice of resistors and supporters to improve practice and move change action forward. In fact, the EL Education Core Practices specifically instructed school leaders to implement effective mechanisms for communicating and implementing decisions across the school. Therefore, like the principals in the study, school administrators in other settings could demonstrate impressive empathy by using
a shared leadership model. There were a variety of strategies that pull in the voices of both resistors and supporters. For instance, school leaders used voting structures or processes to determine teacher readiness for change action. These structures typically were in a survey format. In response to the results of the readiness survey, administrators were open to adjusting change action or goals based on teacher voice in the voting process. Furthermore, if there was not an overwhelming support for the change action, school leaders considered if the goal or change action was appropriate at that time. Sometimes change action was delayed after additional training or consensus building was completed. Lastly, administrators in other settings should use protocols, like tuning and “Back to the Future” protocols, to focus the work of faculty during change action. These protocols provided structure for professional discourse, allowing the voices of all people to be heard (EL Education, 2011). Specifically, the tuning protocol allowed teams to collaboratively reflect and refine assessment and teaching practices. According to the National School Reform Faculty (2016b), the tuning protocol gave teachers and administrators a structured way to review student work. In addition, this protocol was used by teachers and leadership teams to reflect and refine lesson and assessment plans, professional development plans, or change action plans. In conjunction with tuning protocols, administrators leveraged reflection protocols, like the “Back to the Future” protocol, to thoughtfully plan, implement, and refine change action with faculties (National School Reform Faculty, 2016a). The National School Reform Faculty (2016a) asserted the purpose of reflection protocols was to “vision into the future and tell what it would look like in the very best-case scenario” (p. 1). Reflection about change action gave each individual a voice and identified the specific steps, team members, actions, and timeline that would help the team successfully complete the change action plan.

When administrators used structured protocols for teacher involvement in change action, leaders
honored the voice of resistors and supporters in appropriate ways to improve change action or instructional/educational practice. And, because these protocols walked faculties through the process of iterative practice, teachers saw how grit and growth mindset were vital to the improvement process. As a result, the school leader modeled how trust, growth mindset, and grit go hand in hand. By willingly practicing impressive empathy, school leaders demonstrated how the school can grow over time through ongoing reflection, discussion, and revision by the whole team. Furthermore, administrators’ efforts to practice impressive empathy addressed teacher dissatisfaction head on by giving voice to the concerns and stressors teachers have.

**Implication Three: Honoring the Struggle**

In addition to leveraging impressive empathy to engender growth mindset and grit, EL Education (2011) expected school leaders to “reflect regularly on their own progress toward personal goals and toward addressing school goals, modeling for staff and students an ethic of self-improvement” (p. 79). Thus, it was critical for administrators to openly and freely reflect about their personal and professional goals, successes, and failures. In fact, when administrators were transparent about their success and failure, they fostered collegiality between individuals. Furthermore, they modeled the habits of mind needed to be a gritty and growth mindset oriented individual. As a result of their open sharing of failure and success, administrators built the professional connection so desperately needed during times of struggle and stressful change (Hallowell, 2011). Like the EL Education Principals in this study, school leaders in other settings should openly share examples of success and failure through storytelling practices. Principals shared personal stories of success and failure in a variety of venues including faculty meetings, parent/teacher conferences, student/teacher conferences, or professional learning meetings. By doing so, principals in the study were able to bridge the gap between teachers and
administrators, contributing to a more approachable leader to his or her teachers. As a result of storytelling, the EL school principals fostered the impressive empathy and addressed adaptive deficiencies more readily because they took the time to form personal connections with teachers. Principals should also highlight the grit stories of peers, other faculty members, and students; they should celebrate instances of grit and growth mindset in others because it builds the connection between teachers so needed when the implementation of change is so hard. By recognizing the effort of individuals and celebrating the amazing work that comes as a result, administrators modeled the grit and growth mindset habits and actions needed “to sustain quality practice and investment amidst the difficult daily grind of teaching” as shared by the NE Principal. The key to storytelling was ensuring that the sharing was public and genuine. Furthermore, the sharing was routine so that teachers saw how grittiness and growth mindset is critical to the ultimate successful completion of the change action.

**Recommendations for Future Research**

The fifth section of Chapter Five includes suggestions for future research in the effect of principals’ beliefs around mindset, grit, and resistance to change on teacher dissatisfaction and attrition. Methodological considerations as well as theories around growth mindset and grit provided the basis for future research around the effects of principals on teacher dissatisfaction and attrition.

**Suggestion One: Methodological Considerations**

In the present study, there was an underlying assumption that administrators had high levels of growth mindset and grittiness because they worked in high functioning EL Education schools. I did not consider this a limitation to my study because the evidence from the interviews, documents, and focus groups indicated that these individuals did indeed exhibit
growth mindset and grit behaviors. However, it may be helpful to identify the exact levels of
growth mindset and grit principals have in order to understand more fully their leadership
perspective in terms of grit and growth mindset. According to Duckworth and Yaegar (2015),
quantitative measures like a self-report survey would help researchers to collect very specific
quantitative data about personal qualities. The additional quantitative data about growth mindset
and grit levels of each principal would give additional credibility to the qualitative data collected
in the semi-structured interviews, focus groups, and documents. Future research could include
the collection of survey data using grit and growth mindset scales. These scales would help
researchers investigate more fully grit and growth mindset behaviors exhibited by EL Education
principals. Specifically, further survey research could help to elucidate the differences between
veteran and novice leadership behaviors in EL Education schools. This data would be helpful in
determining if principals in transition schools, or schools going from a traditional setting to an
EL Education setting, need higher levels of grit and growth mindset to foster the full
implementation of non-traditional instructional and assessment practices.

Furthermore, the current study used a multi-case study design to investigate the
experiences of EL Education principals, specifically in terms of how they used growth mindset
and grittiness to help teachers overcome dissatisfaction during times of change or stress. While
my study included only five different cases, I did not consider this a limitation because validity
and meaningfulness of the study comes from the rich and deep data collected from each case
(Patton, 2002). Furthermore, according to Merriam (2009) the purpose of qualitative research
was not to generalize across all populations. Rather, I used the small sample size to elucidate
specific information about how these specific EL Education principals helped their teachers to
overcome struggle and stress to continually improve practice. While the small sample size did
not affect the validity of my data, it may be helpful to continue this research with other administrators. Gathering additional data from principals may help to determine if there are specific differences between the experiences and actions of principals in the different EL Education school settings.

**Suggestion Two: Growth Mindset and Grit**

In addition to looking closely at the levels of growth mindset and grit of principals, it may be helpful to collect data around the levels of growth mindset and grit of the faculties in the school setting. While I did not include the teacher perspective in this study, I did not consider this a hindrance because I triangulated my data using multiple sources of data. However, future research could collect data on teachers’ perspectives and levels of growth mindset and grit. This data would be helpful to paint a larger picture of how a culture of growth mindset and grit help to alleviate the stress and dissatisfaction often felt during times of change and transition.

In addition to studying the teacher perspective more closely, future research could investigate how growth mindset and grittiness affect the hiring practices of principals successfully leading schools in the midst of change. This data would be helpful because it would identify the types of teachers needed to implement change across the school setting. Specifically, researchers can identify if there were particular questions or hiring processes that led to identifying grittier or growth mindset oriented individuals. By studying the hiring practices of highly functioning EL Education schools, future researchers may be able to discover if the hiring of gritty and growth mindset individuals has led to higher levels of teacher satisfaction and retention.
Conclusion

Due to the concerns with teacher attrition and dissatisfaction facing schools today, I investigated how administrator levels of growth mindset, grittiness, and resistance to change affected levels of teacher stress and dissatisfaction. Specifically, I wanted to understand more fully the experiences of EL Education administrators as they worked with their faculties to implement the EL Education Core Practices across the school. I desired to know how these administrators used their own beliefs and actions around growth mindset and grittiness to address the technical and adaptive deficiencies teachers have (Powell & Kusuma-Powell, 2015).

In my analysis of the data, I found that EL Education principals leveraged beliefs and actions around growth mindset and grit to help teachers overcome stress and dissatisfaction. Administrators in all cases used growth mindset to help teachers improve technical and adaptive skills (Gero, 2013; Powell & Kusuma-Powell, 2015). In addition, I found that an open and thoughtful approach to failure alleviated the stress of teachers. The administrators in this study understood how to reframe the language and assumptions of failure to make it a learning experience for teachers (Hallowell, 2011). In addition, they honored the positive results of iterative practice when teachers experienced failure. Lastly, the results proved that administrators developed a culture of revision, resilience, and passion to engender growth mindset and grit in teachers. To foster this type of culture, administrators should leverage shared-leadership practices and protocols so that collegial trust abounds among teachers and between the administrator and staff.

As evidenced in this study, teachers in all settings encounter stress and dissatisfaction at some level during their careers. In fact, all meaningful and lasting work requires grappling with failure and fear (Hallowell, 2011). However, in schools where there was a culture of grit and
growth mindset, administrators and teachers overcame this fear and dissatisfaction. In fact, in this multi-case study the principals explained how their teams’ continued effort and passion for students helped them improve performance over time. Furthermore, these principals shared specific leadership actions they leveraged to address teachers’ technical and adaptive skills during challenging times. For instance, the school leaders nurtured a culture of revision and support to help address teachers’ technical skills. Furthermore, the principals openly discussed successes, strengths, failures, and weaknesses with their faculties in order to strengthen teachers’ adaptive skills. In addition, these principals worked with their teams to develop a common definition for grit and growth mindset, and they leveraged storytelling and specific growth mindset language to help teachers overcome resistance to change. Because the administrators in this study openly discussed the challenges of change action and because they supported their staffs through the revision process, their teachers willingly and thoughtfully accepted challenges with less resistance. If school leaders wish to help maneuver teachers through challenging change, they should take note of each administrator’s leadership actions. By providing teachers with the specific supports and models outlined in this chapter, administrators in all schools can help teachers navigate beyond dissatisfaction to actively and successfully participate in change action.
References


doi: 10.1177/0022487114542516


http://www.merriam-webster.com/dictionary/resistance


APPENDICES
Appendix A: Semi-Structured Interview

1. Tell me a little about your professional experience and why you chose to be in an EL school.

2. Tell me about your school.
   a. What grades do you have?
   b. How many students and teachers do you have?
   c. Have you always been an EL school?
   d. How long have you been in the network?
   e. Have you gone through the credentialing process?
   f. How many teachers do you hire each year due to attrition?
   g. Are there reasons related to EL that have to do with teachers leaving?

3. How do you use the EL Core Practices with staff members?

4. What part of the Core Practices do you perceive as challenging for teachers, if any?

5. What part of the Core Practices do you think teachers find stressful, if any?

6. Why do they find these practices stressful?

7. What strategies do you use to support teachers with this stress?

8. How would you define growth mindset?

9. How would you define grittiness?

10. Do you believe that mindset and grittiness affect how you lead? Why or why not?

11. Do you discuss growth mindset and grittiness with your faculty?
   a. When do you discuss growth mindset and grittiness with your faculty?
   b. How often do you discuss growth mindset and grittiness with your faculty?
c. Have you done any formal professional development with your faculty about growth mindset? How about grittiness?

d. What was your faculty’s response?

12. How do you encourage teachers to change practice, if at all?

13. What would you describe as your biggest challenge, if any, in helping teachers overcome resistance to change?
Appendix B: Statement of Original Work

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University-Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced and all permission required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the Publication Manual of the American Psychological Association

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14 February 2017
Date