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Doctor of Education in Organizational Leadership



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College of Graduate and
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Date 11/16/2018

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The Implementation and Impact of Growth Mindset in a North Texas School District

A dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Education in Organizational Leadership

by

Tricia A. Badillo

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Abstract

Growth mindset strategies are linked to positive academic behaviors. Additionally, it is common knowledge that a school's learning environment and the teachers' attitudes and points of view are influential on student learning. However, leaders of school districts continue to struggle with effecting necessary changes to alter schools' culture and implement practices that align with growth mindset. One North Texas suburban school district (Coppell Independent School District) is leading a shared effort to ensure growth mindset culture and practices are implemented district-wide. The purpose of this single case study was to understand how district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices at Coppell and how they perceived the impact of growth mindset. A sample of 15 administrators, leaders, and teachers participated. The results of thematic analysis of semistructured interviews and document analysis revealed mindset is incorporated into the culture and educational practices as revealed through the following themes: (a) leaders and teachers live and support growth mindset; (b) the environment is designed to promote growth; (c) building positive relationships is a priority; (d) valuing growth is promoted through language and communication; (e) failure, struggles, and mistakes are okay; (f) risk and effort are encouraged; and (g) assessment and grading practices emphasize learning. Results of the thematic analysis of interviews and documents on the impact of growth mindset include (a) there is a positive impact of unleashing the potential of individuals and the group and (b) continuous improvement and self-reflection are a result of growth mindset. Recommendations for future research and for school districts considering implementing growth mindset into their culture and educational practices are provided.

Keywords: growth mindset, organizational change, educational practices, school culture, systems thinking

Table of Contents

Acknowledgements.....	i
Abstract.....	iii
Chapter 1: Introduction.....	1
Statement of the Problem.....	7
Purpose of the Study.....	8
Research Questions.....	9
Methodological Approach and Rationale.....	9
Definition of Key Terms.....	12
Summary and Preview of the Next Chapter.....	14
Chapter 2: Literature Review.....	16
Conceptual Framework.....	17
Current Culture in K–12 Public School Education.....	20
Impact of Mindset on Learning.....	25
The Impact of Praising Abilities Versus Effort.....	38
Systems Thinking.....	42
Creating Cultural/Organizational Change in Education.....	44
Leadership and Creating Systemic Change.....	47
Summary.....	49
Chapter 3: Research Method.....	51
Research Method and Design.....	52
Population.....	53
Sample.....	54
Materials/Instruments.....	55
Qualitative Data Collection and Analysis Procedures.....	57
Ethical Considerations.....	60
Assumptions.....	62
Limitations.....	63
Delimitations.....	63
Summary.....	64
Chapter 4: Results.....	66
Presentation of the Findings.....	66
Summary.....	96
Chapter 5: Discussion, Conclusions, and Recommendations.....	98

Discussion of Findings in Relation to Past Literature	99
Limitations	108
Recommendations.....	110
Conclusions.....	117
References.....	120
Appendix A: Interview Guide.....	132
Appendix B: Study Participant Recruitment Email.....	134
Appendix C: Participant Consent	137
Appendix D: IRB Approval	138
Appendix E: Research Approval from Coppell ISD.....	139

Chapter 1: Introduction

Beliefs about intelligence (implicit theories) have received considerable attention in recent years. Scholars have determined that the mindsets of students and teachers play an essential role in learning and have researched entity theory (fixed mindset) and incremental theory (growth mindset) extensively (Dweck, 2000, 2012, 2017; Yeager & Dweck, 2012). Moreover, mindsets are considered the beginning of how information received is processed and internalized (French, 2016), and the approach that individuals take when viewing their intelligence has been found to “powerfully shape learning processes” (King, 2017, p. 137). Students’ goals, beliefs about effort, and learning strategies used when facing setbacks are impacted by their mindset (Yeager & Dweck, 2012). Additionally, researchers continue to examine how implicit theories of intelligence (entity and incremental theories) contribute to the understanding of motivation, academic achievement, and how to handle social adversity (Lou, Masuda, & Li, 2017; Yeager et al., 2014).

Dweck (2006) explained that growth mindset is the belief that intelligence and academic abilities can increase through the use of targeted strategies and effort (Yeager & Dweck, 2012). Incremental theorists have suggested that an individual’s mindset is a strong predictor of achievement and that intelligence can be developed (Claro, Paunesku, & Dweck, 2016; Haimovitz & Dweck, 2017). Individuals with a growth mindset rely on resilience, grit, and persistence to face challenges and believe their intelligence is malleable (Birle, Secui, & Vuscan, 2016; Dweck, 1999a, 2017; Lou et al., 2017; Mangels, Butterfield, Lamb, Good, & Dweck, 2006; Roedel & Schraw, 1995). Thus, when strategies are used to link motivation, learning, and increased achievement, students are pushed to a deeper understanding and respond to failures in more adaptive ways (Birle, Dulca, & Vernan, 2017; Dweck, 2000, 2010, 2012, 2015; Eskreis-

Winkler, Shulman, Beal, & Duckworth, 2014; Rattan, Good, & Dweck, 2012; Wheeler & Omair, 2016; Zhang, Kuusisto, & Tirri, 2017).

Growth mindset learners understand that difficulty and confusion are not hindrances to learning. Instead, they persist and positively confront challenges, persevere when setbacks occur, and learn more through their struggles than if success had been immediate (Dweck, 2017). Moreover, students who implement growth mindset strategies increase their efforts while seeking input from others, especially when tackling more rigorous tasks (Dweck, 2015; Rondel & Schraw, 1995). People who approach learning through an incremental theory lens habitually choose increased persistence, apply various strategies, and therefore experience success when faced with difficulties (Rondel & Schraw, 1995). Consequently, students practice positive outcomes and behaviors while remaining engaged and focused on their task (Keating & Heflin, 2015; Murphy & Dweck, 2010; Schmidt, Shumow, & Kicker-Cam, 2015).

Conversely, individuals with a fixed mindset believe they were born with an established range of abilities and therefore may attempt to hide their mistakes for fear of failure (Blackwell, Trzesniewski, & Dweck, 2007; Dweck, 2007a). Fixed mindset theorists have argued that success stems from inherent talent, leading students to become disinterested in learning and more focused on being correct, seeming smarter, or validating that their abilities are superior to others (Davis, 2017; Dweck, 2006, 2015, 2017; King, 2012; Yeager & Dweck, 2012). Additionally, when individuals function with a fixed mindset, struggles and challenges involved with learning difficult content are avoided, which prohibits the opportunity for overcoming obstacles (Davis, 2017; Dweck, 2017; King, 2012).

Furthermore, when learners are overly concerned with how they are perceived versus what they are learning, they are less likely to ask for help or seek out thought-provoking topics

due to their fear of disappointing themselves or others. Students with a fixed mindset attribute mistakes to personal failures, leading to detrimental feelings about their self-worth (King, 2012). Additionally, a student with a fixed mindset is more likely to be perceived as possessing a lack of intelligence if a concept is not quickly mastered (Blackwell et al., 2007; Dweck, 2007b; King, 2012).

Whereas fixed mindset theorists believe that intelligence is static, growth mindset proponents argue aptitude is receptive to stimuli (Dweck, 2006; Dweck & Leggett, 1998; Wheeler & Omair, 2016). Although Dweck's research confirmed that everyone is likely a mixture of both fixed and growth mindsets, a journey toward functioning with a growth mindset is possible through self-reflection and efforts to be cognizant of one's dominant mindset (Dweck, 2006, 2015). Understanding the beliefs and characteristics of both growth and fixed mindsets provides evidence on how mindsets influence learning (Dweck, 2002, 2017; Lottero-Perdue & Parry, 2017). As there is a general consensus among experts that mindsets are dynamic, teachers can help learners shift their mindset from fixed to growth in the classroom (Snipes & Tran, 2017; Yeager & Dweck, 2012; Zhang et al., 2017). As educators' understanding of growth mindset's impact on learning increases, they can successfully lead their students to identify multiple ways their intelligence can flourish.

Furthermore, researchers have determined that organizations also differ in the mindsets they reflect (Miller, 2016; Preece, Katz, Richards, Puccio, & Acar, 2017). Much as with individuals, growth mindset is reflected in organizations that value learning and growth from the accomplishments and struggles of their members (Miller, 2016). Conversely, talent is prized above all other skills in organizations that embody fixed mindset beliefs (Miller, 2016). Leaders and members of fixed mindset organizations ensure their individual skill sets are highly

esteemed and recognized by others (Miller, 2016). Moreover, due to a fixed mindset, organizations' disdain for failure, and reliance on success, risk taking is avoided (Miller, 2016).

On the contrary, leaders of growth mindset organizations seek to build cultures that value working collaboratively to learn from each other and embrace challenges while actively seeking to improve (Miller, 2016). Members of an organization that endorse "the belief that talent and intelligence can be cultivated" and in which "successful performances are attributed to working hard and people are praised for their effort and initiative" (Keating & Heslin, 2015, p. 332) encourage the collective organization to persist in contributing their best and seeking new information. Growth mindset employees are more likely to support and help each other learn. An organization with a growth mindset culture remains focused on what each member does to support individuals and the group, which results in engaged, attentive members focused on shared goals (Keating & Heslin, 2015). Additionally, Keating and Heslin (2015) found positive links between growth mindset and reduced biases, which was shown to generate further opportunities for dialogue.

Despite extensive research on the positive attributes associated with growth mindset characteristics (Dweck, 1999b, 2015, 2017; Hochanadel & Finamore, 2015; Murphy & Dweck, 2010; Yeager & Dweck, 2012), many school leaders have continued to grapple with instituting a culture and implementing practices that align with growth mindset (Hannay, Jaafar, & Earl, 2013). This struggle is reinforced by Dweck's (2016) acknowledgment that while many classrooms have implemented components of growth mindset theory effectively, others' misinterpretations have led to unproductive thinking and exercises when attempting to expand growth mindset practices school- or district-wide. Teachers must acknowledge their mindset and what activates growth or fixed behaviors, and work toward growth mindset thoughts and actions

more frequently (Dweck, 2016). When teachers verbalize they have a growth mindset but have a limited understanding of what that means, praise ability over process, or expect students' mindsets to automatically become growth without teaching them how to adjust their thinking, they are functioning with a false growth mindset (Dweck, 2016). Mindsets are not a simple switch from fixed to growth; rather mindsets are on a continuum, and through the journey toward flexible thinking, true growth is possible for teachers and students.

Since the desire for all children to be productive and successful in school is a top priority, leaders of school districts with an organizational growth mindset value continuous organizational learning, allowing failures or setbacks to be a part of the learning process instead of a negative outcome (Miller, 2016). When teams of people in an organization work together to consider complex issues, decide on a plan, and utilize others to actualize it, alignment of values and organizational learning occurs (Kuscu, Yener, & Gurbuz, 2015). The mindset, culture, behaviors, work engagement, and learning frameworks are positively impacted as all members of an organization work together (Argote & Miron-Spektor, 2011; Caniels, Semeijn, & Renders, 2018; Ege, Esen, & Asik-Dizdar, 2017; Ferincz, 2016).

One North Texas school district, Coppell Independent School District, has recognized that functioning with an organizational growth mindset “may result in organizational improvements and increased teacher skills that support all students to grow and learn” (Hanson, Ruff, & Bangert, 2016, p. 204). Through systematic, internally adopted beliefs, Coppell ISD has fostered growth mindset ideals. One of Coppell ISD’s guiding documents, *The Learning Framework* (Coppell Independent School District, 2017c), specifically stated that “administrators and educators are empowered to create physically, intellectually and emotionally safe environments, to develop growth mindsets, to design active and engaging learning

experiences, and to promote learning as a lifelong process” (p. 2). Learners in Coppell ISD are encouraged to develop growth mindsets, and educators promote a growth mindset for their students in the classroom (Coppell Independent School District, 2017c). Additionally, Coppell ISD is currently leading a collaborative effort to implement growth mindset practices into its organization so that growth is reflected in all aspects of the organization (Coppell Independent School District, 2017c; Hanson, Ruff, et al., 2016; Texas Association of School Administrators Public Visioning Institute, 2008).

Nevertheless, while researchers have supported the idea that an organization’s values have a significant influence on each member of the organization, they have also stated that altering an entire organization’s belief system and culture is challenging (Hanson, Ruff, et al., 2016; Hartnell, Kinicki, Lambert, Fugate, & Doyle-Corner, 2016; Murphy & Dweck, 2010). Established behaviors and cognitive approaches entrenched in the practices and belief system of organizations are engrained in the organizational culture over time and are not easy to alter (Preece et al., 2017; Schein, 2010b; Warrick, 2017). Consequently, when making efforts to change an existing culture or mindset, the impetus must be an achievement that all members of the organization will support (Warrick, 2017). Fortunately, the academic success of each student in schools is a significant factor. Hence, this unifying motivator encourages leaders of school districts to work toward adopting a growth mindset culture even if the leaders of the organization previously held a fixed mindset.

When developing a culture of growth, learning organizations must appreciate the need for members to aid the organization’s growth and to grow individually as well (Hartnell et al., 2016; Keating & Heslin, 2015). Coppell ISD has utilized developed systems and expectations that push all leaders, teachers, and students to function with a growth mindset (Coppell Independent

School District, n.d.b, 2017c). Hence, it is important to examine how Coppell ISD district leaders, school leaders, and teachers at the district and school levels have implemented growth mindset values into the culture and practices and to understand their perceptions of how growth mindset has been beneficial to the district (Hanson, Ruff, et al., 2016; Tichnor-Wagner, Harrison, & Cohen-Vogel, 2016).

Statement of the Problem

In education today, school districts focus on instructional practices, such as yearly standardized assessments, which lead students to perceive their academic skills are fixed abilities. This has negative ramifications for learners today as a fixed mindset is associated with reduced tenacity when facing challenges such as homework, learning new content, and studying (Dweck, 2000, 2006, 2007a, 2012; Yeager & Dweck, 2012; Zhang et al., 2017). In contrast, individuals with a growth mindset believe that intelligence is malleable and, when faced with challenges, understand that effort and persistence can lead to success (Dweck, 1999a, 2006, 2007a, 2017; Lou et al., 2017; Wheeler & Omair, 2016; Yeager & Dweck, 2012). Thus, growth mindset strategies are linked to positive academic behaviors such as increased motivation, learning, and improved achievement (Dweck, 2000, 2012; Rattan et al., 2012; Zhang et al., 2017). There is an overall consensus among experts that a learner's environment and teachers' influence can help cultivate a growth mindset for all students in the classroom (Dweck, 2002, 2017; Gutshall, 2013; Lottero-Perdue & Parry, 2017; Snipes & Tran, 2017; Zhang et al., 2017).

Despite extensive research on the positive attributes associated with growth mindset characteristics (Dweck, 1999b, 2006, 2012, 2015, 2017; Hochanadel & Finamore, 2015; Murphy & Dweck, 2010; Yeager & Dweck, 2012), many school leaders continue to struggle with generating a culture and employing practices that align with growth mindset (Hannay et al.,

2013). One North Texas suburban school district (Coppell ISD) is leading a shared effort to ensure growth mindset culture and practices are implemented district-wide (Coppell Independent School District, 2017c; Texas Association of School Administrators Public Visioning Institute, 2008). Being cognizant of the research that shows that altering an organization's belief system and culture is challenging (Murphy & Dweck, 2010), Coppell ISD has systematically established and adopted organizational structures while developing capacity among its leaders to implement long-lasting change (Fullan, 2001; Hannay et al., 2013; Kotter, 2012).

As Coppell ISD continues to be a leader in moving toward full implementation of growth mindset practices and policies, it is important to examine how this shift has occurred. A study of how Coppell ISD district leaders, campus leaders, and teachers have implemented growth mindset principles into the culture and educational practices at the district and campus levels addresses the questions other districts have in regard to best practices when addressing district-wide change (Kotter, 2012; Tichnor-Wagner et al., 2016). Additionally, a clear understanding of district leaders', campus leaders', and teachers' perceptions of the impact of growth mindset on the school's culture and educational practices contributes to the growing knowledge of the structures and supports necessary to make growth mindset change possible (Hanson, Bangert, & Ruff, 2016; Hartnell et al., 2016; Tichnor-Wagner et al., 2016).

Purpose of the Study

The purpose of this holistic, qualitative, single case study with embedded units was to understand how district leaders, school leaders, and teachers incorporated growth mindset principles into the organizational culture and educational practices in Coppell ISD, and how they perceived the impact of implementing growth mindset principles into the school's culture and classroom practices. To attain insight from multiple data sources within a single school district

for the purpose of gaining an understanding of the impact growth mindset has district-wide, a single case study was deemed most appropriate (Baxter & Jack, 2008; Cresswell, 2007; Hanson, Ruff, et al., 2016; Merriam, 2009; Tichnor-Wagner et al., 2016). The study population consisted of leaders and teachers from Coppell ISD, a North Texas school district in the Dallas–Ft. Worth metroplex. A purposeful sample of 15 district leaders, campus leaders, and teachers was selected from current employees of Coppell ISD who had been instrumental in the implementation of growth mindset. Guiding district documents were studied, and leaders at all levels participated in face-to-face, semistructured interviews. The interviews included questions to determine how growth mindset principles are incorporated into the culture and educational practices and what the leaders’ perceptions are of their impact. Interview data from all participants and information from district documents were transcribed, coded, compared, analyzed, and synthesized into common themes (Merriam, 2009). Additionally, each participant had the option to review her portion of the study to ensure accuracy if she so chose. Findings from this study may be beneficial for leaders of other school districts who are considering implementing growth mindset culture and strategies at an organizational level.

Research Questions

Q1. How have district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD?

Q2. How do district leaders, school leaders, and teachers perceive the impact of implementing growth mindset principles in the school’s culture and classroom practices?

Methodological Approach and Rationale

When deciding on the general methodological approach most suitable to address the identified research questions for my proposed study, multiple perspectives were considered.

First, I considered the topic of the study. Initially, the subject of growth mindset was of personal interest to me based on my career in education and personal experience with growth mindset practices. Next was the broad purpose for my study. Qualitative research is generally focused on the ways meaning is constructed with the primary goal of a qualitative study to uncover and interpret ways that people are working to better understand their lives. A qualitative study allows for information to be uncovered and the data to be thoroughly analyzed. A qualitative case study permits for the analysis of a single bounded system (Merriam, 2009). Therefore, as my study focused on a complex issue investigated through multiple lenses to acquire a deeper level of understanding with one school district, the most suitable approach was a qualitative case study (Baxter & Jack, 2008; Merriam, 1998, 2009).

Whereas Merriam (2009) considered any case study to be a basic qualitative study, Stake (1995) provided categorical guidelines to qualify the study types further. Stake (1995), in a description of an instrumental case study, called for the case to be looked at in depth, whereas Baxter and Jack (2008) encouraged pursuing the query with an end goal of providing insight into an issue or advancing a belief. The purpose of this instrumental case study extended beyond understanding growth mindset. This qualitative, instrumental case study provided a depth of understanding on how teachers, as well as campus and district leaders, implemented a growth mindset in a school district and how they perceived the impact. The case itself played a supportive function as it guided the understanding of growth mindset (Merriam, 2009).

Gathering the data for the instrumental case study required me to assume responsibility for thorough, systematic data collection and subsequent analysis while recognizing potential biases (Merriam, 2009). As a current administrator with Coppell ISD, I acknowledged my previously established relationships with others in the district, and I guarded against

predetermining outcomes during data collection. One trademark of case study inquiry is the use of several data sources to increase data integrity (Baxter & Jack, 2008). Data collection for this study was twofold. First, it included one-on-one, semistructured interviews with school district staff (district administrators, campus administrators, and teachers). Questions were crafted to allow for open responses and were field tested before the interviews started. Second, data were collected by reviewing district documents in Coppell ISD (*CISD Curriculum Management Plan, The Learning Framework, CISD Leadership Framework, CISD Classroom Management Framework, CISD District Improvement Plan, etc.*). To ensure respondents were comfortable providing frank and honest answers, confidentiality safeguards were solidified throughout the interview and data collection process. The compilation of data enabled a broad understanding of all facets of the organization that were impacted by growth mindset practices.

Additionally, this qualitative single case study was holistic, with embedded units that permitted me to investigate the impact growth mindset had on individual schools within the same school district (Baxter & Jack, 2008). The ability to fully analyze and richly describe both data sources (interviews and district documents) allowed the case to be fully developed (Baxter & Jack, 2008). This rich analysis of both interview data and document analysis enabled me to avoid common pitfalls associated with fixating on individual data sources rather than synthesizing multiple pieces of data (Baxter & Jack, 2008).

Purposeful sampling was employed to gain insight from a variety of district leaders, campus leaders, and teachers who have a history with the district. Utilizing a sample size of 15 teacher and leader participants allowed viewpoints from all levels of the district (administration, elementary, and secondary) to be considered. This sample size also allowed for the perceptions of the district, campus, and teacher leaders interviewed to be generalized for the entire district

(Merriam, 2009; Pratt, 2009). The concurrent collection of data and analysis is also a unique component of an instrumental case study (Baxter & Jack, 2008). With other research methods, the data collection is isolated from the analysis, but with a case study, the data and continual inquiry coexist (Baxter & Jack, 2008). To aid in ensuring the data collection remains focused, Stake (1995) advocated for the use of centering the research around specific *issues* to anchor the information gathered to personal contexts as well as social and historical perspectives. The topics serve as guiding foundations as the data were continually collected, analyzed, and synthesized into findings (Baxter & Jack, 2008).

Furthermore, data are analyzed in multiple forms within qualitative case studies. The data must be treated as a whole, not as individual pieces to be reported on separately (Baxter & Jack, 2008). Most importantly, the “researcher must ensure that the data are converged in an attempt to understand the overall case, not the various parts of the case, or the contributing factors that influence the case” (Baxter & Jack, 2008, p. 555). By circling back to the issues and working to answer the research questions, the case data remained true to the purpose of the study.

Definition of Key Terms

Implicit theories of intelligence. This term refers to lay theories concerning individuals’ core beliefs “about the capacity to grow one’s abilities” (Haimovitz & Dweck, 2017, p. 1849). They yield a framework about intelligence helping to shape an individual’s responses to academic challenges (Blackwell et al., 2007; Yeager & Dweck, 2012).

Mindsets. Originating from cognitive psychology, mindsets are common beliefs that guide actions when given a task (Dweck, 2006; French, 2016). Further, mindsets are “activation

of different cognitive procedures which affect how people interpret subsequently encountered information” (French, 2016, p. 675).

Entity theory (fixed mindset). This theory encompasses the belief that intelligence is unchangeable and inherent (Yeager & Dweck, 2012). When people function with a fixed mindset, their ability to overcome obstacles or difficult situations is limited, leading them to avoid situations in which they could fail (Claro et al., 2016; McCutchen, Jones, Carbonneau, & Mueller, 2016).

Incremental theory (growth mindset). This theory is the belief that intelligence is malleable (Murphy & Dweck, 2010) and can be developed through the use of strategies and effort (Blackwell et al., 2007). When approaching learning with a growth mindset, challenging tasks are used as learning experiences that will ultimately improve their overall ability (Claro et al., 2016).

Organizational learning. There are multiple definitions, but most include that it is a multilevel, reflective process that results in some change in the behavior of the organization “that occurs as the organization acquires experiences . . . a process that occurs over time” (Argote & Miron-Spektor, 2011, p. 1124; Ege et al., 2017; Ferincz, 2016).

Learning organization. A learning organization is adaptive and flexible in nature. It systematically enables members to continuously learn in a manner that leads to structures and strategies contributing to all members learning and crafting positive improvements (Ege et al., 2017). Researchers also point out “each learning organization should also be a teaching organization, which requires future skills for learning organizations” (Ege et al., 2017, p. 447).

Organizational mindset. An organizational mindset is a shared belief “that the organization and its employees have about the nature of talent and ability,” which integrates

elements of the culture, drives practices and strategies, and conveys the organization's dominant approach toward thought processes (Miller, 2016; Preece et al., 2017).

Organizational culture. The culture of an organization encompasses the environment in which people work and its influence on how they think and feel about work (Warrick, 2017).

The culture of an entire organization of people working together has shared norms, values, and rituals that impact how the organization functions at the deepest level (Schein, 2010a; Warrick, 2017).

Grit. Duckworth, Peterson, Matthews, and Kelly (2007) defined grit as having a passion and persevering when working toward long-term goals. Gritty individuals diligently work toward long-term objectives despite setbacks, adversity, or lack of positive feedback (Duckworth, 2016; Duckworth et al., 2007).

Resilience. This denotes determined effort to overcome a difficult situation and turn it into a positive experience even when faced with failure or struggles (Murphy & Dweck, 2010). Resilient individuals bounce back from disappointment or challenges.

Summary and Preview of the Next Chapter

The manner in which students and teachers view their intelligence, specifically whether they consider their intellect malleable (growth) or innate (fixed), is proving to be transformational in the field of education. As school districts work within the constraints of increased accountability measures to provide exceptional educational opportunities for every learner, recognizing the power of mindsets has produced opportunities for expanded learning strategies that powerfully impact and empower students. Working with what is in our control is allowing educators and students to partner together on their learning journey. As researchers continue to discover the influence growth and fixed mindsets have on motivation, achievement,

and beyond, schools and districts can harness this growing knowledge to help everyone attain greater understanding and success.

In the following chapter, literature studies are reviewed, which provides information on topics including growth and fixed mindset, organizational learning and culture, standardized assessments, feedback, and creating change. Through the review, an understanding of some issues impacting education today are explored as they relate to mindset, accountability, and change. Furthermore, a case is established for delving into understanding how leaders of one school district incorporated growth mindset principles into their culture and practices, and what impact growth mindset had on the schools' culture and classroom practices.

Chapter 2: Literature Review

The purpose of this study was to understand how district leaders, school leaders, and teachers incorporated growth mindset principles into the organizational culture and practices in Coppell ISD, and to determine how district leaders, school leaders, and teachers viewed the impact on their schools. Data collection consisted of semistructured interviews using a selective sample of district staff involved in teaching and leading at both the elementary and secondary levels, along with the exploration of district guiding documents. The following literature review contains an examination of issues impacting school growth and culture in an era of high-stakes accountability measures. Moreover, the structure of organizations and culture, including how organizations learn, what mindsets they reflect, and how to best elicit change in the culture is discussed. Additionally, implicit theories of intelligence, specifically growth and fixed mindsets, are examined in detail.

The majority of the research was retrieved through the online library services of Abilene Christian University. Keywords included *mindset*, *implicit theories of intelligence*, *entity theory*, *incremental theory*, *resilience*, *fixed and growth mindset*, *organizational culture*, *learning organization*, *change in school districts*, *accountability standards*, and *high-stakes accountability*. After reading helpful studies, I entered keywords or searched for specific authors from those studies for additional literature searches. Authors specifically searched for included Carol Dweck, Edward Schein, and Senge. To determine other authors with specializations in areas related to my study, I sought out sources from other researchers' studies. I also pursued information from authors with whom I was familiar through my professional and academic career, such as Michael Fullan and John Kotter. While my research started broad with generalized searches, it later evolved into looking for more specific aspects of mindset and

organizational theory, further leading me to develop a strong foundational understanding of the concepts guiding my research.

Furthermore, after describing the conceptual framework, including components of culture, organizational learning, and systems, I reviewed the understanding of the current culture in K–12 public school education, specifically discussing standardized assessments and the impact an achievement focus has on teachers. Next, I surveyed the impact of mindset, specifically fixed and growth mindset, on learning. The notion of grit and resilience are discussed within the sections on mindset. Subsequently, I reviewed the impact of praising abilities versus effort and school and classroom culture. In the latter portion of the review, I examined how leaders facilitate change in organizations through sections on systems thinking, creating cultural/organizational change in education, and leadership and creating systemic change. At the conclusion of the literature review, I established a strong case for the need to explore how district leaders, school leaders, and teachers incorporate growth mindset principles into the culture and educational practices in Coppell ISD and the perception of the impact of the growth mindset principles in the schools' culture and classroom practices.

Conceptual Framework

When searching for a conceptual framework to guide my work, I began by investigating implicit theories of intelligence, specifically entity (fixed) and incremental (growth) mindsets. Once a thorough understanding of these theories solidified, connections between growth and fixed mindsets and achievement, as well as schools as organizations with mindsets, began to emerge. Initial inquiries led me to further investigate how schools and districts can function as learning organizations, what organizational mindsets involve, and what is involved with orchestrating change in organizations overall and in the culture. Throughout my literature

investigation, the impact of mindset, specifically growth mindset, was a recurring premise, but studies led me to delve deeper into the understanding of an organization's culture, mindset, and how cultures develop and evolve.

Culture. To develop a working knowledge of organizations, Schein's (2010a) work on the concept of organizational culture was examined. This understanding helped me to develop a clearer understanding of what is below the surface of an organization's culture and how that impacts all workings in an organization. When a shared culture is established and understood, initial misunderstandings that previously led to frustration become anticipated and managed through cultural norms (Hannay et al., 2013; Schein, 2010a). Because the culture of an organization "is the deepest, often unconscious part of a group" and "implies the rituals, climate, values, and behaviors tied together into a coherent whole" (Schein, 2010a, pp. 286–287), it is one reason change is such a challenge in an organization. The culture, the way things are done, should be considered, and a comprehensive understanding of what an organization's culture is and how it evolved plays an important role when new learning is on the horizon (Hannay et al., 2013).

Members of organizations that value learning benefit from leaders at all levels working to "help to build and sustain a culture with strong values for learning . . . especially as it relates to educational organizations" (Yuki, 2009, p. 52). Since individuals display the qualities they believe others in the organization value, people will adopt the standards that are emulated overall by the leadership (e.g., growth mindset, etc.). Experts in organizational change have found that "organizations with growth mindsets—those where learning and growth are highly valued—build cultures that are more collaborative and innovative" (Miller, 2016, p. 5). Hence, based on the philosophy that capacity and aptitude can be fostered through determination and training,

growth mindset organizations stimulate environments that cultivate learning and further embody a culture of development (Murphy & Dweck, 2010).

Organizational change through learning. Organizational learning is not immediate. It is a process that occurs over time as it involves a change in culture (Argote & Miron-Spektor, 2011; Schein, 1996). As leaders of organizations facilitate new knowledge, share it among members of the organization, and apply the new information resulting in change, organizational learning occurs (Argote & Miron-Spektor, 2011; Yuki, 2009). Leaders influence organizational learning through their actions and words (Yuki, 2009). What leaders support and encourage members to pursue becomes identified as having value and supports collective learning (Hannay et al., 2013; Yuki, 2009).

While organizational learning is powerful, the collective mindset of an organization has influence and value as well (Murphy & Dweck, 2010). An organization's mindset (theory of intelligence) is considered "the shared beliefs of people within a setting that intelligence is either a fixed and stable trait or a malleable and expandable quality" (Murphy & Dweck, 2010, p. 283). Organizations with a fixed (entity) mindset focus more on individual performances, whereas those with a growth (incremental) mindset believe individuals and the organization as a whole benefit from growing together through learning, effort, and training (Murphy & Dweck, 2010). While there are fixed and growth mindset organizations, Murphy and Dweck (2010) postulated there is a preference for growth mindset beliefs in organizations.

Dweck (2014a) connected her research on growth mindset to growth mindset organizations by acknowledging that organizations, or any group of people with a shared culture, have an overall organizational mindset. In addition, researchers have found that the mindset of the leaders impacts the organizational culture (Avci, 2014). Furthermore, without a growth

mindset, members may view learning as difficult or unnecessary, but when approached through a growth mindset lens, cultural mental models reflect the opportunity to learn through struggles (Avci, 2014).

Systems. When considering the integrated concepts involved in an organization's culture, Senge's (1990) conceptual framework of systems thinking is helpful to understand growth and change in an organization. Systems are embedded in the interconnections, the relationships, of an organization (Meadows, 2008). Through the connections in a system, a self-enforcing feedback process helps to balance the organization if the vision and reality of the organization are not in sync (Senge, 1990). To prevent this misalignment, knowledge sharing can ensure the interconnectedness of the systems flow through information (Meadows, 2008). When strong leadership keeps the flow of information fluent, members can more quickly resonate with the leader's vision and provide support, even if change is required. When combined with the tenants of organizational growth mindset, systems thinking provides the framework necessary to understand how mindset is connected to all aspects of an organization. Through a deep understanding of interconnectedness in systems thinking, balanced support can be provided by leaders. When change is necessary for one part of the organization, recognizing how that also impacts the whole organization will allow leaders to develop a comprehensive plan that benefits all. Through the conceptual framework of systems thinking, a firm foundation is established to study the impact of mindset in organizations and their cultures.

Current Culture in K–12 Public School Education

The general problem is that in education, there is mounting evidence to suggest a connection between a school's focus on standardized assessments and students' perceptions of their innate abilities. There are numerous interrelated challenges to incorporating growth

mindset in the current culture of K–12 education, including high-stakes standardized assessments; high stress among teachers, impacting attrition and job satisfaction; and meeting the ever-changing needs of all learners. When students perpetually focus on proving their competence through a grade or score on a once-a-year assessment, their ability to engage in other learning can be hindered (Blackwell et al., 2007; Boaler, 2016; Roedel & Schraw, 1995). Despite the original intent of devising accountability criteria to ensure all learners are academically successful and that stakeholders are informed about how schools are performing, recent evidence suggests high-stakes testing results in adverse school climates, educators adapting instructional practices to exclusively prepare for the assessments, and students' reduced long-term desires to learn (Hannay et al., 2013; von der Embse, Pendergast, Segool, Saeki, & Ryan, 2016; Yeager & Dweck, 2012).

Standardized assessments and accountability. An increased focus on standardized assessments limits schools' abilities to allow teachers the time and resources to provide enriched educational experiences that prepare students to problem solve, use multiple strategies when facing difficulties, critically engage in content, or expand their educational goals beyond correctly answering questions (Fisher-Ari, Kavanagh, & Martin, 2017; Hannay et al., 2013; Huddleston & Rockwell, 2015). Standardized testing coupled with increased accountability measures may contribute to the inhibition of growth mindset and manifestation of fixed mindsets for both students and teachers, as students work to attain higher test scores versus deepening their learning (Dweck, 1999b; Feng, Figlio, & Sass, 2018; Hutchings, 2017; Jennings & Sohn, 2014).

Education researchers agree that previous accountability measures have not adequately led to practices that meet the needs of every student (Stosich, Snyder, & Wilczak, 2018).

Subsequently, the federal government has expanded its role in school accountability measures, placing significant pressure on schools and districts to demonstrate measurable growth no matter the odds (Jacob, 2017). While schools in Texas have historically taken yearly standardized assessments, the tests were previously less rigorous and reporting measures were global (i.e., entire grade levels). In recent years, standardized assessments have become considerably more difficult, and reporting measures now extrapolate data by subgroup (e.g., special education, bilingual education, ethnic groups, etc.), which exposes weaknesses previously masked by whole group reporting. Consequently, schools that have the majority of their students passing state assessments can still have subpopulation deficits highlighted when the subgroups' data are independently examined.

Due to state and federal mandates regarding accountability and assessments, schools and districts have faced significant demands to demonstrate measurable growth no matter the circumstances (Bush-Mecenas, Marsh, Montes de Oca, & Hough, 2018; Jacob, 2017). Currently, students in schools can be coded *at risk* per state guidelines as early as age 5 if their academic performance does not match state guidelines. Studies suggest that such oppressive accountability standards pressure teachers, reduce classroom time for reflection and repeated learning experiences, and place unfair expectations on individuals to achieve set scores while teachers are expected to ensure learners achieve 100% mastery despite any maturity or academic differences (Gil & Kim, 2018; Hutchings, 2017; Jennings & Sohn, 2014; Welton & Williams, 2015).

Additionally, stress associated with current accountability standards may negatively impact both learners and educators. Research suggests anxiety related to testing contributes to diminished overall effectiveness of students' long-term education (Bush-Mecenas et al., 2018;

Hutchings, 2017; Jennings & Sohn, 2014). Moreover, multiple studies affirm that teachers and administrators are not opposed to accountability, as they serve a purpose in determining effectiveness of programs and to measure academic growth of students (Hutchings, 2017; Jacob, 2017), but the inclusion of increased pressures and merit evaluations for both teachers and students based on yearly assessments contributes to school environments that are less conducive to effective learning or teaching (Fisher-Ari et al., 2017; Jacob, 2017; Stosich et al., 2018).

Impact of achievement focus on teachers. Most educators enter the teaching profession with a passion to help children learn and be successful in school. Unfortunately, teachers may be unprepared for the inordinate amounts of stress they encounter while navigating the murky waters of high-stakes testing and accountability (Prilleltensky, Neff, & Bessell, 2016). These overwhelming responsibilities lead to common complaints such as teacher stress, reduced self-worth, and strained relationships with parents (Feng et al., 2018; Hutchings, 2017; Prilleltensky et al., 2016; von de Embse et al., 2016). Studies propose that managing teacher stress factors should be addressed as it is a contributing factor to teacher attrition, which impacts the organizational and school structure (Feng et al., 2018; Fisher-Ari et al., 2017; Prilleltensky et al., 2016). Working at an organizational level to provide support, address well-being, and implement strategies to help teachers remain focused on children's individual needs and learning for all will contribute to positive work environments and teacher longevity (Feng et al., 2018; Prilleltensky et al., 2016; Tichnor-Wagner et al., 2016).

Evidence suggests that increased accountability measures have influenced teachers' reduced commitment to their profession (von der Embse et al., 2016). Accordingly, teachers are not as likely to accrue experience and perfect their craft through years of teaching as in previous generations due to shorter teaching careers. In fact, in one study, researchers determined that

over half a million educators moved schools or sought out other careers every year (Fisher-Ari et al., 2017). Though the researchers did not break down the statistics specifically by school level or type, they did determine that high-poverty areas (urban and rural) have higher percentages of teachers leaving, which places a financial and academic strain on schools and diminishes educational opportunities for the students (Fisher-Ari et al., 2017). This challenge to maintain a competent teaching staff at every school necessitates increased collaborative efforts between all involved in education so each student has a qualified teacher who is not overwhelmed with accountability worries (Hannay et al., 2013).

Hannay et al. (2013) provided insight into how school district leaders implement organizational structures that promote maintainable transformation in all district classrooms by examining a Canadian school district that was dealing with mandates regarding implemented accountability measures similar to those in Texas schools. The Canadian district systematically acted by focusing on prioritized processes such as teacher classroom practices, to reach their goal of student learning (Hannay et al., 2013). When the focus of teacher practices to increase learner advancement was identified, the next steps of connecting the vision to school goals and practices while modeling active change leadership became clearer (Hannay et al., 2013).

A call for “a new mindset in education” was clearly articulated through the study, along with the need for reflective practices that lead to growth (Hannay et al., 2013, p. 72). The authors implied that an alignment of district and school initiatives was essential in forming a unified vision. The authors shared that educational organizations “need to be reshaped to support knowledge-creation in an environment that recognizes deep changes to practice” (Hannay et al., 2013, p. 66). Working through difficult questions to determine how to do this

contributed to persistent reflection throughout the learning process, and over time the school district became a learning organization (Hannay et al., 2013).

While a drawback of the study was limited details on how the district implemented the steps for change, the ideas presented merit consideration. At the conclusion of this study, the authors suggested that district leaders should work toward leading their schools toward becoming a learning organization and that this research topic should be continually pursued (Hannay et al., 2013). Additional research is also necessary to further determine how leadership helps propel a school district toward becoming a learning organization with a growth mindset (Hannay et al., 2013).

Impact of Mindset on Learning

Beliefs about the nature of human qualities, such as intelligence, are important because they impact individuals' actions. The way people view their intelligence impacts how they face critical points in their lives (Blackwell et al., 2007). One trademark of human nature is every person's vast capacity to adjust their thinking, to change, and to grow (Dweck, 2012). Mindsets (implicit theories of intelligence) represent multiple cognitive filters for processing information about people's beliefs (French, 2016) and have a critical role in learning and achieving (Rattan, Savani, Chugh, & Dweck, 2015). Even when learners have equal intellectual abilities, their mindset shapes their responses to educational challenges and academic outcomes (Blackwell et al., 2007).

Cognitive abilities can be considered either a fixed attribute (fixed mindset = entity theory) or a malleable factor (growth mindset = incremental theory) (Dweck, 2002, 2012, 2017; Hochanadel & Finamore, 2015; Keating & Heslin, 2015; Yeager & Dweck, 2012; Zeng, Hou, & Peng, 2016). Growth mindset thinking concentrates on the actions a person takes (e.g., give

effort, exercise agency) and learning goals, whereas a fixed mindset view emphasizes who an individual is (e.g., “I am smart,” “I am not as smart as her,” “I am good at math,” “I am bad at math”) and performance goals (Blackwell et al., 2007; Keating & Heslin, 2015). Additionally, mindsets function as a mental structure that guides thoughts, feelings, and actions in achievement settings and also impacts numerous aspects of life including relationships, effort, discernment of setbacks, motivation, and reaction to challenges (Birle et al., 2016; Dweck, 2012; Heslin & Keating, 2017; Keating & Heslin, 2015). Well-defined research studies suggest that individuals’ mindsets are stable but also adaptable and influence behaviors, academic achievement, and personality traits (Dweck, 2012, 2017).

Research on the understanding of mindsets and individuals’ abilities has stemmed from the desire to pinpoint motivation and its impact on academic achievement and goals (Dweck, 2017). Dweck and colleagues determined that distinct characteristics of self-theories, such as entity and incremental theories, are associated with different educational outcomes manifest through learning approaches, determination, studying time, goal setting, and ultimately academic achievement (Dweck, 2000, 2017; King, 2012). This recognition of differences among students has prompted additional investigation into the distinct characteristics of learners who persevere and thrive when faced with challenges and those learners who avoid situations and stop trying when faced with challenges. Through observations, interviews, mindset measuring tools, and quantitative and qualitative studies, researchers have suggested that an entity theory of intelligence (fixed mindset) has maladaptive consequences whereas an incremental theory of intelligence (growth mindset) has positive benefits (King, 2012). Additional research is necessary, though, on the best way to utilize known information on mindsets to inform next steps

with approaches to help children, parents, and teachers understand the relationship between mindsets, learning, and school performance (Birle et al., 2016).

Most of the research on mindsets is from the viewpoints of students, and as such, there is less research related to teachers' beliefs about intelligence (Jones, Bryant, Snyder, & Malone, 2012). To contribute to the understanding of teachers' mindsets, Rattan et al. (2012) conducted a series of studies to examine how mindsets impact instructional practices used by teachers when learners struggle. The studies presented a unique approach to investigating whether fixed versus growth mindsets encourage teachers to unconsciously focus their feedback on comfort for low-scoring students instead of reteaching or providing targeted next steps (Rattan et al., 2012).

Through four controlled studies, the authors investigated the following: whether teachers' mindset impacted their prediction of learners' long-term success based on one grade, if fixed mindset leads teachers to provide comfort feedback when learners struggled, and if a teacher's fixed mindset coupled with low expectations resulted in a lack of student motivations and lower personal expectations (Rattan et al., 2012). The researchers used multiple groups of undergraduate students to investigate the impact of teachers' mindsets, expectations, and feedback to more fully examine the effect a teacher's mindset has on learners (Rattan et al., 2012). Results from the first and second studies included teachers with fixed mindsets who described their students as not smart enough for math and not working hard enough based on one test grade (Rattan et al., 2012). The third study included teachers who went even further and discouraged students from their choice of future vocation, encouraging them to drop their course after one test (Rattan et al., 2012).

In three of the four studies evaluating the feedback provided to learners after a math assessment, researchers found that when teacher participants had a more fixed view of

intelligence, they attributed a learner's poor test grade to the child not being proficient with the content or having a lack of overall intellectual ability (Rattan et al., 2012). Additionally, in the fourth study, researchers discovered that the teacher's mindset impacted the type of feedback given to learners when they received a poor test grade. Teachers provided learners with either comfort feedback ("Not everyone can be good at math. . . . You do great in other subjects"), strategy feedback ("You are a talented student in general. . . . Change your study strategies"), or control feedback ("I know you are a talented student in general. . . . I really care. . . . Let's stay in contact about how you are doing") (Rattan et al., 2012, p. 735).

While the teachers did not provide feedback with the intent to harm, researchers discovered the feedback provided by fixed mindset educators focused on negatives and ultimately lowered the teachers' expectations and learners' beliefs about their abilities, ultimately leading to weakening learners' self-esteem and desire to push themselves toward more challenging math courses (Rattan et al., 2012). While this study focused on math content, the implications are insightful when considering the long-lasting influence a teacher's mindset and subsequent feedback have on learners. In all four studies, the more the teacher endorsed a fixed mindset, the stronger her belief that the low grades equaled lack of intelligence and the more negatively her feedback impacted the students (Rattan et al., 2012). Researchers need to develop a deeper understanding of how teacher mindset impacts praise and feedback and ultimately children's motivation to learn. Although this study gave insight into the impact of teachers' mindset on student feedback and beliefs about students' abilities, it is also not known how the mindset of the larger system, such as leaders at the school and district levels, impacts school culture and educational practices related to mindset and the subsequent outcomes.

Fixed mindset. Individuals who view the world with a fixed mindset (entity theorists) believe their aptitudes are inherent, so little can be done to alter their abilities. This mindset can lead people to avoid situations where they are not confident, put forth less effort, and give up when faced with setbacks (Rattan et al., 2015). Fixed mindset individuals avoid challenges for fear of failure, of disappointing those who believe they are smart, or of having their weaknesses exposed (Dweck, 2006, 2010, 2012, 2017; French, 2016; Haimovitz & Dweck, 2017; Heslin & Keating, 2017; Keating & Heslin, 2015; McCutchen et al., 2016). With the belief that intelligence, personality, and talent are based on genetics, those with a fixed mindset avoid activities requiring effort and interpret mistakes as lack of aptitude (Blackwell et al., 2007; Davis, 2017; Dweck, 2010; Fitzgerald & Laurian-Fitzgerald, 2016; Mangels et al., 2006; McCutchen et al., 2016). Furthermore, these students are more likely to shun tasks requiring extra effort due to their perception that working hard insinuates lack of intrinsic ability and their belief that mistakes mean they are not good enough (Dweck, 2010, 2012). These feelings may contribute to the use of maladaptive strategies and detrimental feelings about their self-worth (Dweck, 2010, 2012; King, 2012; Yeager & Dweck, 2012). When students function with a fixed mindset and struggle to demonstrate mastery with ease, their self-esteem may be threatened (King, 2017). By focusing on performance goals to prove their intelligence, students may avoid feedback and become hyperfocused on doing better than others (Mangels et al., 2006).

While fixed mindset theorists consider intelligence to be a fixed quality with a set capacity, there is a general understanding that everyone has the ability to learn new things, but finding safe ways to do so can be difficult. Dweck (2012) stressed the importance of understanding connections between mindset and a person's beliefs about her abilities, as mindset often determines who is successful in academics. Dweck (2012) also postulated that when

people believe their traits (e.g., intelligence, personality) are fixed, they avoid challenges for fear of making themselves look or feel less intelligent. More research is needed on discovering strategies to allow learners and teachers with a more fixed mindset not only to learn in their comfort zone but also to provide situations for learning that will push them to have a safe place to “fail” as they stretch their innate abilities and utilize tactics to grow in other areas.

When considering the impact of mindset on individuals, organizations also hold mindset beliefs that influence their organizational practices. For example, leaders of organizations with a fixed mindset are generally less focused on working to help each other be successful; rather, members with similar exceptional skill sets are encouraged to compete and perform at top levels to prove their usefulness to the organization and secure their spot in the organization (Miller, 2016). Additionally, leaders of fixed mindset organizations are less likely to coach members with constructive feedback or mentoring due to the inherent competitiveness and their desire to stay ahead of their peers (Keating & Heslin, 2015; Miller, 2016). Since members of fixed mindset organizations must continually prove themselves worthy, leaders may pressure employees to work harder through the use of motivating incentives, which may lead to aggressive employees trying to outdo each other so their skills will be individually recognized rather than a group of skilled professionals working together to strengthen the organization as a whole (Miller, 2016). When employees are routinely provided with praise for their abilities and given seemingly positive labels such as *brilliant* or *gifted*, they may subsequently avoid tasks that would make their abilities appear less superior or they may view challenges as a test to monitor their performance (Keating & Heslin, 2015). Consequently, the culture of fixed mindset organizations may encourage employees to exaggerate their performance, resist helpful feedback, and blame others when faced with setbacks (Keating & Heslin, 2015). Moreover,

members of organizations with a fixed mindset are more focused on immediate results and less supportive of inventiveness and risk-taking.

Growth mindset. In contrast to those with a fixed mindset, people with a growth mindset believe their academic abilities are malleable. Growth mindset theorists focus on a human being's ability to change, adapt, and develop through experiences and persistent effort and risk-taking (Dweck, 2012, 2017; Keating & Heslin, 2015; Roedel & Schraw, 1995; Yeager & Dweck, 2012). Viewing intelligence as flexible does not assume equal potential for each person, but a growth mindset does adopt the philosophy that each individual has intellectual ability that can be further developed (Blackwell et al., 2007). When functioning with a growth mindset, effort, strategies, and thought processes are developed while learning. Failures can be attributed to a need for altered strategies and increased efforts to solidify learning and overcome disappointments (Ryazanov & Christenfeld, 2018).

Students' academic persistence is strengthened when they associate effort with increased school performance and believe they are valued and belong (Rattan et al., 2015). Furthermore, students who view their intelligence as something that can be altered are more academically motivated than those with a fixed mindset (Jones et al., 2012). Through the use of strategies, help from others, and repeated practice, those with a growth mindset trust they have the capacity to change over time, but when failure does inevitably occur, instead of being consumed with the negative aspects, growth mindset learners evaluate what strategies did not work and change their direction as they forge ahead (Dweck, 2012, 2016, 2017; Haimovitz & Dweck, 2017; King, 2012; McCutchen et al., 2016).

Teachers with a growth mindset believe that everyone can be more successful academically by learning, growing, and improving through the use of targeted interventions and

increased resiliency when facing challenges (Blackwell et al., 2007; Dweck, 2010, 2012, 2016; Haimovitz & Dweck, 2017; Zeng et al., 2016). This resilience results in deep learning. After mistakes are made and corrected, individuals with a growth mindset show superior accuracy when faced with similar content due to the ownership of the material (Tirri & Kujala, 2016). Consequently, growth mindset can result in “improvements and increased teacher skills that support all students to grow and learn” (Hanson, Ruff, et al., 2016, p. 204).

Additionally, incremental theorists (growth mindset) propose that abilities can be improved or altered through effort and perseverance, so when one has a growth mindset, she is more likely to seek challenges and rebound from mistakes (Gutshall, 2013). Teachers with a growth mindset have been shown to encourage engagement in students, leading to strengthened academic behaviors that explain increased academic achievement (Hanson, Ruff, et al., 2016). When teachers have a growth mindset, they are more inclined to both recognize the potential in struggling students, “support persistence to mastery,” and back school change efforts that have the potential to increase learner success (Hanson, Ruff, et al., 2016, p. 207).

In the same way growth mindset individuals hold set values and ideals, leaders of growth mindset organizations highly value learning while helping others grow, attain goals, and build collaborative and innovate cultures (Keating & Heslin, 2015; Miller, 2016; Warrick, 2017). Through these collective experiences, shared organizational learning occurs, which produces common cultural and learning expectations by problem-solving through collaborative efforts (Hartnell et al., 2016; Heslin & Keating, 2017; Keating & Heslin, 2015; Koohborfardhaghghi & Altmann, 2017; Miller, 2016). Research further suggests that a growth mindset is a desirable characteristic, leading to engaged members who are satisfied and highly committed to the organization’s goals and values (Caniels et al., 2018; Hartnell et al., 2016). Growth mindset

organizations also attract transformational leaders, who further enhance commitment, relationship-oriented values, job performance, shared vision, and a service climate (Caniels et al., 2018; Hartnell et al., 2016). Consequently, school districts with a growth mindset become learning organizations better able to meet the needs of each learner through innovative tactics focused on increased success. Additional research is needed, though, on the manner in which these strategies are successfully implemented district-wide and what the outcomes entail (Kuscu et al., 2015).

As achievement and accountability measures maintain a focus in education, growth mindset plays a key role in students' success. Research supports that teachers with a growth mindset promote academic learning and help their students develop grit when setbacks are faced (Dweck, 2012; Hartnell et al., 2016; Zhang et al., 2017). When students recognize their abilities are not fixed, they develop positive, enduring beliefs about their ability to improve their academic achievement and seek more challenging opportunities as they progress through life (McCutchen et al., 2016). While state assessments are inevitable, when approached through the lens of a growth mindset, they no longer have a fixed stronghold on the learning.

Research indicates that teachers who adopt growth mindset language and provide feedback consistent with growth mindset elicit lasting change in the mindset of the learners in their classrooms (Hochanadel & Finamore, 2015; Zhang et al., 2017). When teachers provide learners feedback that focuses on their determination and use of strategies, students recognize their efforts produce positive change, and they are encouraged to be resilient and persistent in their quest to learn (Gutshall, 2013; Hellmich & Hoya, 2017). Furthermore, multiple studies indicate that learners with a growth mindset consistently demonstrate academic achievement that outperforms those with a fixed mindset (Claro et al., 2016; Mangels et al., 2006). Continued

research is needed on how to apply what is currently known about mindset theory and how to use this information to bring about positive change in schools and districts, which are responsible for the education of children (Dweck, 2012).

Similarly, growth mindset has been found to contribute to the narrowing of achievement gaps. While researchers are quick to point out that while growth mindsets are not a solution to all problems pertaining to achievement gaps, growth mindset interventions can play a critical role with increasing educational outcomes (Rattan et al., 2015). In one study of 10th-graders in Chile, researchers indicated that the impact of a student's mindset had the same effect as family income and economic status (Rattan et al., 2015). For example, students with growth mindsets from low-socioeconomic backgrounds performed comparably to students with a fixed mindset from families with higher income levels (Rattan et al., 2015). When teachers have a growth mindset and intentionally provide support, feedback, and practices into their classroom, their ability to foster growth mindset thinking in their students is more successful. Teachers' conceptions of intelligence have been repeatedly found to impact their learners' beliefs (Fraser, 2017; Jones et al., 2012). Multiple researchers have also concurred that growth mindsets particularly benefit subpopulations that historically have had more academic struggles (e.g., minorities, women in math and science, etc.) (Greene, 2014; Rattan et al., 2012).

Additionally, mindsets impact grading practices, pedagogy, culture, and teacher feedback (Rattan et al., 2015). Scholars suggest that integrating mindset messages with existing initiatives is one way to ensure the benefits of growth mindset practices are assimilated (Rattan et al., 2015). The inclusion of growth mindset practices does not require all other educational practices to be eliminated; rather, through the thoughtful addition of specific interventions that teach educators and learners how to adjust their thoughts and subsequent actions, growth and

improvement for all is possible. Schools with a growth mindset culture have faculty that believes all teachers are responsible for all students' academic achievement (Hanson, Ruff, et al., 2016). This collective belief increases the staff's willingness to adopt challenging organizational goals, leading to improved academic performance (Hanson, Ruff, et al., 2016). Rattan and colleagues (2015) have suggested incorporating the inclusion of growth mindset strategies for students during multiple courses offered during school.

Additionally, researchers recommend that schools and districts work to implement mindset interventions and evaluate the consequences of growth mindset "for students' motivation, teachers' experiences, and overall school achievement" (Rattan et al., 2015, p. 724). With a school growth mindset culture of common vision and shared knowledge and support, all teachers and students are sustained in their efforts to learn (Hanson, Ruff, et al., 2016). Through the implementation of growth mindset strategies, teachers and schools are working within their boundaries to design educational opportunities that enrich learning for all. Two promising outcomes of growth mindset that need further understanding include grit and resilience.

Pursuit of goals. Grit has been one consistent characteristic associated with success in the pursuit of goals (Hochanadel & Finamore, 2015). Originally coined by researcher and psychologist Duckworth, *grit* is a term used to describe individuals who passionately persevere in the pursuit of long-term goals when faced with adversity (Duckworth et al., 2007; Fitzgerald & Laurian-Fitzgerald, 2016; Hochandel & Finamore, 2015). The U.S. Department of Education (2013) defined grit as the "perseverance to accomplish long-term or higher-order goals in the face of challenges and setbacks, engaging the student's psychological resources, such as their academic mindsets, effortful control, and strategies and tactics" (p. 15). The pursuit of goals and growth mindset are directly related to each other, as both concepts hinge on the belief that

growth is attainable while valuing effort and persistence in the pursuit of pursuing goals and learning (Hochanadel & Finamore, 2015). Duckworth (2016) and Dweck (2016) both conducted studies that indicated that individuals are capable of change and do adapt and improve when they choose to put forth effort and persevere.

Evidence of grit in education is seen as students achieve long-term goals through dedication to overcoming difficulties (Hochanadel & Finamore, 2015; Reed & Jeremiah, 2017). Determination in the pursuit of goals helps individuals persevere, even when progress is stalled, and is a contributing factor to a person's work ethic and success. Fortitude and grit are more accurate character traits to gauge high school graduation rates and grades than IQ (Duckworth, 2016; Reed & Jeremiah, 2017). Tenacious individuals learn more academically and socially from collaborative efforts, leading to emotional and psychological strength (Fitzgerald & Laurian-Fitzgerald, 2016). Additionally, multiple factors are involved with grit and pursuing goals: interest, passion, dedicated practice to improve, and hope (Duckworth et al., 2007; Reed & Jeremiah, 2017). Education experts agree that the combination of motivation, self-control, growth mindset, and goal-directedness contribute to academic preparations, leading to the future success of students today (Duckworth et al., 2007; Laursen, 2015; Reed & Jeremiah, 2017; Snyder et al., 2002).

The impact of pursuing goals is not limited to students, though. Robertson-Kraft and Duckworth (2014) studied the grittiness of novice teachers to determine if there was a connection between teacher retention, effectiveness, and grit. Whereas talent and skill lead to initial success, when effort is added, dedication to the pursuit of a personal goal becomes a leading factor of advancement and longevity (Reed & Jeremiah, 2017). The research revealed that while challenges related to teaching can be disheartening, teachers who entered the profession already

demonstrating grit and tenaciousness (demonstrated through college work and other academic credentials) had a greater likelihood of being effective (demonstrated through student learning) and remaining in the field of education longer than their less determined peers (Robertson-Kraft & Duckworth, 2014). Overall, “gritty people believe that they will learn more and become stronger people by overcoming their challenges with steady and passionate effort. There is, in their eyes, almost never a reason to give up” (Fitzgerald & Laurian-Fitzgerald, 2016, p. 57). Duckworth et al. (2007) suggested that educators and parents could encourage the pursuit of goals in growth mindset through encouraging students to work with intensity and stamina, to understand that excellence requires discipline over time, and to understand how to anticipate and prepare for failures.

Resilience. Another important characteristic associated with positive learning outcomes is resiliency. When students focus more on process than ability, their mindset helps them respond resiliently to challenges (Yeager & Dweck, 2012). Research implies that “resilience is not exclusively a quality of a person or of a context, but rather it can also be the consequence of a person’s interpretations of the adversities they are facing” (Yeager & Dweck, 2012, p. 312). Although there are correlations between growth mindset and resiliency, it is not solely a growth mindset trait. All students have the potential to develop characteristics that promote resilience when academic and social adversities arise (Yeager & Dweck, 2012). Yeager and Dweck (2012) found that learners’ mindsets can transform, which also promotes resilience. Even when learners have equal intellectual abilities, their mindset shapes their receptiveness and responses to educational experiences (Blackwell et al., 2007). Higher resilience results in greater well-being, increased academic achievement, engagement, and goal attainment (Zeng et al., 2016).

However, by helping students understand academic challenges through a growth mindset lens, resilience is strengthened (Zeng et al., 2016). Resilience is related to growth mindset as it helps students respond positively to challenges (Yeager & Dweck, 2012). In fact, growth mindset can be considered an antecedent of resilience, which “is a potential factor that plays an important role in the psychological mechanisms relating growth mindset to academic achievement” (Zeng et al., 2016, p. 3). Students’ ability to manage stress increases when they are resilient (Yeager & Dweck, 2012). The way people view their intelligence impacts how they face critical points in their lives (Blackwell et al., 2007). Incremental theorists focus more on learning goals to increase their abilities versus performance goals, which merely demonstrate how smart or competent they already are (Blackwell et al., 2007). Additionally, when students recognize that intellect can be developed and they focus more on process than abilities, they become more resilient, less fearful, and more persistent when faced with rigorous learning challenges (Yeager & Dweck, 2012).

Grit and resilience are two characteristics that are under the control of each individual. Whether or not learners or teachers stay their course is up to their personal levels of resilience and grittiness. As with grit, when students and teachers are resilient, they remain focused on their objectives and have increased stamina when working toward their significant goals. By controlling their mindset and determination, teachers and students can remain autonomous in their quest to learn and grow.

The Impact of Praising Abilities Versus Effort

When reflecting on motivating factors for learning, Dweck (1999a, 1999b, 2007a, 2014a) focused on the positives and negatives of praise and feedback. While most teachers want to increase their learners’ confidence in their aptitudes and enjoyment of learning by praising their

abilities, Dweck (2007a) and others found that feedback focusing on abilities limits students' persistence on future work (Cimpian, Arce, Markman, & Dweck, 2007; Kamins & Dweck, 1999b; Mueller & Dweck, 1998). What Dweck and colleagues (2007a) found consistently was that "praising students' intelligence gives them a short burst of pride, followed by a long string of negative consequences" (p. 35), as an overemphasis on talent or ability leaves students vulnerable to failure and fearful to face challenges due to their internalized belief that their abilities are innate and unchangeable (Dweck, 2007b). Yeager and Dweck (2012) acknowledged that "even seemingly positive teacher or parent behaviors—such as praise or comfort for struggling students—can lead students to adopt more of a fixed, entity theory" (p. 310).

Additionally, Dweck (2007b) reported that *process* praise (level of engagement, effort, strategies, perseverance, etc.) increases motivation by communicating to students that they are making positive strides toward being successful now and in the future because of their efforts, not their innate abilities. In a TED Talk viewed nearly 8 million times, Dweck (2014a) shared how evaluating progress with grades of *yet* or *not yet* can powerfully spur increased efforts for students. Through the simple feedback of *not yet* when a student has not demonstrated mastery, a student is provided with an understanding that she will be successful, that she can do it, and that she is on a journey toward success. When the terms *yet* and *not yet* are applied to learning, students' mindsets can indeed change as they understand they are on a learning journey (Blackwell et al., 2007; Dweck, 2014a).

After researchers noted that specifically teaching learners about the malleability of intelligence and praising students for their effort leads to growth mindset behaviors, multiple researchers wanted to test the impact similar interventions would have in a gaming format (O'Rourke, Haimovitz, Ballweber, Dweck, & Popovic, 2014). With real-time feedback through

the use of *brain points* awarded for effort and strategy, the study of 15,000 children included evidence that growth mindset feedback has the potential to increase students' persistence when faced with difficulties (O'Rourke et al., 2014). To address the goal of the research study, which was to investigate the impact of incentivizing productive effort and teaching growth mindset in an educational game, the researchers designed two versions of a math video game for elementary age students (O'Rourke et al., 2014). The experimental version taught about the growth mindset through the game's narrative, feedback, and structure, whereas the control version was designed with a neutral mindset typical of traditional games (O'Rourke et al., 2014). The study population included children of all ages and ability levels who had access to the BrainPop website through elementary school accounts. The results repeatedly demonstrated that the students were engaged deeply in the process of reviewing their errors, learning from their mistakes, and correcting them based on the process praise received (O'Rourke et al., 2014). While the designers engineered the game so all students would face challenges, the intervention had a significant effect on the number of levels played ($z = 9.04, p < 0.0001, r = 0.07$), which indicated the children who participated in the growth mindset version of the game demonstrated more grit and persistence (O'Rourke et al., 2014). Resilience is promoted when students receive feedback that focuses on their concentration, strategies used, and persistence. Even in a gaming environment, praising wisely (process praise) resulted in students who were hearty and resilient (Dweck, 2014a). This study demonstrated the power of growth mindset in a different context.

Conversely, when teachers' and schools' feedback and practices emphasize students' strengths and weaknesses as fixed abilities, they inadvertently foster a fixed mindset. Additionally, receiving praise for aptitude undermines resilience (Gutshall, 2013). Fixed mindset may be further confirmed by leaders and teachers who focus their positive reactions on

students' strengths and provide feedback intended to make them feel better about themselves (e.g., "Don't worry about your below-average grade, not everyone's good in science") when they struggle with content that is more difficult (Dockterman & Blackwell, 2014; Rattan et al., 2012). When students do well on a task that was not difficult for them or required little effort and subsequently receive positive teacher feedback, their self-worth becomes associated with their innate abilities (Haimovitz & Dweck, 2017). Consequently, those who experience praise on behalf of their inborn talents attribute personal value to their fixed abilities and not the effort or strategies applied.

To increase the positive attributes of growth mindset, educators can praise the process and energy exuded when learning (Dweck, 2007b, 2014a; Hattie, 2011). By praising the right things (effort, strategy, and progress), teachers are narrowing in on *how* learning occurs, and through this focus on the learning process versus being smart, students' ability to tackle challenges and persevere when success is not imminent increases their tenacity and further advances their academic achievement. Growth mindset teachers work to praise students for their effort rather than for specific traits (Hanson, Ruff, et al., 2016). The power of educators' and parents' praise is seen in a longitudinal study by Gunderson et al. (2013), in which researchers recorded the types of praise given to young children by their caretakers in a naturalistic setting multiple times in one year, followed by a questionnaire given to the same children 5 years later (Dweck, 2002; Gunderson et al., 2013). Praise was measured cumulatively across three visits when each child was 14, 26, and 38 months old ($N = 53$) (Gunderson et al., 2013). This study was the first to involve an investigation of the effects of various types of praise in real-life parent/child relationships (Gunderson et al., 2013). The results indicated a statistically significant correlation at two different ages between young children given process praise and

their later development of a growth mindset: 14 months, $r(51) = .27, p = .05$; 38 months, $r(51) = .32, p = < .05$ (Gunderson et al., 2013). Even in early childhood, children internalized the feedback given, which consequently impacted their mindset as they grew older (Gunderson et al., 2013).

Feedback from teachers should inform learners if they are on the right path and provide direction on next steps (Hattie, 2011). Dweck (2014a) stressed that when educators and parents establish environments steeped in *yet*, equality happens. Students who are praised for their engagement in the learning process become hardy and resilient (Dweck, 2014a). When they make an error, they learn from it and correct it (Dweck, 2014a). Students understand their success is coming; they just haven't achieved it *yet* (Dweck, 2014a). The words *yet* and *not yet* give students greater confidence, help them self-monitor and adjust based on error awareness, and lead them toward a path of greater persistence (Dweck, 2014a; Moser, Schroder, Heeter, Moran, & Lee, 2011). Students who recognize the power of *not yet* are on track to become tenacious, gritty, lifelong learners focused on the journey of learning.

Systems Thinking

As school district leaders look at the most effective manner in which to produce needed change, increase effectiveness of initiatives, or become a stronger learning organization, leaders work to predict and understand the interconnectedness of relationships and perspectives of all involved in the organization (Thornton, Peltier, & Perreault, 2004). Education leaders must also acknowledge how their school and district are interconnected when looking at changes so the solution will address the root concern, not merely a symptom of a larger problem (Thornton et al., 2004). Through continuous, systematic improvement, organizational learning, and feedback, leaders who employ systems thinking tactics are encouraged to view their entire school as a

complex organization made up of multiple parts (Thornton et al., 2004). By learning how schools and districts work as a system, better practices for change will be developed as system thinking primes leaders in organizations to understand the most challenging issues by broadening their perspective to see the whole system (Caldwell, 2012; Kuscu et al., 2015).

School improvement and educational reform have become areas of increasing concern as government accountability requirements highlight areas of weaknesses and achievement gaps remain. In an effort to extend efforts for successful school and district reforms, Mania-Singer (2017) studied the relationship between the district central office and the schools of one urban district through the lens of systems thinking. What was discovered at the conclusion of the 3-year qualitative study of this school district was that initiatives had been implemented one school at a time, with no identified plan or understanding of how each school operates, no communicated plan for cohesiveness, no shared understanding of the *why* behind assigned initiatives, and no collaboration between district and campus leaders (Mania-Singer, 2017). Interviews revealed that higher-performing school leaders were more included in information sharing and committee membership than lower-performing schools, and most school leaders believed those who worked within the central office remained elusive (Mania-Singer, 2017). At the conclusion of the study, valuable lessons for other school districts were identified regarding increased communication, collaboration, and working toward becoming a learning organization with a shared vision (Mania-Singer, 2017). Additional research is needed, as a research gap was discovered regarding the impact of relationships between school district central offices and various types of schools (e.g., suburban districts, smaller districts, etc.) and how districts can work more effectively as a system.

Conversely, systems thinking involves more than the sum of all the interconnected parts. While Caldwell (2012) stated that “we understand how systems behave and this understanding leads to better practices” (p. 147), he also acknowledged that systems thinking is the core of a learning organization, and his research contributed to the continuation of a deeper understanding of what a learning organization encompasses and systems theory’s premises. Caldwell (2012) identified some limitations of systems thinking theory, especially homing in on the difficulty of truly understanding the core disciplines of a learning organization identified by Senge (1990) and the challenges of incorporating systems thinking with real-world organizational problems. Despite Caldwell’s (2012) criticism, there remains adequate evidence that “systems thinking should be a vital component in efforts to improve education” (Thornton et al., 2004, p. 227). In order for educational leaders to be successful, focusing on making incremental changes to the system, determining high-leverage improvement, and aligning feedback given with targeted practices ensure that practices are shared in all aspects of the organization (Fillion, Koffi, & Ekionea, 2015; Senge, 1990; Thornton et al., 2004).

Creating Cultural/Organizational Change in Education

Increasing recognition of the positive attributes associated with growth mindset is spurring leaders of school districts to unite in their efforts to develop an organizational growth mindset culture for the benefit of all stakeholders. Effective understanding of mindsets has strengthened educational organizations in their efforts to ensure every student is afforded the opportunity to demonstrate significant learning (French, 2016). Additionally, research supports that an organization’s values influence individuals in the group (Hanson, Ruff, et al., 2016). When an organization also shares beliefs, those views influence people’s mindsets and behaviors, contributing to a growing desire to change (Hanson, Bangert, et al., 2016; Hanson,

Ruff, et al., 2016; Hartnell et al., 2016; Murphy & Dweck, 2010; Warrick, 2017; Wheeler & Omair, 2016). Nevertheless, changing the culture within an entire district or individual school is not a direct process and necessitates careful deliberation in order to achieve success (Fraser, 2017).

Leaders establish shared values and goals, which unify an organization, and work to build a guiding coalition to bring about needed change. Research indicates that school leaders have worked for decades to improve practices in schools with limited success, but with the inclusion of district administration, positive reform is more likely (Hannay et al., 2013; Mania-Singer, 2017). Therefore, growth mindset characteristics that focus on utilizing multiple strategies when challenges arise, working collaboratively, and being committed to success at all levels of a school district will help district leaders forge the way to improve professional practices district-wide (French, 2016; Hannay et al., 2013; Murphy & Dweck, 2010). This shared responsibility of working toward a growth mindset culture in education can lead to both organizational improvements and advanced teacher skills, which contribute to academic advancement for all students (Hanson, Ruff, et al., 2016). When applied on a structural level, these growth mindset qualities can also result in leaders and members of an organization who positively collaborate, display unified values that attract other like-minded members, and choose challenging organizational goals leading to school improvement (Hanson, Bangert, et al., 2016; Jin, Seo, & Shapiro, 2016; Murphy & Dweck, 2010). Research supports that transformative change can occur in educational organizations that are committed to learning and making progress while sharing cultural values (Hannay et al., 2013; Warrick, 2017). In addition, more research is essential to more thoroughly understand how educational organizations can successfully implement such changes and the related outcomes (Hannay et al., 2013).

Generating change in organizations and impacting the culture are not simplistic tasks that happen by chance. Leaders must have a vision that is both broad (big picture) and specific (details). To engender change, leaders must step outside and get an overview, a wider perspective, to identify how information, goals, motivations, mindsets, and actions are connected (Meadows, 2008). When leaders find the interconnections between the individual elements of an organization, relationships and connections are identified and designing a plan for change is possible (Meadows, 2008).

School and classroom culture. With multiple positive components associated with a growth mindset, developing classroom cultures that cultivate a growth mindset is becoming a goal for many schools. Since mindset is dynamic, specific teaching practices and intentional experiences can facilitate its development (Yeager & Dweck, 2012). Thus, teachers' words and actions can directly influence the mindset of learners, helping them to become more resilient while fostering a love for learning, not just regurgitating information on a test (Dweck, 2010, 2012; Yeager & Dweck, 2012). When teachers challenge their learners to set progress goals, praise students' use of strategies and persistence, and reinforce that fast learning is not always the path to mastery, students' levels of learning are strengthened (Dweck, 2010; Yeager & Dweck, 2012). Accordingly, embedding growth mindset practices into a classroom or school requires thoughtful commitment, but the challenge becomes part of the shared journey toward learning with a growth mindset (Hartnell et al., 2016; Yeager & Dweck, 2012).

Researchers have become increasingly aware of the links between culture, performance, mindsets, and the behavior and attitudes of individuals (Schein, 2010b; Warrick, 2017). When looking to overcome obstacles, research suggests that functioning with a growth mindset and considering the positives help individuals effectively cope and focus on possible solutions, ways

to improve, and how to grow and learn through the process (Jin et al., 2016). Additionally, the school culture and approaches to learning can encourage the expansion of growth mindset beliefs (Dweck, 2010; Fraser, 2017).

Researchers recently found that an organization's values impact beliefs and behaviors regarding the group's ability to resolve conflict, demonstrate resilience in the face of setbacks, and set learning goals (Hanson, Bangert, et al., 2016). Classroom teachers with a growth mindset are more likely to focus on the growth potential in learners who struggle and to support their persistence in achieving mastery (Hanson, Ruff, et al., 2016). These collective attributes contribute to a supportive classroom culture that yields intrinsically motivated learners who value relationships and community (Hartnell et al., 2016). While the current research has repeatedly indicated a connection between growth mindset and positive classroom culture and relationships (Hanson, Bangert, et al., 2016), additional research is needed to establish which factors influence openness to change and growth mindset (Hanson, Bangert, et al., 2016; Wheeler & Omair, 2016).

Leadership and Creating Systemic Change

Ensuring academic and emotional success for children in schools today is a presumed priority for all who serve in education. Every educator and school has the desire for students to learn at high levels. Therefore, leadership teams that develop systems that foster practices that allow teachers to do what is best for learners while adhering to accountability and state standards, will help to balance tensions between mandates out of teachers' control and thought processes that are in their control (Bush-Mecenas et al., 2018; Hannay et al., 2013). Research shows that leaders are instrumental in inspiring and engaging employees, improving morale, and encouraging commitment to organizations' goals and values (Caniels et al., 2018). When

schools are filled with educators with like-minded goals, their engagement in the shared responsibility of confirming success for all learners is higher.

Research indicates that school leadership can contribute to an optimistic state of mind on the part of teachers even amidst challenging circumstances (Caniels et al., 2018). Consequently, while mandated state accountability measures remain a reality, teachers and schools retain autonomy over their attitudes and actions. When led by positive leaders who mindfully engage others in the learning process, school leadership helps to focus thoughts and actions on solutions during circumstances where negativity would hinder growth (Heslin & Keating, 2017). Leaders and teachers can collaboratively face challenges while maintaining a singular focus on children's success. Moreover, concurrent findings suggest that additional research is needed on definitive ways leaders can positively influence schools to become a culture of learning through specific structures and support (Tichnor-Wagnor et al., 2016).

Learning to be an effective leader is a never-ending struggle requiring continual growth and improvement. School leaders' motives (growth or protecting their self-concept) impact their decisions and guide their responses to challenges faced while leading (Heslin & Keating, 2017). Leaders who are motivated by self-improvement and systematically approach and reflect upon challenging leadership experiences have a growth mindset, meaning they believe abilities develop through the use of strategies and repeated practice (Dweck, 2006, 2012, 2017; Heslin & Keating, 2017; Miller, 2016; Yeager & Dweck, 2012). Research infers that the greater understanding leaders have of the characteristics of mindset qualities, the more adept they will be when working toward positive change in their organization (Dweck, 2012, 2016). Moreover, research has indicated that each person can control her mindset if she chooses to do so (Fitzgerald & Laurian-Fitzgerald, 2016). Multiple researchers have proposed that educational

leaders who are determined to positively work toward changing what they can control will encourage more educators to continually grow and show resilience in the face of setbacks while leading schools toward improvement (Caniels et al., 2018; Dweck, 2012; Jin et al., 2016; Heslin & Keating, 2017; Keating & Heslin, 2015). This level of determination is evident in the characteristics of grit and resilience, which can positively influence learning.

Summary

Despite their best intentions to provide a robust education for students that prepares them for future success, some school leaders have chosen to narrow their teaching focus to ensure learners achieve the required state-mandated scores. This limited focus has led to decreased student engagement for many (Blackwell et al., 2007). Unfortunately, when students are not engaged in what they are learning and are solely fixated on an obligatory set score, their potential for learning decreases. Conversely, when students have opportunities to take risks and learn from failures in a supportive environment, they develop a mindset that encourages growth and their potential for achievement increases (Hannay et al., 2013). Consequently, schools that remain determined to ensure teaching strategies are entrenched with growth mindset practices develop students who are resilient, tenacious, and work toward goals that extend their learning (Fraser, 2017).

Schools that work to find solutions to address reduced engagement and increase achievement are impacting more than a single group of learners; they are impacting the entire organization (Hanson, Ruff, et al., 2016). As the organization grows and learns together, members become motivated to focus on what can be controlled—their mindset. As fixed mindset views within organizations are viewed less favorably than growth mindset outlooks, school districts that work toward learning and growing together develop mindset practices that

are adopted overall and positive environments for learning are established (Murphy & Dweck, 2010). Therefore, school systems that adopt growth mindset policies and practices should be studied further. The experiences associated with school districts' successes and struggles implementing growth mindset is useful information for other school systems.

Regarding the methodology to support my research, a qualitative study was used to construct information revealed through the data collection process. Through the analysis of the data, information was gleaned on the complex issue of shifting an organization's culture toward a growth mindset. The compilation of data allowed for a broad understanding of all facets of the organization that would be impacted by growth mindset practices.

Although there is a plethora of research on the benefits of growth mindset and organizational learning and culture, there is a gap in the literature on how growth mindset is implemented in an organization (Blackwell et al., 2007; Fraser, 2017; Murphy & Dweck, 2010). Understanding how an entire school district systematically implements change throughout the whole organization to increase achievement for all can be beneficial for other leaders of learning organizations. With a strong foundation on growth and fixed mindsets, organizational learning and culture, and how to systematically implement changes, utilizing multiple data sources to study one school district's journey will provide knowledge on the potential impact for others.

Chapter 3: Research Method

Growth mindset strategies are linked to positive academic behaviors such as increased motivation, learning, and improved achievement (Dweck, 2000, 2012; Rattan et al., 2012; Zhang et al., 2017). There is an overall consensus among experts that a learner's environment and teachers' influence can help cultivate a growth mindset for all students in the classroom (Dweck, 2002, 2017; Gutshall, 2013; Lottero-Perdue & Parry, 2017; Snipes & Tran, 2017; Zhang et al., 2017). However, despite extensive research on the positive attributes associated with growth mindset characteristics (Dweck, 1999b, 2006, 2012, 2015, 2017; Hochanadel & Finamore, 2015; Murphy & Dweck, 2010; Yeager & Dweck, 2012), many school leaders continue to struggle with constructing a culture and implementing practices that align with a growth mindset (Hannay et al., 2013). One innovative North Texas school district, Coppell ISD, is leading a collaborative effort to implement growth mindset practices into the culture district-wide (Coppell Independent School District, 2017c; Texas Association of School Administrators Public Visioning Institute, 2008). Being cognizant of the research that shows that altering the belief system and culture of an organization is challenging (Murphy & Dweck, 2010), Coppell ISD has systematically established and adopted organizational structures while developing capacity among its leaders to implement long-lasting change (Fullan, 2001; Hannay et al., 2013; Kotter, 2012). As Coppell ISD continues to be a leader in effecting positive strides toward full implementation of growth mindset into the culture and educational practices, it is important to examine how this shift has occurred and the impact of growth mindset.

The purpose of this study was to comprehend how district leaders, school leaders, and teachers incorporated growth mindset principles into the organizational culture and educational practices in Coppell ISD, and how they perceived the impact of implementing growth mindset

principles into the school's culture and classroom practices. A thorough investigation through the evaluation of district documents and interviews with district leaders, school leaders, and teachers who have incorporated growth mindset principles into the culture and educational practices in Coppell ISD allowed me to develop a thorough understanding of the case.

Additionally, analysis of how district leaders, school leaders, and teachers perceived the impact of implementing growth mindset principles in the school's culture and classroom practices was explored.

Research Method and Design

While research itself is “inquiry, deliberate study, a seeking to understand” (Stake, 2010, p. 13), qualitative inquiry is interpretive, realistic, situational, and personal (Stake, 2010). Qualitative research is focused on developing a deep understanding of experiential data as opposed to measuring individual data points, but within qualitative realms, there remains the opportunity to understand the individual and collective (Merriam, 1998; Stake, 2010). To examine the impact growth mindset has on the culture and practices in Coppell ISD, the literature supports a qualitative methodology.

As the research questions in this study focus on *how* or *why* and the emphasis surrounds a complex issue that needs to be explored and understood through multiple lenses, a single case study methodology was deemed most suitable (Baxter & Jack, 2008; Yin, 2003). As a form of qualitative research, a case study can contribute to professional practice and allow an understanding to grow when deciphering phenomena in complex organizations through a variety of data sources (Baxter & Jack, 2008). Yin (2003) shared that a “case study is not either a data collection tactic or merely a design feature alone, but a comprehensive research strategy” (p. 13). When the case study approach is applied correctly, it becomes a valuable method to evaluate

systems (Baxter & Jack, 2008). A case study approach was most appropriate for this study because the research questions focus on how and why growth mindset practices in Coppell ISD have been implemented and the circumstances surrounding the application of growth mindset (Baxter & Jack, 2008).

Constructivists ascertain that every individual has a unique perspective when considering circumstances (Baxter & Jack, 2008). Case studies are constructivist in nature, as they allow facts to be viewed and evaluated through individuals' perspectives while retaining the meaningful characteristics of real-life situations (Baxter & Jack, 2008; Yin, 2003). More specifically, through the use of an instrumental case study, this research provided further insight into how Coppell ISD implemented growth mindset practices and the perceptions of its impact (Baxter & Jack, 2008).

Population

The population for this study was Coppell ISD, a mid-sized school district in the Dallas–Ft. Worth metroplex of North Texas. The school district serves nearly 13,000 students at 10 elementary schools, 3 middle schools, 1 traditional high school, 1 project-based high school, 1 ninth-grade center, and 1 alternative school (Coppell Independent School District, n.d.a). Additionally, Coppell ISD employs more than 1,200 professional and auxiliary staff (Coppell Independent School District, n.d.a). Coppell ISD serves a diverse population, and per its state accountability records, significantly exceeds the state average on state achievement tests (Coppell Independent School District, 2018a).

While Coppell ISD had experienced exponential growth over the past decade, success had been consistent but not without struggles (e.g., changing demographics, a 23% at-risk population, recapturing payments required by the state, etc.) (Coppell Independent School

District, n.d.a). The mission statement of Coppell and its list of common values, as shared on its webpage, provided evidence of the high expectations and commitment of the district to achieve success (Coppell Independent School District, n.d.c). Additionally, Coppell ISD had a call to action for each learner: “Working together, we are committed to creating profound learning experiences for each child, while nurturing meaningful relationships, to positively impact our world” (Coppell Independent School District, n.d.g). Furthermore, Coppell ISD functioned with an assumed belief that “intelligence is malleable” (Coppell Independent School District, n.d.b, p. 2). In addition to these singular introductory beliefs, Coppell ISD provided public access to other foundational documents that provided information to others about the district’s ideals and curriculum (Coppell Independent School District, n.d.e).

Sample

The sample for this study included 15 professional educators from Coppell ISD including 5 district administrators in influential positions (directors and superintendents), 5 campus administrators (3 elementary principals and 2 middle school principals), and 5 teachers (3 elementary and 2 high school) from the district. Overall, the study included representation from two high schools, five elementary campuses, two middle schools, and three levels of district administrators. The purpose of the individual interviews was to hear viewpoints from all levels of the district (administration, elementary, and secondary) so that all perspectives could be considered. This sample size allowed for the perceptions of the interviewees to be generalized by drawing broad conclusions for the entire district based on the perceptions of the sample (Polit & Beck, 2010). Analytic generalization allowed the analysis and interpretation to be pivotal for the analysis and interpretation of the data (Polit & Beck, 2010).

Each participant was interviewed once at a mutually agreeable time. Purposeful sampling was used to identify participants to include those who were in their fourth year or more with Coppell ISD and willing to participate in the study. The predetermined parameters of experience were to help ensure the sampling had experienced the call-for-growth mindset and were broad enough to provide rich, comprehensive information concerning the research questions (Frels & Onwuegbuzie, 2012). Additionally, the parameters of experiences with Coppell ISD included a large population of administrators and teachers who were eligible for participation, thus contributing to each persons' anonymity.

Given the nature of the research questions, purposeful sampling was used to select participants for this study because participants needed a history with the school district. The research questions were focused on how growth mindset principles were incorporated into the culture and educational practices of Coppell ISD and their perceptions of the impact of growth mindset. In order for the participants to have a historical understanding of the culture (Merriam, 1998), they must have been employed at the school district for at least 3 years to be eligible to participate. Additionally, purposeful sampling was necessary to obtain participants with different perspectives and from different campuses. Participants included district leaders, campus leaders, and teachers in order to gather input from various viewpoints because "the case will not be seen the same by everyone" (Stake, 1995, p. 64).

Materials/Instruments

Interview guide. For this study, data collection consisted of qualitative interviews using researcher-developed interview questions (see Appendix A). The questions included in the semistructured interview guide were intended to elicit information from the district leaders, campus leaders, and teachers about how growth mindset principles were incorporated in the

culture and practices of Coppell ISD and their perceptions of how those principles impacted the schools' culture and classroom practices. The specific level of responsibilities associated with each job were considered when designing the interview questions.

While there was an established interview guide, I also followed Stake's (1995) flexible design approach, which allowed for changes as necessary based on the collected information. An administrator and teacher who did not participate in the research study participated in field-testing the interview questions before interviews began. Feedback received validated that the interview questions garnered the needed information from the participants to answer the research questions. During the interview data collection process, asking good questions to provide clarity regarding the research questions, avoiding questions that inferred an answer, recording and transcribing data, and developing a rapport were all considered essential components of effective interviews (Yazan, 2015).

Document analysis. District documents provided additional data. Documents analyzed included *CISD Curriculum Management Plan*, *The Learning Framework*, *CISD Leadership Framework*, *CISD Classroom Management Framework*, *CISD Facilitation Framework*, and *CISD District Improvement Plan*. As a part of the document gathering process, "knowing what leads to significant understanding, recognizing good sources of data, and consciously and unconsciously testing out the veracity of their eyes and robustness of their interpretations" (Stake, 1995, p. 50) provided the opportunity for me to have a healthy skepticism of the case. Permission was not required to access the needed documents, as they were all available for public access through the district website.

Qualitative Data Collection and Analysis Procedures

Prior to data collection for this study, I obtained approval from Coppell ISD and the Abilene Christian University Institutional Review Board (IRB). A list of Coppell employees from each category, with their tenure and specific role listed, was acquired from CISD and used to gain contact information and to build the list of eligible staff to be interviewed. After IRB approval was obtained, potential interview participants were decided upon and invited to participate in the study via an email. Specifics about the purpose of the study, my contact information, potential risks and benefits, and an informed consent form were attached to the email sent to potential participants. Once the individual agreed to participate, she was asked to review and sign a consent form (see Appendix B) and information about how to coordinate a time for the interview was provided.

When scheduling interviews, appointments were purposeful to allow for a maximum of one interview per day over a 6-week period during August–September 2018. During the interview, I took notes in Notability on the iPad, and through this application, audio recordings were also used for transcription and accuracy purposes so my full attention could be focused on the interview. Interviews were transcribed within 72 hours after the interview, and while transcribing, particular attention was given to evolving patterns, allowing for a list of codes and notes to be developed. Values coding and concept coding were used to elicit themes after the codes were identified.

When reviewing the interview data, patterns and themes were identified which supported the research questions:

1. How have district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD?

2. How do district leaders, school leaders, and teachers perceive the impact of implementing growth mindset principles in the school's culture and classroom practices?

With the district documents, evidence of growth mindset principles and practices were noted. When comparing the answers from the interviews to the district documents, I identified corresponding keywords and grouped them, allowing for alignment and gaps to be noted. Next steps included using value and concept coding to develop categories based on commonalities and frequencies of word use or ideas. As phrases evolved by way of repeated patterns throughout each study participant's responses, cohesive viewpoints emerged. The categories of codes were subsequently assimilated into themes. The themes continued to develop as the data were further analyzed in relation to the research questions. Patterns and themes were identified to answer the research questions. As Stake (1995) suggested, the data were structured in as much detail as possible to ease organization. The immersion of and reflection on the data allowed for a relatable qualitative study and effective generalization as the meaning was generated from the applicability of the data (Polit & Beck, 2010). The compilation of data allowed for a broad understanding of all facets of the organization that would be impacted by growth mindset practices.

Methods for establishing trustworthiness. There was a baseline for trustworthiness during the interviews because I work in the same district as the participants. The names of participants were not shared with anyone to ensure each participant felt confident regarding the level of confidentiality associated with the study. Besides sharing the participant's interview transcript with each individual if requested, I will share the study with all participants upon publication. Pseudonyms were used to protect their identities, but the school district name was

included in the study. Reminders of confidentiality were given to each participant before, during, and after the interviews.

To ensure the validity and reliability of the study, methodological triangulation was used to enable me to reduce bias and cross-examine the reliability of participants' responses and the connections to the district documents analyzed (Stake, 1995; Yazan, 2015). Additionally, as suggested by Merriam (1998), triangulation helped contribute to a holistic understanding of the case and strengthened reliability and internal validity. Through the attribute of qualitative descriptiveness, "a rich, thick description of the phenomenon" (Yazan, 2015, p. 139) being studied was possible. Accordingly, the proposed case study was descriptive, with embedded units due to the complex account of the growth mindset phenomenon in Coppell ISD through the use of multiple data units (Yazan, 2015).

Researcher's role. As the sole researcher, I had the primary responsibility of ensuring each interview participant understood her role in the study and that all district documents were reviewed and analyzed. Merriam (1998) suggested qualitative research relies on a subjective understanding of how people interact. Subsequently, as the researcher, I was responsible for objectively collecting data to help make meaning of the data as "the primary interest of qualitative researcher is to understand the meaning or knowledge constructed by people" (Yazan, 2015, p. 137). As an employee of Coppell ISD, I considered that one potential bias I had was predetermining the answers study participants would present. I guarded against this potential bias through thoughtfully crafted interview questions that I field-tested with educators not included in the study to confirm the quality of responses would be strong. Furthermore, by objectively applying the information from the interviews and district documents to the research questions, any potential biases were lessened, allowing for objective data analysis.

Ethical Considerations

Through the IRB and the research approval processes, all participants were assured of being protected from harm and had the choice to participate or cease their participation at any time. All identifying information was removed from the participants. The only identifying factor was the name of the school district, Coppell ISD, but all school and participant names were concealed to ensure confidentiality.

Protecting participants from harm. When considering possible harmful effects from participation in the proposed study, the only potential risk involved a potential lack of confidentiality. For example, if a teacher were interviewed and the teacher's comments did not align with the district or administrator, the participant could potentially face adverse career repercussions if her name were included in the report. With the assuredness of confidentiality, though, each participant was confident her comments and contributions to the study remained secure, so this potential risk was mitigated. Additionally, there were no known physical risks for participation in the study. Each interview was conducted in a comfortable location and lasted less than an hour.

The benefits of participating in the study were to contribute to sharing what Coppell ISD had learned about the implementation of growth mindset practices that would potentially help other school districts in the future. It was my hope that the information gleaned from this study would contribute to the field of organizational learning and growth mindset and provide information beneficial to other school districts.

Informed consent. I reached out via email (see Appendix B) to each potential participant with the preliminary information and then followed up with a phone call to discuss the process, answer questions, and obtain verbal consent. A consent form was then sent via email or

delivered to her office for signature. After the individual agreed to participate, she was interviewed one-on-one with me. The information gleaned through the interviews was focused on the participants' viewpoints of the implementation of growth mindset practices and policies in Coppell ISD and their school. The interviews were set up at a time convenient for the participant, they were audio recorded, and notes were taken. The final transcript and inclusion of the interview content were offered for review to the participants. No study participant accepted the offer to review the transcripts.

The consent form requested each participant's participation in the interview. There were no incentives offered. Taking part in this study was voluntary, and there were no negative consequences for refusing to sign the consent form. If the participant had agreed to take part but then changed her mind, her participation could be withdrawn for any reason. If a participant had chosen to discontinue the interview, all information pertaining to the interview would have been destroyed. Neither of these situations happened during the interview process.

Right to privacy. There were no known risks to any participants involved in this study. Each participant was offered the opportunity to review interview data for approval before publication. Interviews were set up at the location choice of the participant and were not announced to others. Names and identifying factors were removed from documents and were not included in the dissertation. There were no risks to any participants involved in this study. Only researchers and personnel who were part of this study saw the information about each participant from this study. The results of this study may be published in a scientific book or journal or presented to other people. If this occurs, the participants' identities will remain anonymous through the use of pseudonyms. All information about individuals from this research project will continue to be secured in a locked cabinet. Information on computers will remain

protected through password protection and remain inaccessible except by me. Names and identifying factors were removed.

Assumptions

Certain assumptions contributed to a successful study. One substantial assumption in regard to the participants being interviewed was that each person responded honestly. To help ensure that occurred, reassurance of the safeguards in place to maintain confidentiality were reiterated before, during, and after each interview (e.g., transcriptions will be in a locked file, all names and identifying factors will be hidden, the list of interview participants will remain confidential). Additionally, I assumed that each participant had no ulterior motives in sharing her personal experiences and perspectives. Beyond answering questions honestly and openly, each participant was assumed to want to contribute through the sharing of what she had learned. I also assumed that each participant had a working, personal understanding of growth mindset and would be able to provide information from her personal experiences to contribute to the discussion during the interviews. This assumption was based on personal experiences working in the district and understanding the knowledge of and experiences with growth mindset in multiple schools and district-wide. Consequently, this inclusion criterion regarding a working understanding of growth mindset was appropriate.

Another assumption was that recruiting eligible district leaders, campus leaders, and teachers to participate would not be difficult. I addressed this potential concern by sharing my research study details with Coppell ISD to ensure support was secured. Beyond official approval from Coppell ISD, I had also received a verbal commitment of support from multiple district administrators indicating their interest in participating due to their high level of interest in the topic of growth mindset and its impact. Due to the great interest in the topic, I was able to secure

the needed participants. I emailed 20 potential participants, and of those 20, 15 indicated interest and committed to participate. Additionally, each participant was eager to schedule and make arrangements for the interviews. All interviews were scheduled during the work week, with no more than one per day, within a 6-week period from the middle of August to the end of September.

Limitations

One possible limitation for the proposed study was that the case centered around a single school district, which could limit the generalization of the results. To combat this limitation, Stake (1995) suggested that through the study, researchers could present their findings in a way that allowed them to share “enough about their cases to encapsulate complex meaning into finite reports—and thus to describe the cases in sufficient descriptive narrative so that readers can vicariously experience these happenings and draw conclusions” (p. 141). Another factor I considered was my relationship with Coppell ISD. As an employee of Coppell ISD for 15 years, I had a relationship with the participants who were involved in the study, which became an advantage, as trust and rapport were previously established. I also had firsthand knowledge of some of the district documents that were utilized for data analysis. These limitations were addressed through a thorough interview guide, which drove the data collection and analysis of the documents. I received enough relevant information from my round of 15 interviews to reach the point of saturation.

Delimitations

In an effort to focus the study results on the specific research questions, explicit boundaries surrounded the study. The study revolved around the particular ways district and school leaders and teachers had integrated growth mindset principles and what their perceptions

of the impact on the school culture and classroom practices had been. The topic of growth mindset and organizational learning and culture was vast and interesting, but the focus on how growth mindset principles had been incorporated into the culture and educational practices in Coppell ISD and how the impact of growth mindset was perceived in the culture and classroom practices were adhered to for this study.

One related suggestion that was considered included measuring the mindset of a group of teachers and specifically focusing on their implementation of growth mindset in their classroom. Due to the difficulty achieving permission for the survey and the subsequent findings producing a limited view of individual classrooms versus a district-wide perspective, this plan was deemed as less beneficial to the conclusions being generalized. The study was focused on multiple perspectives of leaders and teachers at both the elementary and secondary levels. When information about Coppell ISD was common knowledge to me, but it was not revealed through the interviews or district documents, I did not consider it in the findings to ensure the reliability of the case.

Summary

To achieve the purpose of the study and address the research questions regarding growth mindset and its impact in Coppell ISD, a qualitative case study approach was used. As a growing school district in North Texas, Coppell ISD was poised to expand its influence as its numbers grew; it strived to be a leader in addressing state accountability issues, and it worked to equip every learner to be successful. With a sample size of 15 study participants, the study included consideration of multiple perspectives. Coppell ISD's vast selection of district documents allowed for data analysis to deeply explore the district and its policies. Semistructured interviews were driven by a field-tested interview guide. Appropriate

permissions were secured from IRB and Coppell ISD before any data collection began. Analysis of all data occurred with the purpose of developing a deep understanding of the research questions. Triangulation ensured the study was reliable and valid, and the research guarded against bias and validated all data sources for accuracy. All participants were assured of confidentiality restraints and were given multiple opportunities to give informed consent. With the safety perimeters and trust established, participants were assumed to be forthcoming and open and provided honest responses.

With the case being one school district, generalization of the results was limited, but the findings indicated Coppell ISD's journey could potentially help other school districts and organizations. The study remained solely focused on answering the research questions. With an organized plan for the study that allowed for flexibility through the semistructured interviews, the proposed research study was primed for successful data collection and analysis.

Chapter 4: Results

The purpose of this case study was to understand how district leaders, school leaders, and teachers integrated growth mindset principles into the organizational culture and educational practices in Coppell ISD, and how they perceived the impact of implementing growth mindset principles into the school's culture and classroom practices. An instrumental case study was used as I attained insight from multiple data sources within a single school district (participant interviews and multiple guiding district documents) for the purpose of gaining an understanding of the impact growth mindset had district-wide (Baxter & Jack, 2008; Cresswell, 2007; Hanson, Ruff, et al., 2016; Merriam, 2009; Tichnor-Wagner et al., 2016). Interview data and information from district documents were analyzed and synthesized into common themes (Merriam, 2009).

Presentation of the Findings

This section contains a summary of the participant demographics and the results of the data analysis based on the study's two research questions. Fifteen total interviews were conducted. Additionally, district documents were analyzed. Themes were outlined in a discussion of the data, with direct quotes from participants and district documents embedded to corroborate the patterns and ideas that emerged in response to each research question. While all participants worked in Coppell ISD, no individuals whom I supervised were asked to volunteer for the study in an effort to reduce any potential bias.

Demographics of participants. Fifteen participants were interviewed ($n = 15$). Five of the participants were classroom educators (elementary and high school), 5 were campus administrators (elementary and middle school), and 5 were district administrators (upper-level positions). There were 12 female participants, which made up 80% of the sample population, and 3 male participants, which made up 20% of the sample population. All study participants

identified themselves as Caucasian. Years of service with Coppell ranged from 4 to 27 years, with a mean tenure of 13 years ($SD = 8$). The length of time for each interview ranged from 24 to 58 minutes, with a mean of 42 minutes ($SD = 10$). After all interview responses were transcribed, the number of double-spaced pages ranged from 8 to 19, with a mean of 15.2 pages ($SD = 3.17$).

To ensure confidentiality in the study, each participant was assigned a letter and number marker for identification purposes. To ensure anonymity, each identifying combination was based solely on the participants' role within Coppell ISD. Classroom teachers were identified as CT1, CT2, CT3, CT4, and CT5; campus administrators were identified as CA1, CA2, CA3, CA4, and CA5; and district administrators were identified as DA1, DA2, DA3, DA4, and DA5.

Research Question 1: How have district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD? To answer the first research question, data were collected from the interviews and district documents to identify seven themes and seven subthemes. Descriptors for each theme are outlined throughout the presentation of the findings. The identified themes are as follows:

Theme 1: Leaders and teachers live and support growth mindset

Subthemes

- Leaders empower and encourage teachers
- Teachers have choices in and contribute to professional learning
- Leaders consider growth mindset in hiring practices
- Every student, teacher, and leader is expected to grow

Theme 2: The environment is designed to promote growth

Subthemes

- The physical environment is structured for growth and collaboration
- Emotional safety is embedded in the sociocultural environment

Theme 3: Building positive relationships is a priority

Subtheme

- Collaboration with others is embedded in the culture

Theme 4: Valuing growth is promoted through language and communication

Theme 5: Failure, struggles, and mistakes are okay

Theme 6: Risk and effort are encouraged

Theme 7: Assessment and grading practices emphasize learning

Theme 1: Leaders and teachers live and support growth mindset. Through Coppell ISD and its administrators' work to research and present a unified message surrounding the power of mindset, growth mindset principles have been assimilated into the culture and educational practices of Coppell ISD. As *The Learning Framework* (Coppell Independent School District, 2017c) continues to be the standard for Coppell ISD, district and campus administrators utilize feedback from staff and teachers to revisit the documents each year, establishing their continued support. District and administrators leading by example in support of growth mindset was an identified theme. This support was acknowledged as a catalyst for the expansion of growth mindset principles and their influence on educational practices. Leaders at all levels within Coppell expect themselves and others to be ready to learn; to work through challenges; and to value passion, dedication, and learning, which contributes to an organizational growth mindset (Dweck, 2014b). Four subthemes emerged from the data analyzed: (a) leaders empower and encourage teachers; (b) teachers have choices in and contribute to professional learning; (c)

leaders consider growth mindset in hiring practices; and (d) every student, teacher, and leader is expected to grow.

All respondents shared examples that indicated they felt supported by the district and administration. CT2 stated, “The growth mindset, with one of its key premises to continue to grow and to not worry about failure—we preach that all of the time to our learners, and it’s preached to us from the administration.” Administrators were identified as leading the effort to grow the mindset of their staff and students. When discussing growth mindset from a global perspective, CA5 shared, “It builds loyalty. It motivates people. It builds a respectful culture. I think it’s good for kids from a student achievement standpoint, but I also think it’s good when we talk about ‘you matter.’ I think a growth mindset promotes that because it honors people.” Growing is a collective process that is honored, expected, and modeled from all levels of leadership in Coppell. For example, CA1 shared the importance of always growing and demonstrating that to her staff: “If we want them to grow, we have to grow right along with them. . . . Mindset is everything. . . . Growth mindset is who are.” Growth mindset has encouraged leaders to grow, to be an example to their staff on the need to continuously learn, and to embed opportunities into their schools for others to do the same. DL1 echoed the importance of supporting and leading by example: “As a district we have really implemented the philosophy of being a growth minded district and individual by the Learning Framework, by the things that we as a district have put in place to help support our teachers, to support our educators in the classroom.” Additionally, CA3 stated, “I think about the Learning Framework that our district follows, that learners are educators and educators are learners. It is bred in us to believe that the learning never ends.” The culture of Coppell revolves around growth.

Through their actions, leaders in Coppell communicated a common vision. Classroom teachers articulated examples of their campus and district administrators leading by example. CT4 shared two examples of how the district modeled growth. One example included coding standards that were recently added to the math scope and sequence in the district's efforts to meet the changing needs of learners. Another illustration was when homework policies were being reevaluated, parents were an integral part of the committee, serving alongside teachers and administrators. Both instances solidified to CT4 that "Coppell wants to make sure we constantly do what's best for kids, that we are constantly do what's best for educators, what's best for families, for community."

One campus leader, CA4, maintained that she is "continually growing as a leader and a person. And then people see that and want to do the same thing." This supports values articulated in *CISD Leadership Framework* (Coppell Independent School District, 2016, p. 3), which shares expectations for leaders: "Leaders embody a growth mindset: a belief that leadership qualities can be cultivated and honed through effort, learning, and reflection." CA1 added, "Our job is to constantly learn. It's not that we have to say how are we going to have a growth mindset today; we shifted directly into 'that's the norm.'" Coppell ISD presumes individuals understand that all situations are an opportunity for new learning and they should exhibit and embody a growth mindset (Coppell Independent School District, 2016).

Modeling the shared understanding that growth is important was echoed by DL2: "I believe I can keep growing. I believe other people can keep growing." This resonated with CA5, who confirmed this idea: "Everybody is expected to put forth effort. If you don't, that's when we figure out how to help you." The attitude that all are involved in the learning-and-growing process is entrenched in the culture of Coppell ISD. DL1, CA4, DL4, and DL3 all

commented that “educators are learners,” while DL3 added, “Our belief is all educators are learners and all learners are educators, and here are the behaviors that we expect to see to be in alignment with that.” By encouraging students and staff to focus on how they can help each other, individual talents benefit everyone. DL4 echoed this conviction: “We individually have strengths, but collectively, as a whole, we are stronger.” CA5 observed, “I think we are really a strengths-focused district. I think the message that I hear as a principal is all about plugging people in to align with their strengths or looking for peoples’ next opportunities or matching people with leadership opportunities.” Looking for aptitudes in others and providing a place to expand those strengths are outcomes of the culture of growth mindset.

Leaders at all levels in Coppell shared how they expected themselves and others to be ready to learn and grow. One teacher (CT3) shared an example that highlights the benefit of administrators’ support:

I think our administration really pushes us to try new things. They are always giving us professional development on new ideas and new things. But also, they are like, “Try it, or don’t.” We may fail, we may not do it. If it doesn’t work, it doesn’t work—we will try something else.

One of Coppell ISD’s established norms is “maintaining a growth mindset,” while *The Learning Framework* (Coppell Independent School District, 2017c) stated that educators are expected to “promote a growth mindset for learners” (p. 10) as well (Coppell Independent School District, n.d.b). DL1 noted that in Coppell,

It’s a constant evolution of change. Nothing is ever status quo. We look at continual improvement, a continually improving model. We are not just doing something different for the sake of doing something different but looking at the research that supports that. So that we’re making smart decisions that will have an impact on student achievement.

This focus on striving to continually improve, leading by example, and possessing a growth mindset are expected attributes among leaders and teachers, which was echoed repeatedly by all participants in the study.

Leaders empower and encourage teachers. Teachers who are equipped for success will be effective. Through focused feedback, specific training, and experiences to build capacity, educators in Coppell are afforded the opportunity to soar. Beyond leading by example, multiple instances of how educators are empowered and encouraged were communicated during the interviews. When sharing how she enabled classroom educators to grow, one district administrator (DL2) shared,

Celebrate success and support of teachers no matter their title. Any educator can show success in the classroom. Any teacher is capable of doing great things from the first day or school and the first day of employment. I believe anyone can do it, not just out of sheer luck but with the right resources and the right direction and right behaviors to get the work done to do great things in a classroom.

One principal, CA2, emboldened staff to grow, even if that means they will have to leave campus to pursue their goals.

I've got educators who come in and they're like, "I really want to take some leadership on whatever," and I'm like, "Okay, talk to me about that." I try to put people in front of the audiences and in front of the experiences they are wanting to have because I really believe the best thing I can do as a principal is to grow leaders for future buildings.

Working together, teachers and administrators establish what a student needs to grow. CA2 recalled working with educators who are running into struggles with a learner and the teacher says, "I can't break through to this kid.' No, no, no—there's no 'I can't.' You just haven't yet. Let's figure out what the kid likes, and let's get figure out how to get through to him." CA2 empowers the educators through academic and social-emotional resources and never-ending encouragement. Another principal, CA5, saw the benefits of educators being encouraged to

flourish: “It’s been neat to see educators feel empowered and responsible almost to, now I’ve got to share this.” CA5 continued to reassure teachers, “If you’ve become a master at this, share it with others . . . promoting that culture of building-wide learning, not just for kids but for educators as well.” These examples align with *CISD Leadership Framework* (Coppell Independent School District, 2016): “It is the responsibility of a leader to recognize and cultivate the potential in others preparing and encouraging them to create their own legacies” (p. 2).

Teachers have choices in and contribute to professional learning. The requirement for continued professional learning extends beyond college degrees and teacher certification exams. As society evolves and new research determines improved methods to advance learning or effectively engage students, teachers and leaders must regularly continue to learn about their profession. Additional training is also a requirement from the state to maintain accreditations. According to the Texas Education Agency (n.d.), teachers must complete 150 hours of continuing education every 6 years to renew their certification, and administrators are required to complete 200 hours. To be most impactful, professional learning should focus on choices and self-efficacy to support educators’ beliefs that they can improve through effort and the use of better strategies (King, 2017). Providing staff quality, engaging options for professional learning and growth was a common observation as a result of growth mindset being implemented. CA4 shared,

Your professional learning has to have ownership by the people receiving it. . . . Teachers can choose and pick based on their desire to learn about what they want to. Letting them have that choice, it all fits under the big umbrella based on beliefs.

Choice was important to the study participants. When providing an example of how professional learning is primarily led by educators at one campus during monthly gatherings, CA5 shared, “There’s a tremendous amount of educator choice . . . so the whole idea is that if there’s

something you learned about or something you're good at, you've got a responsibility to share it and deliver with others." This was echoed by DL2 as well: "If you want to lead a book study, you lead a book study. If you want to jump on something and request credit, fantastic." This idea of choices with professional learning was expanded further upon by DL5, who shared, "Professional learning sometimes could be a sit and get. . . . We're really starting to move towards Twitter chats, or you're seeing collaborative book studies." As the district planned for professional learning, options to engage and provide choices were shared as priorities. When discussing how teachers were responding to professional learning on her campus, CA1 commented,

They're adapting it. They're excited about it, so when we have that session again this year, I know that the strategies that are thrown out on the table will look different than they did last year, just from the people who stretched.

When sharing evidence of growth mindset in Coppell, DL1 shared,

People are looking to grow as a professional, regardless of where they are in their career. And so, for individuals who truly exemplify that growth mindset, they're always looking for opportunities to grow and learn and more importantly share what they have learned with others.

Overall, participants believed having choices in professional learning increased engagement.

Leaders consider growth mindset in hiring practices. When confirming the needs of every learner in Coppell are met, hiring growth-minded teachers is considered a top priority. Teachers are not hired hastily. Through recently revamped educator profile questions, applicants are screened by an interview committee with the decision to offer a position coming only after references are asked a series of uniform questions and the applicant is able to articulate concrete examples of both her ability to teach and her desire to grow. As CT1 shared, "When you have educators with a growth mindset, and when you are hiring people with a growth mindset, the culture in your school is a positive one." CA3 expanded this viewpoint by describing the

teachers she looks to hire for her building: “They want to learn, they want to grow, and they have the initiative to take that opportunity on their own or to ask for help along the way.” The desire for every child to learn under the guidance of a highly-qualified teacher who values growth was prevalent among the study participants. CA4 shared about the teachers she looked to add to her campus,

You hire people who want to grow. And I say that over and over again—it is all in the hiring. You hire those people who are willing to move forward and grow because that’s what education is doing. You set an example, you hire those people who want to do that, you give them the tools to grow.

When discussing the expansion of growth mindset in Coppell, DL1 added, “We were hiring like-minded people that kind of understood, so they kind of jumped on board with that pretty quickly, so that helped too.” Educators who are invested in finding ways to ensure every child grows are of high importance and solicited through the high standards of Coppell’s hiring practices.

Every student, teacher, and leader is expected to grow. Growth is not a concept that is reserved for one group of individuals in Coppell. The growth of each group and each person impacts others. Based on the participants’ comments, it was a shared belief that a growth mindset increases individuals’ desire to improve and find ways to learn (Caniels et al., 2018). Growth for all students, teachers, and leaders in Coppell ISD was a widespread theme from the interviews. The connection between mindset and growth was expanded on by CT3, who shared, “That mindset piece is huge. Growth mindset—they’re looking for growth. Did we see the kid change for the better throughout the year?” The value of continual growth was evident from the interview responses. When considering the differences of individuals’ growth, DL1 said,

I also think with growth mindset, growth doesn’t look the same for everyone. Somebody might make a year’s growth in a year’s time in 3rd grade, and that’s wonderful. That’s

what we want them to do. Another child might only make smaller increments, but that's huge for them.

DL3's statement reaffirmed Coppell's focus on growth: "We aren't where we want to be, but there is a collective commitment that it is not okay for us to stay where we are."

Learning being viewed as a journey in Coppell was reiterated by CA3, who shared, "To me, it's just a natural setting for kids to excel and to have that growth mindset. They're not there yet, but they're on that journey." CA5's statement focused on the shared culture of learner success: "It's just kind of the culture here of we're going to engage every kid, in some way."

CA2 shared the belief that all students will grow on her campus:

One of the biggest things I push my educators to do is to not come into my office and say the kids can't. . . . Because if you're coming in and saying the kids can't, you've already given up. You've already given up on the kid or the group of kids or the whole grade.

Growth is essential for all as teachers are always growing, too. When discussing educators and growth, CA5 stated,

It doesn't matter where you are; the whole idea is you are moving. There's something that's very leveling about that. If you're the rock star or the brand-new, struggling—everybody's expected to move. From this respect, we're all on the same playing field. It's also just naturally an "Okay, what's next?" You're a phenomenal educator? Great, what's next? You're a struggling teacher? Great, what's next? That idea is, let's find where we are and see what our next step is.

DL1 added,

People are looking to grow as a professional, regardless of where they are in their career. And so, for individuals who truly exemplify that growth mindset, they're always looking for opportunities to grow and learn and more importantly share what they have learned with each other.

Growth mindset has permeated the culture of Coppell. One teacher, CT2, shared, "I'm constantly pushing myself. I'm pushing into areas that I'm not really confident with, that I'm not real sure of." Educators continually commented on their efforts to push themselves to improve.

CT3 commented, “It’s such a culture of Coppell now. I think that every year that it has become more and more prevalent and more and more talked about in Coppell. Then the more familiar we are with it . . . the more I feel okay to have that growth mindset as an educator.” All stakeholders are expected to journey toward growth in Coppell ISD.

Theme 2: The environment is designed to promote growth. The buildings, classrooms, and structures where students spend their time each day influence their learning. Thoughtful furniture and classroom arrangements increase engagement and flexible seating arrangements and encourage collaboration and motivation to participate (Scott-Webber, Strickland, & Kapitula, 2014). Additionally, structures that impact schedules at each school are utilized to maximize learning and promote growth opportunities. The *CISD Curriculum Management Plan* (Coppell Independent School District, 2017b) expanded on this belief about mindset and environment and how it is incorporated into the culture and practices by stating, “Administrators and educators are empowered to create physically, intellectually, and emotionally safe environments, to develop growth mindset, to design active and engaging learning experiences, and to promote learning as a lifelong process” (p. 18). Subthemes that support this theme include the following: (a) the physical environment is structured for growth and collaboration and (b) emotional safety is embedded in the sociocultural environment.

Four years ago, Coppell ISD used district bond funds to purchase innovative, modern furniture for all elementary and secondary campuses. When designing learning spaces, teachers and leaders now have infinite choices and are encouraged to extend the learning environment to hallways, alcoves, and outside. Additionally, over the past 2 years, the district has been tearing down walls and transforming storage rooms into flexible, collaborative learning spaces. It is now commonplace for individual and groups of learners to be engaged in learning inside or

outside the classrooms. Moreover, all school walls had previously been painted a standard off-white color, but now, each school has autonomy when choosing paint colors of not only hallways and shared spaces but individual classrooms as well. As Coppell has grown and new buildings have been built, purposeful design has led to the building of the nation's first net-zero energy elementary school, which was created to be a tool for learning, transforming an aging middle school into a modern 9th-grade center with 50% larger capacity, thereby alleviating overcrowding at the main high school campus and adding a new, intentionally planned middle school filled with adaptable spaces to allow for collaboration and flexibility while using challenge-based learning (Coppell Independent School District, n.d.d).

When discussing evidence of growth mindset in the culture and practices, DL1 shared, "When you look at the learning environment, more than anything, you can see that because it's so overt. We've changed our whole classroom experience through the furniture, the shared spaces, using areas outside of the classroom for learning." CT1 added, "The learning environment has changed to meet the kids' needs. We are giving kids all the chances to be successful. There are so many options now that we didn't have before." Due to flexible learning spaces and encouragement from leaders, teachers are now able to "provide a safe nurturing learning environment in which all learners can construct their own meaning" (Coppell Independent School District, 2017c, p. 10).

In addition to improving the physical spaces students are learning in, campus leaders have implemented various programs, schedules, and structures to meet the needs of each child. CA5 shared an educational practice used on campus to address students' needs:

We've carved out time to focus on kids' needs, whether it's intervention, enrichment—WIN time, "What I need." We don't call it intervention time; we don't call it tutoring; we don't call it anything like that. It's "What I need."

Whereas students traditionally have had one teacher of record who was primarily responsible for their education each year, sharing students among teachers is an example of growth mindset being incorporated in educational practices within Coppell. Several elementary, middle, and high school campuses now use similar collective intervention times to provide opportunities for educators to share learners for a 30-minute block each day to work on targeted interventions with students who are not typically in their classrooms.

Other schools have weekly club meetings during the day or after school. One campus has 14 teacher-led clubs that meet after school, and to address the needs of learners who ride the bus or are not able to participate due to transportation or time constraints after school, they have added several new clubs during the day as well. The offerings are multiage and stem from teacher and student interests. CA4 shared about the student-led “genius hour” at her campus: “Kids are allowed to really pursue their passions. It can change week to week. The structure is more flexible: 1 hour a week, across grade levels. On one given day, there could be 50 different things going on that students have decided they want to be a part of.” CT5 commented on a new schedule her school implemented this year:

We are doing block lunch, which means all the kids will be off for lunch at the same time. Which means there are 30 minutes for lunch, and there is also time for RTI [response to intervention], required block tutoring, basketball, tutoring, teachers’ rooms, etc.

The examples presented support the beliefs articulated in district documents, “Educators design learning experiences that increase engagement and intrinsic motivation” (Coppell Independent School District, 2017a, p. 5).

The physical environment is structured for growth and collaboration. Supporting the theme of the learning environment is the subtheme of the physical environment. The physical

environment includes the furniture, classrooms, shared spaces, and buildings that the nearly 13,000 students in Coppell ISD learn in daily, as well as the teaching modalities educators use to engage learners. Evolving classroom experiences are contributing to positive changes in the physical learning environment. Students' classrooms today are more colorful, comfortable, and flexible. Learners currently have options such as sitting on wobble stools or bean bags, standing at counter-height tables, collaborating around a shared table in the hallway, or working in another teacher's room while they are in a small group. Talking with peers in class, submitting a project onto a digital portfolio for their parents to view, or using technology to chat with a school across the globe are now commonplace for students in all grade levels. With the inclusion of technology options, students' experiences can even expand outside their school building. When talking about changes to the physical environment, CA4 remarked,

Teaching practices—the way teachers teach—they are more facilitators—small groups, lots of talking/communication, group work, moving from isolation learning to group learning. You see active learning, movement. Just the way the kids are taught is totally different when you have a growth mindset moving forward.

As Coppell designs and builds new buildings and remodels existing structures, there is a focus on creating spaces that are flexible and conducive to multiple modalities of learning in response to the assimilation of growth mindset beliefs. DL3 shared, “When I think about the buildings that we’re building, they really are about flexible spaces for learning to happen. I think that’s pretty powerful and contributes to this belief that growth mindset does exist in the school district.”

Teachers notice the impact even an open door can make, as CT1 expressed, “Everybody’s door is open. Everybody shares. Everybody has a place.”

Emotional safety is embedded in the sociocultural environment. Extending the focus on positive learning environments as an outcome of growth mindset principles, participants

highlighted the importance of social and emotional safety as a priority. In order for students to be receptive to learning, they must have their needs met, which includes social and emotional well-being. When leaders of schools and teachers promote a caring and positive climate, learning is fostered (Hattie, 2012). CT3 cited an illustration of learners feeling emotionally secure in her classroom: “Having that culture of acceptance in the classroom is really big. When you know that even if I do shout out an answer that is completely wrong . . . it’s going to be okay.” As growth mindset has become embedded in the culture district-wide, social and emotional safety have been areas of increased focus for Coppell. DL3 expounded, “When you talk about the emotional environment and the supports we are putting in place from a social emotional standpoint . . . it’s important and empowering kids.”

Coppell leaders recognized the importance of emotional safety and highlighted it as a goal in the 2018–19 *CISD District Improvement Plan* (Coppell Independent School District, 2018b): “We at CISD will engage, learn, and work in a safe, inclusive, and responsive environment” (p. 40). Study participants’ statements acknowledged the value of personal relationships with learners as a contributing factor to an overall environment of physical and social/emotional safety. When commenting on the value of connections with others, CT2 shared, “You have a relationship built on growing together. . . . I think that openness, that willingness to talk about it is something that makes all the difference.” CA3 added that on her campus, “We’ve worked hard to build a strong sense of community.” Ensuring students are supported from an emotional and social standpoint establishes a feeling of safety that contributes to a positive learning environment on each campus. Forging connections with others was cited as a contributing factor to learners perceiving school as a safe place to learn and grow.

Theme 3: Building positive relationships is a priority. Establishing relationships with all stakeholders is a priority in Coppell. When teachers value relationships with their students, a positive and caring climate evolves, and without those relationships, learning is inhibited (Greene, 2014). As students navigate an ever-changing society, the need for appropriate social interactions and tools to establish positive relationships with peers and adults becomes more essential. Building relationships extends outside the student/teacher circle as well. One subtheme emerged in support of Theme 3: Collaboration with others is embedded in the culture.

Participants at all levels echoed the sentiment of CA4, who shared, “The relationship piece with the children and the parents and the families and the staff. That’s huge. In the past, that was not seen as anything that was important.” CT2 confirmed this belief and the connection to mindset by sharing, “As a campus, we have a focus on growth and relationships. It’s sometimes hard to separate growth and relationships and growth mindset.” The importance of forming strong relationships was also supported by DL4: “It ties back to relationships. You have to have that trust and feel that you can be vulnerable.”

As students advance through school, CT5 keeps the focus on relationships in the forefront by communicating to each of her students:

I tell the kids, “I don’t care about your grade. I don’t care about your GPA and maxing out of a class. I care about each and every one of you.” I looked at each of them in the eye. “I care about you, and I care about your learning, not about those grades.”

By verbalizing these beliefs and actualizing them through intentional conversations, or by giving them time for tutoring or extra assistance on a project, or by attending a weekend soccer game, dance competition, or swim meet, educators regularly displayed their desire to build positive relationships and demonstrate to their students that they are valued. District support for

establishing relationships can also be found in multiple district documents (Coppell Independent School District, 2016, 2017a, 2017c, 2018b).

CT2 shared about the value of relationships at her school: “We have a focus on growth and relationships. It’s sometimes hard to separate growth and relationships and growth mindset.” DL4 commented, “It ties back to relationships. You have to have that trust and feel that you can be vulnerable.” When discussing a connection between relationships and growth mindset, CT3 acknowledged, “I know I’m supported by my other teachers and my other colleagues. That helps me know that if I’m struggling with anything or I need anything, I can go to anybody and ask for help.” Relationships do matter according to the participants and district frameworks. *The Learning Framework* (Coppell Independent School District, 2017c) stated that all in Coppell ISD are expected “to build appropriate and positive relationships that foster a mutual respect” (p. 5). The value of relationships is evident in the culture and educational practices of Coppell.

Collaboration with others is embedded in the culture. As growth mindset principles become engrained within the culture and practices of Coppell, teamwork and cooperation among leaders, students, and teachers are now expected. Powerful solutions and positive outcomes are the result of teams of educators collaborating and sharing knowledge, wisdom, and experiences (Erkens & Twadell, 2012). Students collaborating with peers also deepens understanding of content while growing interpersonal skills. Through structured and unstructured experiences, groups of stakeholders in Coppell ISD work together to solve problems, extend learning, or broaden their perspective. Collaboration is expected within the district.

CT2 shared how relationships with peers through collaboration contributes to this practice: “We build relationships with our learners and with our peers, as facilitators, that allow

us to open up and to be able to lean on each other and support each other a little bit more.” Teachers, like CT3, recognize the benefits of being in relationship with others: “I know I’m supported by my other teachers and my other colleagues. That helps me know that if I’m struggling with anything or I need anything, I can go to anybody and ask for help.” When discussing what collaboration looks like and how it is a byproduct of growth mindset being incorporated into the culture, DL5 commented, “People talking to one another—they are not scared to share their opinions. They are constantly thinking and brainstorming about opportunities to grow within either that department or that school or whatever.” Collaboration with others does not mean everyone agrees with each other, but working as a team creates mutual enthusiasm for learning and expands perspectives. DL2 shared,

I definitely think the way you interact with others gets them excited as well, so it creates a growth mindset cycle. Even if they don’t always agree with you and say, “No, I don’t like that”—they’re not afraid to say that. It’s not disrespectful, but it’s almost like—“Prove it.”

Expanding on this viewpoint, DL4 commented:

We’re really trying to collaborate. We’re doing that in our own department teams and across groups so we’re not making decisions in isolation. That collaboration has not been just within each department, it’s been across teams, which I think has been awesome, both for the conversations and the decision-making.

DL1 also noticed that collaboration in professional learning communities (PLCs) is a result of growth mindset principles being incorporated: “We are utilizing PLCs more—collaboration among educators and introducing new concepts at a new level.” Each campus in Coppell has a plan in place to provide dedicated collaboration time for educators to support their commitment to increasing collective conversations among staff members at each campus.

Theme 4: Valuing growth is promoted through language and communication. Words and how they are used are powerful. The importance of language and communicating shared

values and expectations was an identified theme. When sharing evidence of growth mindset, CA5 cited “the language that we use, what we choose to recognize and praise.” DL3 added, “I think our language very much reflects that (growth mindset). That language doesn’t happen until your mindset reflects that.” Being free to communicate honestly was also expounded on by CA3: “There is freedom to question and have conversations—say what you need to say with the understanding that you can say what you want to, kindly.” Using respectful communication when providing feedback is an established practice as well. DL3 added, “It’s just part of the culture here to say, ‘I wonder.’ . . . It’s part of the culture to say, ‘I like.’ . . . It isn’t part of the culture to jump on or criticize.” Communication was noted as a way to positively cooperate, question, and elicit change as mindsets develop. DL1 pointed out the power of language: “I think it helped ground us to have a shared vision and common language so that people were more on the same page than maybe we had been before.”

Language and communication also reflect growth mindset in classroom practices within Coppell. At CA3’s school, growth language is expected: “We don’t use BUT, we use AND. We don’t use CAN’T, we use CAN.” Additionally, “Every class talks about growth mindset and so that’s a focus of the language of this building.” CA2 echoed a similar expectation that she shares with her teachers: “Don’t ever say they can’t! They can, it may just take a little bit longer, or they can, they just need to be taught differently, or they can, just ask them how they learn best.” CA5 shared a teaching strategy observed in which the teacher “shared a kind of a tracking system where kids are self-assessing by the standards—a NOT YET, ALMOST, and GOT IT kind of thing—even that kind of change in language promotes a growth mindset.” Evidence of the inclusion of growth mindset principles is apparent in the specific language communicated within Coppell ISD.

Theme 5: Failure, struggles, and mistakes are okay. Study participants recognized they are free to make mistakes on their journey of growth. In Coppell ISD, failures are not perceived as the end result, but rather, they are another avenue from which to learn. To those with a growth mindset, failure is not irredeemable but rather provides knowledge regarding which strategies did or did not work (King, 2012). The importance of learning from failures, struggles, and mistakes is a byproduct of a culture that functions with a growth mindset. These beliefs are evident in the educational practices in Coppell. CT4 appreciated “being able to take risks without fear of judgement or scrutiny” and taught her students, “I make mistakes. You’re going to make mistakes.” CA2 encouraged teachers to take risks by telling them, “As long as it doesn’t socially, emotionally or physically damage a child, try it! If it works, awesome! If it works, share it with your friends. If it doesn’t work, don’t do it again!” When discussing growth mindset and risk-taking, DL1 added, “We’re about learning here. We’re about continuous growth. We’re about taking risks. We’re not just about the status quo.” When discussing the freeing effects of not being afraid to take risks professionally, DL2 added, “I know I can come back and keep going and try things out and fail and jump back and have that perseverance to push people’s thinking and do the right thing.” Understanding that failure is part of growth mindset led CA4 to share, “If you have a growth mindset, you will fail. But if you are doing what’s best for kids and make mistakes along the way and learn from them, that’s growth and a way to learn.”

District documents support these statements by emphasizing “mistakes are opportunities for growth” (Coppell Independent School District, 2017a, p. 4) and “learners recognize opportunities to learn through both successes and failures” (Coppell Independent School District, 2017c, p. 51). DL4 also affirmed Coppell’s efforts to celebrate failures:

I do believe we are trying to implement a culture where people can try new things and fail. And that you can share those failures and successes with others so we can all learn from what has worked and what hasn't worked.

Inspiring all educators, newly hired or veterans, to take risks was highlighted as CT1 shared that when she was a newer teacher, "I never felt it was a threatening environment. If it wasn't going well, they gave me positive feedback and constructive criticism." When discussing mistakes, taking risks, and failure at the district level, DL5 shared,

I do think that people, speaking about resiliency, speaking about failure, people need to know that the system isn't perfect. Let's reflect on our practice. . . . We need to come back and be able to talk about it openly if there was something that went wrong or was terrible. Be able to talk about that.

Learning from mistakes was widely reported as an expected part of growth mindset at all levels in the district.

Beyond teachers and administrators feeling free to fail, learners are also encouraged to take risks and learn through struggles. One example from CT2 illustrated this concept: "When you screw up, it's okay. It really affects the way that you teach your kids, and the way that you talk to them after they get a bad score. Because you have a relationship built on growing together." Expanding on this concept, DL2 shared, "I think the culture here especially is watching for you to do something right—not questioning the details but celebrating the big picture successes."

Theme 6: Risk and effort are encouraged. Interview participants at all levels reiterated the importance of students and adults giving effort, implementing different strategies so growth is possible, courageously trying new things, and taking risks. As adults and students face obstacles, a growth mindset encourages persistence when facing challenges and taking risks (Dweck, 1999b). When discussing the impact on students who feel empowered to take chances,

CT3 shared, “When kids feel free to take risks, it expands and blows out the learning.” At one campus, CA5 worked to praise effort over performance. This is seen in what is acknowledged: “It’s all about recognizing effort. It’s all about recognizing kids who take risks. It’s all about promoting that intrinsically as well.” At one elementary school, character traits are emphasized throughout the year with students from each classroom writing comments about how those traits are demonstrated. An example of how students view effort and risk taking is seen from 5th-graders at this campus who wrote about a peer, “She told me mistakes happen and can help us learn,” and about another peer, “She is willing try new things and pushes past obstacles to complete tasks.” One 2nd-grader shared about a classmate, “Thanks for being courageous while trying new things.” CT3 expanded on the importance of pushing through struggles: “With a growth mindset, you still put more effort into the learning and trying, even though you know you can still fail.”

The importance of giving effort and taking risks is not reserved for students. Teachers expressed autonomy from supervisors who encouraged them to take risks as well. CT3 elaborated on the support she receives: “They give us that freedom to explore new things. I think that allows us as teachers to take risks and try new things without being worried about judging every step I am taking or if everything has to be perfect.” To embody a growth mindset as teachers, CT1 added, “Everybody has to be willing to take a risk. You know, to fail sometimes and to be honest with each other, or it doesn’t always work and you get stuck along the way.” CA4 shared how she encourages her teachers to continue to push themselves to try new strategies. She gives them “freedom to experiment, to try those things that are new out there . . . freedom to try research-based practices.” When discussing the connection between growth mindset and failure, DL1 shared, “It’s about continually pushing yourself to the point where you

will fail. If you are only being successful, then are you really putting yourself out there?”

Contributing to this belief that growth mindset and failure are connected, DL5 added,

We take risks. I will say that the majority of our educators and administrators feel that they are going to be supported when taking risks within trying something new, whether it's a new strategy, a new way that we're focusing on not only academic, but social emotional learning for our kids. I think that we're willing to try some of the latest products.

District frameworks support innovation and risk taking as well. *CISD Leadership Framework* (Coppell Independent School District, 2016) contained inspiration for leaders to invest in others: “Leaders empower others to take risks necessary for growth” (p. 3). Moreover, educators are supported to take risks, as *The Learning Framework* (Coppell Independent School District, 2017c) stated that the district should serve as a “support system for educators to take risks in their classroom” (p. 6). During administrator meetings, principals are encouraged to share risks they have taken on their campuses. Successes and failures are communicated for the whole group along with follow-up conversations to process what was learned from the risks taken.

Theme 7: Assessment and grading practices emphasize learning. Shifting the focus from grades to learning is a change in the culture of assessments. How students are held accountable for their learning through assessments and grading practices was an identified theme. The Coppell ISD *Learning Portrait* (Coppell Independent School District, n.d.f) stated,

Grading is a process of quantifying measured learning based solely on academic achievement. Consequently, grading is one form of feedback and communicates learner progress toward mastery of standard(s) and/or learning outcome(s). This process must be accurate, fair, specific and timely.

Coppell ISD also has established foundational criteria for assessments in *The Learning Framework* (Coppell Independent School District, 2017c), which CA1 discussed: “It talks about

how we focus on assessment. It talks about how to respond to assessment. It may not give you a step by step articulated process, but it still gives you what you're supposed to do." CT5

discussed this shift from grades to learning:

Because of growth mindset, it's not, "Here's what I'm going to teach you. You take a test." It's, "I have these guidelines I need to teach you. I'm going to work with my team and develop ways to assess you are learning it, and we're going to help those of you that are falling behind and we are going to enrich those of you that have already grasped the concept." That's totally a growth mindset.

In Coppell, prekindergartners through 4th-graders receive standards-based report cards four times each year to track their growth using specific rubrics, which are shared with parents and students (Coppell Independent School District, n.d.h). Learners in 5th through 12th grade have number grades, but there is a reassessment policy that allows students to retake assessments they did not show mastery on to improve their grade (Coppell Independent School District, n.d.h, 2017c). A change in focus from taking grades to expanding learning alters what campuses recognize. CA5 shared, "We don't do honor rolls. We don't do perfect attendance. We don't do anything like that. But at the individual and classroom and school level we recognize effort, recognize perseverance, recognize initiative." When discussing standards reporting and Coppell's focus on measuring learning as an offshoot of growth mindset, CT3 commented,

I think it gives value to growth rather than success right off the bat. Like, our grading progress: We grade on standards. It's very much that we don't expect perfection from day one. We don't expect them to come into school mastering everything. I think in Coppell, it's very much about, did you see growth in your kids? Did you see something get better? It could be growth with their behavior. It could be growth with their academics. It could be growth with their social skills. It puts a lot of emphasis on different aspects instead of, Did they go from an A to an A-plus?

CT1 remarked on the positive nature of grading for learning: "Standards-based report cards are more encouraging to get kids to try things than giving an actual grade. . . . They are more willing to try again when they are able to say they aren't quite there yet."

Considering the difference between standards reporting and numerical grades, DL2 noted that “standards-based report card rubrics—generally it’s not looking for what kids don’t know, it’s looking for what kids do know.” When considering the focus on growth and grades, CT2 added,

It’s freeing. It’s freeing to know that your almost but NOT YET. You’re getting there and your close and you’re making progress but you’re not there yet. The YET is important. It’s not, “I’m never going to be there.” It’s, “I’m not there yet. Once I reach that, then there will be a new benchmark to climb.”

The journey to continual growth is evident in many grading and assessment practices within Coppel ISD.

Research Question 2: How do district leaders, school leaders, and teachers perceive the impact of implementing growth mindset principles in the school’s culture and classroom practices?

In response to the second research question, data collected from the interviews and district documents resulted in the identification of two individual themes, which are discussed through the use of interview quotes and information from multiple district documents. The themes that were identified to answer Research Question 2 were as follows:

1. There is a positive impact of unleashing the potential of individuals and the group
2. Continuous improvement and self-reflection are a result of growth mindset

Theme 1: There is a positive impact of unleashing the potential of individuals and the group. Growth mindset’s impact on the unleashed potential of individuals and the district overall is evidenced in the beliefs and actions within Coppel. Individuals with a growth mindset demonstrate a willingness to continuously develop themselves and remain highly engaged in their work, which contributes to systematic improvement (Caniels et al., 2018). Teachers, campus administrators, and district administrators who were interviewed discussed how the

significance of believing every child can be successful grew from their understanding of growth mindset. They also shared about the impact their beliefs have on the way they approach learners. When leaders and educators considered how mindset has influenced practices and the culture, their thoughtful answers suggested there was power in leading and learning without limiting potential in others. All interviewed participants articulated their deep-seated belief that everyone can grow and that growth is infinite. In addition, they expressed examples of how they manage students and peers with that expectation. CA5 affirmed, “I think it (growth mindset) has a direct impact on pushing every kid, not just those that fall in the middle, not just the high-achieving . . . not accepting stagnation from our low-achieving.” CT1 shared how an administrator in Coppell helped grow her understanding in this area: “When I started to look at them through her eyes—which is, ‘Every single kid can do it’—I realized they can. I just need to give them the right tools and the right successes.” CT1 actualized this belief that all children can be successful by altering her teaching practices to match the needs of her students, and success followed.

The actions maintained by the interview participants are supported by *The Learning Framework* (Coppell Independent School District, 2017c), which communicated the expectation that educators will “equip each learner with the skills and understandings needed to achieve success at high levels” (p. 8). DL5 expanded on how to empower learners by encouraging a mutual focus on strengths and struggles during the RTI process: “Really taking that structure of the culture to make an impact on a campus that says . . . ‘While we know maybe this learner struggles with so and so, these are the items right here that we’re really going to focus on first.’” At one campus, CA2 expressed an established conviction that was communicated to teachers about their students when planning interventions and checking progress: “I don’t get to give up on my kids. I don’t get to say, ‘They can’t.’” Another example of growth mindset impacting

campuses was shared by CT4, CT3, CA3, CA4, CA5, and CT5, who discussed administrators and teachers on their campuses providing opportunities for students to grow through experiences that highlight their passions and strengths during clubs and enrichment times during the day and after school.

Understanding that growth is an expected and valued part of learning was also identified as an essential conviction by all study participants. When reviewing viewpoints about improving and growing, CT1 observed, “To grow is what’s best for kids; to grow is what’s best for everyone. It’s not always easy. It’s not always fun. It’s usually kind of hard, but it’s what’s best for kids.” CT3 added, “Growth mindset is all about growing as a person.” Adding to the discussion on the importance of growth and how to achieve it, CA4 contributed, “Always being willing to move forward and change. It’s change. It’s always change, but keeping your foundation in the belief system of what’s right for kids.” Discussing examples of modified strategies and schedules used on campus as part of continual growth for teachers and students led DL5 to share, “We have the opportunity to look for some different ways to change our practice and to get better and to grow and to not just focus on a standardized test all the time.” The principle idea that learning is an ongoing process is also supported in foundational district documents (Coppell Independent School District, 2017a, 2017c).

When discussing how growth mindset leads to unleashing potential in individuals and groups, CA5 shared, “Growth mindset builds loyalty. It motivates people. It builds a respectful culture.” Collective beliefs also build unity while increasing the competency of the group. DL4 observed, “We individually have strengths, but collectively, as a whole, we are stronger.” DL1 commented on the impact of mindset: “We have a good solid foundation, we just need to keep pushing ourselves and keep moving forward. . . . We have really implemented the philosophy of

being a growth-minded district and individual.” CA1 added to this understanding, “Everything we do is framed around collective learning. . . . I think growth mindset is who we are.” Growth mindset has become a foundational belief district-wide that is expected to be palpable, or as CT4 observed, “If you’re not willing to have that growth mindset, that sticks out.”

While reflecting on the importance of everyone being a learner and thus growing, DL3 affirmed,

If you don’t philosophically believe that as an educator you are a learner and that professional learning is important and that you have choice in how to do that and meet your learners’ needs, then this isn’t the place for you. . . . It’s powerful to say everyone here is a learner.

The Learning Framework (Coppell Independent School District, 2017c) clearly established this understanding that growth mindset is a shared value and an expectation for all:

The district, as individuals and an organization, operates within a growth mindset. The district shares the common belief that a growth mindset is based on the belief that one’s qualities, including intelligence, can be cultivated through effort. It is the belief that a person’s true potential is unknowable and future accomplishments cannot be predicted. (p. 10)

When commenting on the principles conveyed within *The Learning Framework*, DL3 remarked, “These are the things that we hold tightly as a district, and here are the behaviors that we expect to see to be in alignment with that . . . behaviors follow beliefs.” DL5 clearly articulated the power of mutual beliefs established from district frameworks:

We now have our values that are carved out. . . . It’s an overall understanding for the entire district to say, “This is what we’re all about, this is who we are,” which can help to lead to creating greater growth mindset.

Each participant acknowledged that growth mindset was a shared foundational belief for Coppell ISD that influenced how they functioned.

Theme 2: Continuous improvement and self-reflection are a result of growth mindset.

The importance of self-reflection as an outcome of growth mindset was highlighted by teachers and leaders. Within growth mindset was the expectation that there will be mistakes and failures, as well as continuous growth. Reflecting on those struggles helps the learning to become more valuable and provides the opportunity for individuals to either adjust their path or apply further effort in order to be successful. Remarkable on the power of reflecting and analyzing individual growth, DL1 stated,

I think that when you have a growth mindset, you're seeing incremental change every day. But I think also it's part of that reflective piece, where you look back after an extended period of time and realized it really did make a difference for us.

Pausing for self-reflection allows individuals in Coppell to identify the impact of their practices and determine appropriate next steps. Even components of district documents are reflected upon yearly in Coppell. *The Learning Framework* (Coppell Independent School District, 2017c) is reviewed and revised by leaders annually. DL5 commented on the beliefs supporting reflecting on district policies and procedures:

Here is what we have. These are the foundational pieces. What are we going to do with this? But also constantly coming back and questioning at times—Is this still us? Are these pieces and these elements still what makes the difference?

CA3 discussed the value of reflection and shared, “We continue to refine our practices every year. You see what works, and then you continue to improve what needs improving.” DL4 remarked on reflecting with others: “We are always looking to improve ourselves. . . . You can share those failures and successes with others so we can all learn from what has worked and what hasn't worked.” CA4 observed that as a district, “We've had a willingness to be honest with what we're doing well and also our struggles. And that effects our drive and our direction for moving forward.” Learners are also expected to participate in self-reflection. *The Learning*

Framework stated that teachers should design lessons that “build in reflection time to make meaning” (Coppell Independent School District, 2017c, p. 4). *CISD Leadership Framework* (Coppell Independent School District, 2016) also included a consideration of self-reflection an essential outcome of functioning with a growth mindset. Self-reflection was cited as a significant way that growth mindset impacts the culture and practices for teachers and leaders by allowing for continuous improvement as a result of their mindset.

Summary

The purpose of this exploratory, single-case study was to determine how district leaders, school leaders, and teachers incorporated growth mindset principles into the organizational culture and educational practices in Coppell ISD and how they perceived the impact of implementing growth mindset principles into the school’s culture and classroom practices. The first research question was, “How have district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD?” The results indicated that teachers and leaders at all levels supported growth mindset through their actions. Through the analysis of district documents and the participants’ responses, it was evident that every teacher, leader, and student is expected to grow and is supported on their journey. Mistakes are viewed as learning opportunities, teaching strategies are utilized to encourage collaboration, and specific feedback is employed to guide next steps. Leaders encourage and empower teachers by supporting their effort, providing formidable and responsive professional learning, and building productive relationships. Students are afforded the opportunity to understand that struggles and failures are part of a growth mindset as they receive feedback from teachers that focuses on their learning progress and are afforded multiple assessment opportunities to demonstrate mastery of content.

The second research question asked, “How do district leaders, school leaders, and teachers perceive the impact of implementing growth mindset principles in the school’s culture and classroom practices?” The results showed that integrating growth mindset values positively impacts recognizing the potential in individuals and groups within Coppell ISD. While it was noted that each campus, department, or individual may be at a different place in the growth mindset journey, participants believed that everyone has infinite abilities given the encouragement and freedom to develop. Through continual self-reflection, individuals and groups are able to determine next steps for improvement while remaining resilient when overcoming obstacles along the path.

Chapter 5: Discussion, Conclusions, and Recommendations

The problem addressed in this study was that although growth mindset has been found to be linked with positive academic behaviors such as increased motivation, learning, and improved achievement, how it is implemented into the culture and educational practices in a school district is unclear (Dweck, 2000, 2006, 2007b, 2012; Schmidt et al., 2015; Yeager & Dweck, 2012; Zhang et al., 2017). The purpose of this qualitative, single case study was to investigate how Coppell ISD district leaders, campus leaders, and teachers had implemented growth mindset principles at the district and campus levels and what the impact was.

The case study included 15 participants, including district leaders, campus leaders, and teachers. In order to gain a broad perspective, participants were from elementary campuses, secondary campuses, and district administration offices. I conducted individual, face-to-face semistructured interviews using a field-tested interview guide. The interview sessions were audio recorded for accurate transcription. Because the interview format was semistructured, I was able to ask additional questions as further information or clarification was deemed necessary. Additional data included the examination of multiple district documents authored by Coppell ISD, district policies, and internal district communication.

Data analysis of all information sources included the use of concept coding and values coding. Whereas values coding incorporates a participants' attitudes, beliefs and values, Saldana (2016) defined a concept code as "a word or short phrase that symbolically represents a suggested meaning broader than a single item or action—a 'bigger picture' beyond the tangible and apparent" (p. 119). The codes identified from combing through the data through the lens of both coding approaches allowed for thoughtful written reflection to follow (Saldana, 2016). As "good research is not about good methods as much as it is about good thinking" (Stake, 1995, p.

19), the codes were organized and assembled into categories and, through thoughtful reflection, classified into longer-phrased themes to elaborate on the meanings (Saldana, 2016). The contents of this chapter include a discussion of the findings in relation to previous research and literature, the limitations of the study, and recommendations for practical application and future research.

Discussion of Findings in Relation to Past Literature

Research Question 1: How have district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD? Seven main themes and seven subthemes were categorized in response to the first research question, “How have district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD?” The identified themes and subthemes include the following:

Theme 1: Leaders and teachers live and support growth mindset

Subthemes

- Leaders empower and encourage teachers
- Teachers have choices in and contribute to professional learning
- Leaders consider growth mindset in hiring practices
- Every student, teacher, and leader is expected to grow

Theme 2: The environment is designed to promote growth

Subthemes

- The physical environment is structured for growth and collaboration
- Emotional safety is embedded in the sociocultural environment

Theme 3: Building positive relationships is a priority

Subtheme

- Collaboration with others is embedded in the culture

Theme 4: Valuing Growth is Promoted Through Language and Communication

Theme 5: Failure, Struggles, and Mistakes Are Okay

Theme 6: Risk and Effort Are Encouraged

Theme 7: Assessment and Grading Practices Emphasize Learning

Theme 1: Leaders and teachers live and support growth mindset. Supporting the findings of Hanson, Ruff, et al. (2016) and Murphy and Dweck (2010), results from the study indicate that growth mindset practices are emulated throughout the district as teachers and leaders are continually working to fully adopt a growth mindset and choose challenging goals school-wide in a concerted effort to help every learner be successful. Teachers and leaders also conveyed detailed examples of their diligent efforts to provide structures and systems to advance students and teachers on their journey toward learning and growth. This encouragement of functioning with a growth mindset is supported by previous research by McCutchen et al. (2016), which indicates learners align with their teacher’s beliefs due to their influence and the shared classroom environment. Likewise, the study results indicated that teacher mindsets influence their instructional approaches and feedback to students, which supports the research of Schmidt et al. (2015), who found, after studying two educators teaching identical content, that when “teacher behaviors were observed to be supportive of a growth mindset, students adopted stronger mindset beliefs” (p. 31).

Additionally, based on the responses from participants, employees in Coppell ISD display the qualities they believe others in the organization value. These results connect to Senge’s (1990) research on systems thinking, in which he describes how administrator and

collaborative behaviors influence the values reflected in the organization, and Dweck's (2010) research supporting the influence organizational principles have on the beliefs and actions of individuals in the group. Supporting the findings of Hanson, Ruff, et al. (2016) and Murphy and Dweck (2010), results from the study indicate that growth mindset practices are emulated throughout the district as teachers and leaders are continually working to fully adopt a growth mindset and choose challenging goals school-wide in a concerted effort to help every learner be successful.

Theme 2: The environment is designed to promote growth. Focusing on individual and collaborative learning with groups in physical environments that were tailored for collaboration and emotionally safe environments that allowed for learning was indicated as a priority by interview participants and in guiding district documents. This understanding is also maintained by Senge (1990), who emphasized the impact of groups learning together; Caniels et al. (2018), whose research supports growth mindset's effect on motivation and engagement; and Miller (2016), who recognized the value of working collaboratively with others. Teachers shared how they create learning experiences in their classrooms that cater to collaboration and interactive learning. Focusing on the classroom environment is supported by Scott-Webber et al.'s (2014) research, which indicated there is a positive impact on engagement and motivation when the room is designed to allow for flexible configurations through the use of intentional furniture arrangements and encouraging environments.

An environment designed to encourage growth and allow for collaboration is not reserved for students in dynamic classrooms within Coppell ISD. The importance of teams collaborating is supported through research by DuFour, DuFour, Eaker, Many, and Mattos (2016), Caniels et al. (2018), and Prilleltensky et al. (2016), which indicated that when teachers and administrators

work together in a group environment as opposed to isolation, it creates a culture where the group takes collective responsibility for student learning and continuous learning can occur. Research by Erkens and Twadell (2012) suggested that when teachers cooperate in professional learning communities to solve complicated problems and grow as professionals, they create plans to ensure all learners are growing and improving. This focus on working as cooperative teams with a unified purpose was cited as a positive component of the district by interview participants. In their efforts to create a culture of learning within schools, Dweck (2016), DuFour et al. (2016), and Tichnor-Wagnor et al. (2016) shared the conviction that teachers should have a passion for learning and the ability to collaborate. Study participants' observations aligned with DuFour et al.'s (2016) understanding that when teachers join forces in professional learning communities, educator practices are impacted, leading to improved results.

Theme 3: Building positive relationships is a priority. Teachers', campus administrators', and district leaders' responses indicated a desire to work for a school district where they had strong relationships with like-minded colleagues who wanted to continually grow. Their desire to work for a school district that holds an organizational growth mindset was supported by research by Caniels et al. (2018) and Murphy and Dweck (2010), who proposed that employees with a growth mindset are more inclined to enjoy their work due to the opportunities for personal growth and self-efficacy while being supported through daily challenges by trusted colleagues. Interviewed participants shared an eagerness to develop themselves and build relationships to foster their growth, which was likewise identified in district documents as a desired characteristic for teachers and leaders. While there is limited specific research on this component of growth mindset, Caniels et al.'s (2018) research indicated that transformational leaders promote relationships, proactive personalities, and work engagement.

District documents and frameworks similarly promoted transformational beliefs that participants agreed aided their understanding of growth mindset, positively guided their relationships, and provided ideals to steer them as they faced difficulties in their positions.

Theme 4: Valuing growth is promoted through language and communication. Teachers and campus administrators shared multiple examples of language that valued growth when assessing learners or providing feedback. Adopting Dweck's (2014a) phrase *not yet* as feedback, as opposed to assigning a failing grade when assessing learners; providing feedback through conversations; and assessing with standards-based rubrics are examples participants shared throughout the interviews. Dweck (2014a) indicated that language that focuses on growth cultivates and encourages persistence and contributes to believing improvement is possible. When students are presented with feedback that values growth, such as *not yet*, as Dweck (2014a) described, they are able to learn from their errors and correct them.

Dweck's (2007a, 2014a, 2014b) and Murphy and Dweck's (2010) research supported that when teachers use language that focuses on growth, it builds confidence and encourages students to remain motivated and persevere through challenges in the school environment, which aligns to practices that leaders and teachers shared in their responses. To create resilient students who have a heightened self-awareness and desire to grow, Dweck (1999a, 2007a, 2014a) suggested praising wisely and focusing on process praise, which identifies the thinking behind the strategies applied to students' work, as well as the strategies used and the effort applied.

Theme 5: Failure, struggles, and mistakes are okay. Results from the study indicated that leaders and teachers in Coppell ISD communicate a common vision: that failure and mistakes are as opportunities to learn. Research by Heslin and Keating (2017) and King (2017) similarly maintained the premise that failure is an opportunity to grow and is part of the learning

journey, which corresponded to the comments of teachers and leaders who provided examples that paralleled an understanding that failures are an integral part of a growth mindset. Keating and Heslin (2015) ascertained that “a growth mindset inclines people to perceive setbacks as an inherent part of the learning process that signals a need for more effective strategies” (p. 334). Philosophically, everyone interviewed shared answers that were in agreement with that belief, but answers varied between educators and administrators. This aligned with Heslin and Keating (2017), who suggested that leaders with a growth mindset are primed for learning, proactively responding to challenges while leading, accepting and learning from corrective feedback, and supporting the success of others. Teachers provided specific examples that validated they have freedom to take risks and fail, model that to their students, and share those struggles with their administrators in their effort to grow from their experiences. Whereas this internal conflict was acknowledged by interviewed leaders as an intrinsic struggle, Heslin and Keating (2017) ascertained that as growth mindset is more thoroughly understood and integrated into leaders’ beliefs and actions, leaders are less likely to associate mistakes and failures as an indication of their lack of talent and more likely to internalize them as part of self-improvement instead.

Theme 6: Risk and effort are encouraged. Participants’ responses and district document analysis indicated Coppell ISD’s values were in alliance with Dweck (2014b) in the areas of taking reasonable risks in an effort to grow. In connected studies, multiple researchers including Fraser (2017), Keating and Heslin (2015), Roedel and Schraw (1995), and Dweck (1999b) documented that a growth mindset encourages persistence when facing challenges and taking risks. These qualities were supported by research participants who provided examples of teachers and leaders facing obstacles when helping students and colleagues achieve success. Educators and leaders discussed the benefits of perseverance, encouraging others to work

through challenges, giving effort, and making mistakes, which Dweck (2000, 2010) specified are indicators of a growth mindset. The interview responses also supported the work of Yeager and Dweck (2012), who proposed that growth mindset impacts resilience and develops tenacity. *The Learning Framework* (Coppell Independent School District, 2017c) and numerous teachers and leaders supported Dweck's (1999b) research, which expanded on this idea even further by encouraging teachers to persistently explain to students how to apply effort and utilize multiple learning strategies with as much dedication as they do when teaching academic content.

Theme 7: Assessment and grading practices emphasize learning. Coppell ISD has evidence of growth mindset in its grading and assessment policies outlined in Chapter 5 of *The Learning Framework* (Coppell Independent School District, 2017c). While Chapter 5 has significant amounts of information about assessment, and the word *assessment* is found 146 times in *The Learning Framework* (Coppell Independent School District, 2017c), it does not have large amounts of research to corroborate the recognized beliefs. Consequently, through the improvement of grading practices, student learning increases. In its efforts to monitor the true progress of students' learning, Coppell ISD is continuously reevaluating grading and assessment policies through using standards-based assessment report cards for elementary students and establishing district-wide reassessment policies to encourage students and teachers to continue with learning until mastery is demonstrated.

Throughout the interviews, teachers and leaders documented the benefits of shifting Coppell ISD's focus from grades to rigorous learning experiences. Coppell ISD's aspirations to assess for learning are evidenced through the use of growth-oriented feedback (*not yet*), rubrics, standards-based report cards, and reassessment policies that provide learners the opportunity to master difficult content by correcting or retaking assessments. Aligning with Coppell ISD's

beliefs outlined in *The Learning Framework* (Coppell Independent School District, 2017c), Huddleston and Rockwell (2015) found through their investigation of the impact of assessments through the decades that

by using formative assessments such as portfolio assessments, anecdotal records, and other task- and performance-based assessments, we not only learn more about our students, but we also model to our students and their parents that learning cannot be represented by a single test score. (p. 46)

Research Question 2: How do district leaders, school leaders, and teachers perceive the impact of implementing growth mindset principles in the school’s culture and classroom practices? In response to the second research question, “How do district leaders, school leaders, and teachers perceive the impact of implementing growth mindset principles in the school’s culture and classroom practices?” two themes were identified:

Theme 1: There is a positive impact of unleashing the potential of individuals and the group

Theme 2: Self-reflection and continuous improvement are a result of growth mindset

The teachers and leaders interviewed had assimilated growth mindset principles into their thinking patterns, reflective practices, and assessment of others.

Theme 1: There is a positive impact of unleashing the potential of individuals and the group. In the study, participants discussed the positive impact of growth mindset in their beliefs and practices in unleashing not only the potential of each person but also the group. Research by Murphy and Dweck (2010) supported this idea as they studied the impact of mindset on groups. They found that growth mindset views were viewed more favorably, leading to behaviors that encouraged group members to take risks and attempt new strategies. Yeager and Dweck (2012) and Hanson, Ruff, et al. (2016) similarly found that leaders and members of organizations with a

growth mindset focus on shared goals and have an increased group willingness to adopt challenging targets.

Although this study didn't assess differences between individual and group mindset, if individuals in the group had a fixed mindset but the leaders' mindset was growth oriented, Murphy and Dweck (2010) and Keating and Heslin (2015) suggested organizational members were more engaged in pursuing challenging goals and more likely to endorse growth mindset practices when working with their group. This idea of group engagement and mindset was identified by participants, especially district and campus leaders, who provided examples of constructive teamwork protocols and the understanding that growing teams' and departments' ability to function as a cohesive group empowers them and unleashes their potential for growth. After decades of study on growth mindset in individuals, Dweck (2014b) expanded her research and described components of a growth mindset organization to include a focus on resolve and grit as members journey toward achieving challenging goals together.

Theme 2: Self-reflection and continuous improvement are a result of growth mindset.

Every teacher, campus administrator, and district leader interviewed illustrated her desire to be continually learning and growing, the importance of self-reflection in that process, and the foundational influence *The Learning Framework* (Coppell Independent School District, 2017c) has had along their growth mindset journey. Participant responses highlighted the impact of *The Learning Framework* (Coppell Independent School District, 2017c) and its established ideals, which prioritized the importance of self-reflecting on practices and always learning. In a case study by Hannay et al. (2013), school district leaders who created a “framework for action that guides the organization towards a shared vision” (p. 66) found this structure serves as an

effective tool for inspiring continual growth in individuals and at the organizational level, and profoundly impacts their environment and practices.

These findings are similar to those in a study by Murphy and Dweck (2010), in which they researched the behaviors of groups in five separate studies, where they found that individuals who work within a growth mindset organization seek opportunities to continuously improve. Heslin and Keating (2017) also suggested that mindset extends beyond simple beliefs and may be expanded through efforts to continually self-improve and reflect on how to promote capabilities that are not currently possessed but are desirable.

Limitations

Several possible limitations were considered. The first limitation centered around the case focusing on one specific school district, which could potentially limit the generalization of the results. This limitation is due to the need to thoroughly explore a school district that has implemented growth mindset into its practices and policies, the lack of knowledge of another school district with as much publicly available documentation on their growth mindset journey, and the overwhelming evidence that what Coppell ISD has experienced through the implementation of growth mindset could be of benefit to other school districts. An additional limitation related to the single school district involves the demographics of Coppell ISD.

Coppell ISD is ethnically diverse with a student population comprising 50% Asian, 30% White, 13% Hispanic, and 4% African American students (Coppell Independent School District, n.d.a).

Although only 9% of the population is categorized as economically disadvantaged, 23% of all learners in Coppell ISD are considered academically at-risk. It is important to consider whether the study results would remain the same if the study were conducted in a school district whose population included higher rates of economically disadvantaged learners or more at-risk students.

The reason these demographics are important is that learners come to school with backgrounds that mimic their family. School districts with affluent families often have more resources (e.g., financial, parental time and assistance, outside resources for extra help) to invest in improvement and growth compared to less affluent areas. In addition, less affluent areas may be focused on issues such as safety or providing for the basic needs of the family, and the families may have not been able to provide extracurricular experiences that more affluent families provide (e.g., tutoring, vacations, books at home, etc.).

A further limitation was that this research occurred after growth mindset had been implemented and therefore does not reveal an understanding of what the culture in Coppell ISD was like before *The Learning Framework* (Coppell Independent School District, 2017c) was authored and growth mindset was integrated into the practices and policies. Because there are no substantiated data to indicate how Coppell ISD functioned before the cohesive focus on growth mindset, there is a limit to the generalities that can be made regarding the amount of change attributable to growth mindset that has occurred.

Another possible limitation was that the interview participants were personally known to me. This limitation existed due to my 15-year employment with Coppell ISD. An established, working relationship with the participants required me to craft my interview guide carefully to guard against potential biases and define the study results to the participants' responses to the interview questions and district documents. Conversely, it also allowed the participants to feel comfortable during the interview and for me to have firsthand knowledge of the district documents that were utilized for data analysis. Related to my affiliation with the school district, it is possible that participants would feel the need to exclusively report positive information. It is possible that they may have feared adverse repercussions if they were to report negatively about

their supervisors or district. These limitations were mitigated through repeated reminders that all information would be kept confidential and that each participant could choose to skip a question or stop the interview with no negative implications, pseudonyms were used to protect their identity and by appealing to their growth mindset through assurances that what is shared about Coppell ISD will help other districts that are on the journey toward district-wide growth mindset implementation.

A related limitation was that the study was focused primarily on participants' perceptions. Because a significant portion of the research data (interviews) could not be independently verified, consideration was given to how to reduce this limitation. One solution was to ensure the participants represented different campuses, departments, grades taught, schools, and district positions were included. Despite the multifaceted sample population, the participants' responses were consistent with each other. Through the triangulation of the interviewees' responses and district documents, value was added to the end results.

Recommendations

As school district leaders continue to work within constraints they have limited to no control over (e.g., high-stakes standardized testing, reduced funding, increased legislative requirements, etc.), efforts are being made determine how they can create positive and lasting change while focusing on what they can control (e.g., mindset, communication, interpersonal relationships, etc.). Findings from this study have potentially far-reaching implications if school district leaders are seeking to make a shift to the implementation of growth mindset in their policies and principles. Understanding that each of the three study participant groups (teachers, campus administrators, and district leaders) presumably had the same goal in mind—success for

all learners—served as a guide, as the recommendations were tailored for each group to implement growth mindset principles into their educational practices and culture.

Recommendations for practical application. Based on the findings from my study, there are multiple recommendations for leaders of school districts interested in implementing growth mindset principles district-wide.

Develop a shared document to outline beliefs and establish guiding principles. A recommendation for leaders of school districts at the beginning of their journey to implement growth mindset principles into their educational practices and culture is to begin with a shared, unified document that outlines both the beliefs and specific attributes that are to be emulated district-wide. As Senge (1990) shared when discussing attributes of learning organizations, developing a common vision, thinking continuously, and learning to collaborate are essential attributes when creating opportunities for new growth and learning in an organization. This framework should be developed with the input of multiple stakeholders and vetted by larger groups before presenting to the entire district. Additionally, the guiding framework should be presented as a dynamic document that will evolve and change after systematic review based on new learning.

Provide district-wide professional learning to communicate a unified message and develop a shared understanding. Based on the finding that leaders and teachers live and support a growth mindset, and Schein's (2010a) work on the importance of groups developing an established set of shared beliefs and values and employing a professional learning platform to communicate a unified message is recommended. To ensure there is a shared understanding of the components of the framework and growth mindset beliefs, another recommendation is to provide district-wide professional learning so all teachers, campus administrators, and district

leaders are hearing the same message and have the same baseline understanding. Individual campuses and departments can then collaborate and decide how the principles will be integrated into their classrooms and offices. Planning ahead so newly hired employees may be afforded the same baseline knowledge as parents and community members is essential as well. Whether there are prerecorded video opportunities that may be posted on the district website to be viewed at any time or onsite large group professional learning times that are planned, all stakeholders should be provided the same message. When the message is shared unilaterally and is clearly understood, the potential for growth is exponential.

Differentiate professional learning based on current mindset. Another recommendation is to adapt professional development sessions to match the needs of all staff by utilizing a mindset survey to measure the staff members' mindsets ahead of time to aid with planning and differentiating the content to be shared. If staff members present with a strong fixed mindset, their professional learning would need to start with an extended message regarding the "why" behind growth mindset, including qualitative and quantitative research. Other levels of mindset professional learning could be tailored to match the mindset of the staff. The purpose of this recommendation is twofold. First, by disseminating the same message in differentiated formats, all staff will have a consistent, shared understanding of what it means to teach or lead with a growth mindset and what it does not mean. Hence, the district will guard against a false growth mindset and establish a comparable knowledge base (Dweck, 2016). Second, by ensuring that the message is clearly articulated, it allows for increased accountability and expectations for teachers and leaders to utilize strategies, give feedback, and offer praise that is consistent with growth mindset.

Explicitly teach about growth mindset. Based on the findings that failure, struggles, and

mistakes are okay, and that risk and effort are encouraged, there is a recommendation that students be explicitly taught and provided the opportunity to practice making mistakes, giving effort, and taking risks. As campus administrators clearly communicate and model that making mistakes is an important part of the growth mindset process, teachers will understand they have freedom to make mistakes as they grow, and they can then teach and model that for their students. Additionally, campus administrators should provide guidance on expectations for teaching about growth mindset. Students should be explicitly taught what it does and does not mean to have a growth mindset. Furthermore, learners should be afforded the opportunity to experience the journey toward growth mindset by recovering from failures, developing grit and becoming resilient when facing challenges, taking risks, and learning that the use of strategies and effort leads to eventual success. Because research by Schmidt et al. (2015) and McCutchen et al. (2016) previously suggested that students' mindsets align with their teachers' based on the established classroom environment and that mindsets can be changed, the benefit of applying teaching strategies associated with growth mindset and how to continue growing will likely have a positive impact on student learning. As each teacher aligns her feedback and assessment policies with growth mindset principles, self-reflects on her practices, and seeks to create an environment that allows for failures and successes to coexist, the entire school becomes oriented toward a growth mindset.

Hiring practices support growth mindset district-wide. One recommendation in support of the subtheme of leaders consider growth mindset in hiring practices includes the use of district-created questions developed for use as a portion of each interview for applicants to get insight into the applicant's mindset and her perspective on students' growth. By ensuring there are questions that allow applicants to share examples of when they worked hard to overcome

obstacles, their desire to continually learn, how they approach a student who continues to struggle, and other questions created for the purpose of teasing out their beliefs about mindset, leaders can ensure that employees who value growth will continue to be afforded the opportunity to be a part of the district.

Continue to self-reflect and continually improve. A recommendation in support of the theme of self-reflection and continuous improvement are a result of growth mindset is to annually reflect and potentially revise guiding district documents. Throughout the process of creating and implementing district-wide policies and practices that promote growth mindset, self-reflection and continuous improvement are needed. As the learners' and staff's needs change, amendments or additions to the district framework may be required. If there are misconceptions, then guidance, clarifications, and crucial conversations may be required to remedy them. In aligning with a growth mindset, no student, teacher, administrator, or district leader will ever fully *arrive* at a finish line. Rather, as goals are obtained, new goals are set. As struggles appear, help is given so success is attained. When all members of the district view learning as a journey, there is a resolute effort to ensure every person and guiding district document associated with the school district is on a path toward a growth mindset.

Recommendations for future research. Based on the findings and limitations from my study, there are several opportunities to extend the research about the impact of growth mindset on the policies and practices in a school district even further.

Study growth mindset implementation at various stages of the process. This study included research after the integration of growth mindset had already occurred. One recommendation for future research is an extended version of this study of a district prior to and throughout a growth mindset implementation. This exploration would allow for a deeper

understanding to develop of how the culture changes, types of possible resistance to prepare for, and recommendations to be made for leaders of school districts interested in the prospect of executing growth mindset but struggling with how to get started. Additionally, feedback for school districts in the midst of district-wide growth mindset transformation could be shared.

Classroom observations in districts that have integrated growth mindset practices. If a school district has fully adopted growth mindset and would benefit from viewing how the beliefs impact classroom practices, one recommendation is to study a population sample of individual classrooms using a research-created rubric and to identify practices that reflect a growth mindset. This possibility could be useful for school districts that have embraced a growth mindset and want to examine more fully whether growth mindset practices align with the established beliefs district-wide.

The use of growth-oriented feedback and praise. As the results from this study affirmed the power of language when communicating with learners, it is strongly recommended to investigate the varieties and impact of feedback and praise that are present in classrooms with teachers who do or do not align with a growth mindset. There are multiple possibilities, such as using a random sample for study participants at one or more school districts and through classroom observations, identifying the feedback and praise that are used, or using the same random sample but isolating the content area (e.g., math) or grade level to be observed. Alternatively, mindset inventories could be distributed and classroom observations transpire to survey sample populations of growth and fixed mindset educators.

The connection between leadership styles and mindset. Moreover, a recommendation for future research on leadership styles and their connection to growth mindset is suggested. Research might reasonably investigate if are there particular leadership styles that are more

closely associated with growth mindset. If connections are identified, determining possible educational outcomes associated with the different leadership styles would be valuable.

Utilizing multiple research methodologies to expand possibilities. Another recommendation for future research would be to consider different research methodologies. For example, a study could be conducted using objective data such as assessments, discipline data, and classroom engagement in a longitudinal design to measure the impact of growth mindset. Other data points could also be included in a longitudinal design such as strategic classroom observations for learners who have either been explicitly taught about growth mindset or have been continually educated in a district that has continually implemented growth mindset.

A further recommendation for future research could be to replicate the study in school districts with varying demographics such as high levels of economically disadvantaged learners, larger or smaller overall populations of students and schools, or larger numbers of at-risk students. A variation of the study could include participants filling out mindset surveys to allow for probable identification of participants' dominant mindset. Next steps for data collection could include interviews and/or classroom observations for both growth and fixed mindset educators to determine what similarities and differences can be identified. This process could be done district-wide, for individual schools, or for a feeder pattern of schools (i.e., elementary, middle and high schools that share students K–12). Also, this study could be replicated by a researcher in a school district where she does not have personal connections to eliminate any potential bias.

Include participants from out of district as study participants. In an effort to incorporate an outside perspective and allow for triangulation of data, one recommendation would be to include other stakeholders in the participant sample. For example, the inclusion of parents,

community members affiliated with the district (e.g., region service centers, universities), and students would all lend their insight to the study, extending its impact.

Conclusions

After decades of study on growth mindset in individuals, Dweck (2014b) expanded her research and described components of a growth-minded organization. However, previous research had not focused explicitly on how growth mindset is incorporated into the culture and educational practices in school districts.

The purpose of this single case study was to understand how district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices at Coppell ISD and how they perceive the impact of growth mindset. A purposive sample of 15 administrators, leaders, and teachers participated. Five of them were administrators, 5 were campus leaders, and 5 were teachers. The results of thematic analysis of semistructured interviews and document analysis revealed growth mindset is incorporated into the culture and educational practices through the following themes: (a) leaders and teachers live and support growth mindset; (b) the environment is designed to promote growth; (c) building positive relationships is a priority; (d) valuing growth is promoted through language and communication; (e) failure, struggles, and mistakes are okay; (f) risk and effort are encouraged; and (g) assessment and grading practices emphasize learning. The findings also revealed that the impact of growth mindset in the culture and educational practices was positive: (a) there is a positive impact of unleashing the potential of individuals and the group and (b) continuous improvement and self-reflection are a result of growth mindset.

In addition to revealing how growth mindset principles are incorporated into the culture and educational practices, findings also affirmed what multiple researchers have observed

regarding a connection between leaders of organizations that emphasize a growth mindset and employees' commitment to improving and learning (Hannay et al., 2013; Hanson, Bangert, et al., 2016; Keating & Heslin, 2015; Luhn, 2016; Murphy & Dweck, 2010). Caniels et al. (2018) shared that "employees with a growth mindset are characterized by an eagerness to continuously develop themselves" (p. 50), which was supported by findings from the study indicating that self-reflection and continual growth are top priorities for teachers and leaders. The study's findings contribute to the literature through their support of Dweck's (2014) and Keating and Heslin's (2015) studies, which suggested that an organization can establish a growth mindset by rewarding teamwork, tenacity, and grit while expecting all members to stretch themselves as they demonstrate a dedication to learning.

Through the establishment of *The Learning Framework* (Coppell Independent School District, 2017c), Coppell ISD recognized the influence and importance of growth mindset. *The Learning Framework* (Coppell Independent School District, 2017c) stated,

Through this common vision and language, administrators and educators are empowered to create physically, intellectually and emotionally safe environments, to develop growth mindsets, to design active and engaging learning experiences and to promote learning as a lifelong process. (p. 2)

Coppell's foundational statement aligns with Murphy and Dweck (2010), who proposed that employees emulate the characteristics they believe others in the organization value. Through Coppell's articulated vision and the tendency toward functioning with a growth mindset, Coppell ISD leaders have positioned themselves as exemplars of an organization committed to growth mindset.

The large-scale implementation of growth mindset within Coppell ISD contributes to the literature and supports the work by Schein (1990, 2010a), who wrote about groups' cautious

acceptance of beliefs shared with them by leaders. He also added that potential resulting cultural expectations are only embedded after the leader is trusted and the beliefs have been found to be effective by the group. The methods leaders in Coppell ISD used to successfully integrate growth mindset beliefs into the culture and educational practices have been successful and contribute to the work on culture and organizations by Schein (1990, 1996, 2010a). Although in this study I identified some valuable recommendations for school district leaders considering implementing growth mindset principles into their culture and educational practices, more research is needed. Leaders of school districts considering implementing a growth mindset will benefit from research that focuses on districts with a range of socioeconomic and cultural diversity and different research methodologies and perspectives.

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Appendix A: Interview Guide

- RQ1: How have district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD?
- RQ2: How do district leaders, school leaders, and teachers perceive the impact of implementing growth mindset principles in the school's culture and classroom practices?

Interview Questions for All

- Tell me about your role in the district.
- How long have you been a part of CISD?
- What other positions have you held in Coppell or education?

District Leader Questions

- In your role as a district leader, what are some specific behaviors that reflect the incorporation of growth mindset in the culture at the district level?
 - What does growth mindset look like on the district level?
 - How does growth mindset impact what you do?
- At the school level?
 - [Ask about connection between district/school level or if all schools in the district have similar cultures.]
- At the classroom level? _____ (district or the school/classroom)
- In your role as a district leader, how have you incorporated growth mindset into the educational practices at the district level?
 - School level?
 - Classroom level?
- Can you give specific examples of culture/practices?
 - Educational practices
 - Curriculum
 - Training
 - Sustainable organizational structures?
 - Long lasting structures?
 - Leader/Teacher training?

School Administrator Questions

- In your role as ____, how have you incorporated growth mindset into the culture at your school?
- How does it connect to the district?
- How have you incorporated growth mindset into the educational practices at your school?
 - [How does it connect to the district?]
 - How does growth mindset impact what you do?
- How have you incorporated growth mindset at the classroom level?
- What specific examples of culture/practices can you share?
 - Educational practices

- Curriculum
- Training
- For leaders
- Sustainable organizational structures?
- Long-lasting structures?
- Leader/teacher training?
- What have been the challenges with incorporating growth mindset?

Teacher Questions

- How have growth mindset principles been incorporated into the culture at your school?
 - How does growth mindset impact what you do?
- How do you incorporate growth mindset principles into the educational practices in your classroom?
 - How do you directly teach mindset to your students?
 - Have you noted any specific changes to achievement since?
 - What specific examples can you give of practices which reflect growth mindset?
- What have been the challenges?
- How do you perceive the impact of incorporating growth mindset into the culture and educational practices?
 - anecdotal feedback
 - objective data
 - PLCs

For all

- From what you know about mindset and what you understand about the guiding policies in CISD, how do you see mindset influencing what is valued?
- What else would you like to tell me about the impact mindset has on the culture and practices at _____?
- What is a change you have made personally based on your understanding of growth mindset?

Appendix B: Study Participant Recruitment Email

Introduction:**The Impact of Growth Mindset on the Practices and Policies of a School District: A Case Study of Coppell ISD**

My name is Tricia Badillo. I am a doctoral student at Abilene Christian University and am conducting a research study on the impact of growth mindset on a school district. I am completing this research as part of my doctoral degree. You may be eligible to take part in a research study. This form provides important information about that study, including the risks and benefits to you, the potential participant. Please read this form carefully and ask any questions that you may have regarding the procedures, your involvement, and any risks or benefits you may experience. You may also wish to discuss your participation with other people.

PURPOSE AND DESCRIPTION: The purpose of this case study is to determine how district leaders, school leaders, and teachers incorporated growth mindset principles into the culture and educational practices in Coppell ISD, and how they perceive the impact of implementing growth mindset principles in the school's culture and classroom practices. Through this study, the effects of growth mindset will be investigated. Through face-to-face interviews with district leaders, school leaders, and teachers from multiple schools, a broader understanding of what impact growth mindset has had in Coppell ISD will be obtained.

If selected for participation, you will be asked to participate in a one-time interview by the primary researcher, Tricia Badillo. The interview is expected to last approximately one hour.

During the course of the study, you will be asked to participate in the following procedures:

- If you agree to participate, you will be interviewed one on one with the researcher. The interview will be set up at a time convenient for the participant. The interview will be audio recorded and notes will be taken. The final transcript and inclusion of the interview content will be presented for review and approval by the participant. The information to be gleaned through the interviews will be focused on the participants' viewpoints of the implementation of growth mindset practices and policies in Coppell ISD and their school.

RISKS & BENEFITS: There are minimal risks to taking part in this research study. Below is a list of the foreseeable risks, all of which are not likely or there are procedures in place to thwart the risks:

- Participants may be concerned that readers of the dissertation can infer their identity.
- Participants may not want to answer every question asked during the interview.
- Participant's views expressed may not align with the district and consequently, there would be negative repercussions associated with their job.

To circumvent these risks:

- aliases will be used and no identifying data will be included in the results of the study
- the list of participants will not be shared with anyone
- the informed consent information will include multiple opportunities for invited participants to change their mind with no risk of negative ramifications.
- If an invited participant does not want to answer a question, be included in the study, or changes their mind after initial consent, there will be no derogatory consequences.

There are **potential benefits** to participating in this study.

- The benefits of participating in the study will be to contribute to sharing what Coppell ISD has learned about the implementation of growth mindset practices which will potentially help other school districts in the future.
- You may not experience any personal benefits from participating in this study.

PRIVACY & CONFIDENTIALITY: Information collected about you will be handled in a confidential manner in accordance with the law. Some identifiable data may have to be shared with individuals outside of the study team, such as members of the ACU Institutional Review. Aside from these required disclosures, your confidentiality will be protected through the following procedures:

- Only the primary researcher will see the information about you from this study. Pseudonyms will be used to protect the identity and position of each participant. If information is shared that will reveal the participant's identity, substitutions will be used or the information will not be shared. The results of this study may be published in a scientific book/or journal or presented to other people. If this is done, your name will not be used so no one will know who you are. All information about you from this research project will be kept in locked and secured cabinet, and will hence be secure. Information that is kept on computers will be kept safe from access by people who should not see it, through password-protection. Digital recordings will be deleted after transcriptions have been complete.

COLLECTION OF IDENTIFIABLE PRIVATE INFORMATION: Your data with or without identifiers, will **not** be used for any other research purposes other than those described herein.

CONTACTS: If you have questions about the research study, the Principal Investigator is Tricia Badillo, doctoral student, and may be contacted at [REDACTED] or [REDACTED]. If you are unable to reach the Principal Investigator or wish to speak to someone other than the Principal

Investigator, you may contact [REDACTED] at [REDACTED]. If you have concerns about this study, believe you may have been injured because of this study, or have general questions about your rights as a research participant, you may contact ACU's Chair of the Institutional Review Board and Executive Director of Research, [REDACTED] Ph.D. Dr. [REDACTED] may be reached at [REDACTED]

[REDACTED]

320 Hardin Administration Bldg., ACU Box 29103

Abilene, TX 79699

Your participation in this research is entirely voluntary. You may decline to participate or withdraw from the study at any time and for any reason without any penalty or loss of benefits to which you are otherwise entitled.

Additional Information

There will be 15 participants invited to take part in this study.
Please let the researchers know if you are participating in any other research studies at this time.

Appendix C: Participant Consent

ACU IRB # 18-050

Date of Approval 7/16/2018

Date of Expiration 8/16/2018

Consent Signature Section

Please sign this form if you voluntarily agree to participate in this study. Sign only after you have read all of the information provided and your questions have been answered to your satisfaction. You should receive a copy of this signed consent form. You do not waive any legal rights by signing this form.

_____	_____	_____
Printed Name of Participant	Signature of Participant	Date
<u>Tricia Badillo</u>	<u><i>tricia badillo</i></u>	<u>07/18/2018</u>
Printed Name of Person Obtaining Consent	Signature of Person Obtaining Consent	Date

Appendix D: IRB Approval

ABILENE CHRISTIAN UNIVERSITY*Educating Students for Christian Service and Leadership Throughout the World*

Office of Research and Sponsored Programs
 320 Hardin Administration Building, ACU Box 29103, Abilene, Texas 79699-9103
 325-674-2885



July 16, 2018

Tricia Badillo

Department of Organizational Leadership

Abilene Christian University

Dear Tricia,

On behalf of the Institutional Review Board, I am pleased to inform you that your project titled "The Impact of Growth Mindset on the Policies and Practices of a School District: A Case Study of Coppell ISD",

was approved by expedited review (Category 6 and 7) on 7/16/2018 (IRB # 18-050). Upon completion of this study, please submit the Inactivation Request Form within 30 days of study completion.

If you wish to make any changes to this study, including but not limited to changes in study personnel, number of participants recruited, changes to the consent form or process, and/or changes in overall methodology, please complete the Study Amendment Request Form.

If any problems develop with the study, including any unanticipated events that may change the risk profile of your study or if there were any unapproved changes in your protocol, please inform the Office of Research and Sponsored Programs and the IRB promptly using the Unanticipated Events/Noncompliance Form.

I wish you well with your work.

Sincerely,

XXXXXXXXXXXXXXXXXXXX

Director of Research and Sponsored Programs

Appendix E: Research Approval from Coppell ISD

12/1/2018

myACU Mail - Research Protocol Attached for Dissertation Study



Tricia Badillo

Research Protocol Attached for Dissertation Study

xxxxx xxxxxxxx
To: Tricia Badillo

Wed, Jun 6, 2018 at 9:26 AM

Hi Tricia,

Your research has been approved. I look forward to seeing the results of your study!

DIRECTOR OF STUDENT & STAFF SERVICES