

An Investigation into How Elementary School Administrators Support the Growth
Mindset of Classroom Teachers

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ABSTRACT

The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. The researcher interviewed three administrators from a small, rural county in Virginia to gain understanding of established practices (see Appendix D). Two research questions frame this study: *What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers* and *how do Virginia public elementary school administrators perceive the importance of developing a growth mindset of classroom teachers?*

This study seeks to contribute to the body of work completed by Dweck (2006) on fixed and growth mindsets. Additionally, this study will further contribute to the research of Abboud (2019), which explored evidenced-based strategies utilized by building principals in California high schools that supported high-yielding student achievement. An analysis of data revealed important steps that help in the development and sustainability of a growth mindset, as well as suggestions for future research. School divisions and administrators could provide teachers opportunities for growth mindset professional development in support of learning strategies for best practices in teaching. School divisions and administrators benefit when teachers are trained in growth mindset development. In addition, the study found, administrators should form PLCs in schools to provide opportunities for sharing and collaboration amongst peers related to growth mindset. School divisions should encourage administrators in providing timely feedback to teachers and follow up related to developing a growth mindset.

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GENERAL PUBLIC ABSTRACT

The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain a growth mindset in classroom teachers. An analysis of this relationship revealed important steps that help in the development and sustainability of a growth mindset. The researcher interviewed three administrators from a small, rural county in Virginia to gain understanding of established practices (see Appendix D). Two research questions frame this study: *What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers* and *how do Virginia public elementary school administrators perceive the importance of developing a growth mindset of classroom teachers?*

Data were collected and analyzed to determine themes. Major findings of this research reveal four steps administrators used to support teachers in developing, supporting, and sustaining a growth mindset in classroom teachers, as well as suggestions for future research. School divisions and administrators could ensure teachers are provided opportunities for growth mindset professional development in support of learning strategies for best practices in teaching. School divisions and administrators benefit when teachers are trained in growth mindset development. In addition, the study found, administrators should form PLCs in schools to provide opportunities for sharing and collaboration amongst peers to support a growth mindset. School divisions should encourage administrators in providing timely feedback to teachers and follow up related to developing a growth mindset.

Dedication

This paper is dedicated to the memory of my parents, Jane Karen Mabry and Calvin D. Mabry, Sr. Throughout my collegiate endeavors, you were always there for and with me. Both of you attended as I received my undergraduate degree from Norfolk State University. Mommy, you marched across the stage in my heart as I obtained my master's (Norfolk State University) and educational specialist (Old Dominion University) degrees. Daddy, you slipped away a few weeks before my final defense. I am grateful that you are both dancing amongst the angels as you celebrate this final degree with me.

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Helen Baylor sung a song entitled “If It Had Not Been for the Lord on My Side.” In the song, she asked the question, “Where would I be, where would I be?” I cannot imagine having to answer that question. I thank God for all the provisions he has made in my life. I thank Him for ordering my steps. I am so grateful that nothing is too hard for God. My life was tailor-made for me, and despite set-backs and challenges, God continues to prove that He is in control, and He is working it out for me. Always remember that God’s timing is perfect.

I could not have gotten through this process without my family. Dianette “DeeDee, Nana” Mabry, you have been there for me every step of the way. Thank you for always checking in on me, asking a thousand questions about my work, encouraging me to finish, and taking care of me during my surgeries. Dr. Susan “Bump” Prather, you are an inspiration to the family and a wealth of knowledge. Wayne, Calvin Jr. and Carla, Calvin III and Drew, I am so grateful for your support: love you much! I have a core group of friends who have helped me, covered me, lifted me, supported me, and prayed for me throughout this process. I could not have done it without you: Dr. Shonda Windham, Tonya Edmonds, Khadijah Alexander, Sherita Edwards Jahaziel, and Belinda Turner, you’re simply the best! Michael Stephenson, God knew just what I needed. You handed me the final baton as I galloped towards the finish line. Thank you for pushing me (okay maybe even pulling me) to finish the path that I started. 143. Enough said!

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Chapter One

The Introduction

The core of child development is the capacity to grow, and when children realize this capacity, achievement and learning can occur (Blackwell et al., 2007). Haimovitz and Dweck (2017), curious about parent's views of intelligence versus failure, researched children's intelligence mindsets. One might assume adults foster a growth mindset in children by communicating their own mindset. The research shared that it's not children's parents' view of intelligence; rather, it's their view of failure that fosters children's intelligence mindset. Parents who view failure as debilitating place a greater emphasis on children's performance and ability than their learning, and their children, in turn, feel intelligence is fixed rather than adaptable (Haimovitz & Dweck, 2017).

The lack of this understanding may explain why many youngsters lose interest in or grow afraid of difficulties, even though they were constantly given varied tasks as children (Haimovitz & Dweck, 2017). Yeager and Dweck (2012) credits people who possess a growth mindset with the ability to view personal and professional setbacks and momentary failure as an opportunity to grow and evolve. In some cases, elementary students may have self-defeating thoughts such as, *I am not good at this; I am stupid, and I will never be as good as him or her*. Teachers may hear these and experience an overwhelming urge to change the students' mindsets. The question that drives the proposed research for this investigation is: What does it take for classroom teachers and educators to successfully change students' mindsets?

Overview of the Study

Administrators are charged with serving as the building principal and instructional leader, but also with building positive moral and professional relationships with teachers. The relationship dynamics of the principal-teacher are important to consider. Dweck (2006) introduced the concept of a growth mindset, stating that depending on the amount of effort put forth over time, you can grow and change your intelligence, personality, and talent. The opposite, a fixed mindset, is the belief that your intelligence, personality, and talent cannot change. Changing people's beliefs, even the simplest of beliefs, can have profound effects (Dweck, 2006). The mindset approach has been applied to stress and mental health research, but it has been even more influential in education research. Dweck, Walton, and Cohen (2014)

utilized the terminology academic tenacity. Academic tenacity focuses on long term goals over short-term concerns and overcoming difficulties and complications through perseverance (Dweck et al., 2014).

As administrators work to build positive morale and professional relationships, getting to know the teacher is one way this can be accomplished (Guskey, 2000). Collaboration amongst teachers and administrators is necessary. According to a study conducted by Schoology (2017) focused on the global state of digital learning, more than 30% of teachers, and nearly 50% of administrators, report that teacher collaboration is a top priority. Abboud (2019) designed a research study to how the principal's perception of a teacher's mindset affects how he/she approaches instructional coaching with that teacher. This study continued Abboud's efforts by focusing on principals' perceptions about teachers and each teacher's mindset on professional growth.

Historical Perspective

Dweck's (2006) research into children's mindset discovered that fixed mindsets are characterized by the belief that one is born with a certain amount of intelligence, moral character, and personality. In contrast, individuals with a growth mindset believe that these basic qualities can be cultivated through one's efforts. Dweck (2006) also found that, "the passion for stretching yourself and sticking to it, even (or especially) when it's not going well, is the hallmark of growth mindset" (p. 7). Yeager and Dweck (2012) recognized that as students' progress through the academic system, adversity happens; nevertheless, educators are tasked with preparing students to be resilient and rise to challenges to achieve success. Devers (2018) proposed that fixed mindsets hold people back and those who "see intelligence as malleable, learn from mistakes and see challenges as obstacles to be conquered" (p. 3).

Statement of the Problem

Advances in neuroscience have shown that the brain is far more malleable than originally perceived (Kolb et al., 2003). This research on brain plasticity showed how connectivity between neurons can grow with experience and that these changes are associated with memory, addiction, and the recovery of function. Furthermore, Dweck (2006) asserted that the brain can grow and change a person's mindset from fixed to growth. Kolb et al. (2003) and Dweck (2006) support the claim that students with a growth mindset can learn at higher levels.

According to Farrington et al. (2012), knowledge of noncognitive factors is one thing; however, it is not the same as knowing how to develop those factors in students. Research has shown that people with different mindsets respond differently to challenges, obstacles, and criticism from others (Abboud, 2017; Duckworth et al., 2007; Dweck, 2006; Farrington et al., 2012; Kolb et al., 2003). Studies have also found that people with varying mindsets respond differently when they learn about the successes of others. Although studies have supported fixed versus growth mindset in students, more research could uncover how it translates to public school administrators supporting teachers with growth mindsets (Abboud, 2017; Duckworth et al., 2007; Dweck, 2006; Farrington et al., 2012; Kolb et al., 2003).

Abboud (2017) observed that existing research primarily focused on students and their mindsets; therefore, the researcher conducted a qualitative study to determine high school administrators' perceptions of growth mindset. Specifically, the research focused on how principals supported a growth mindset in their classroom teachers. The research resulted in common themes amongst high school classroom teachers. Abboud's (2017) recommendations alluded to action-based research, such as school divisions providing professional development to support administrators in coaching classroom teachers as they support their students. Ricci (2017) supports shifting mindsets by breaking down the belief that intelligence is static with the proper education and groundwork. The heart of a shifting mindset is "believing that all children can, with effort, perseverance, and motivation, succeed" (Ricci, 2017, p. 5). It appears that students learn and develop more with a teacher who has a growth mindset. This qualitative study looked at systemic ways that administrators, as building instructional leaders, can successfully implement strategies that support a growth mindset amongst classroom teachers.

Significance of the Study

Abboud (2017) discovered findings that touched on school culture, feedback to teachers, celebrating successes, and characteristics of teachers with a growth mindset. Guskey (2000) shared effective pedagogy addresses five critical levels of professional development. Participants' reactions, learning, organizational support and change, participants' use of new information and skills, and student learning outcomes should all be evaluated at various levels (Guskey, 2000). Hattie and Timperley (2009) promoted monitoring instructional delivery of lessons, providing timely feedback to teachers, and clearly stating expectations for student

engagement. Replicating Abboud's (2017) study in elementary schools allows for analysis of successful strategies that could be duplicated across counties, cities, and states.

Purpose of the Study

The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. Student achievement is important in a school's success. Opper (2019) shared it is important to look beyond where teachers go to school and how long they have taught. A better way to assess teachers' effectiveness is by looking at their on-the-job performance in the classroom and students' academic progress. Similarly, Hildrew (2018) suggested looking to the power of mindsets to help transform teaching, leadership, and learning.

Justification of the Study

A previous study examining mindset with high school principals in California was conducted in 2017; therefore, adapting the research with elementary school administrators in Virginia may provide insight and clarity for professionals working with elementary populations. Utilizing the research design of Abboud (2017) allows for insight from another state at the elementary versus the high school level as it pertains to fixed and growth mindsets. Practitioners may find helpful strategies to provide professional development on fixed and growth mindsets to classroom teachers to effect change for student success.

Research Questions

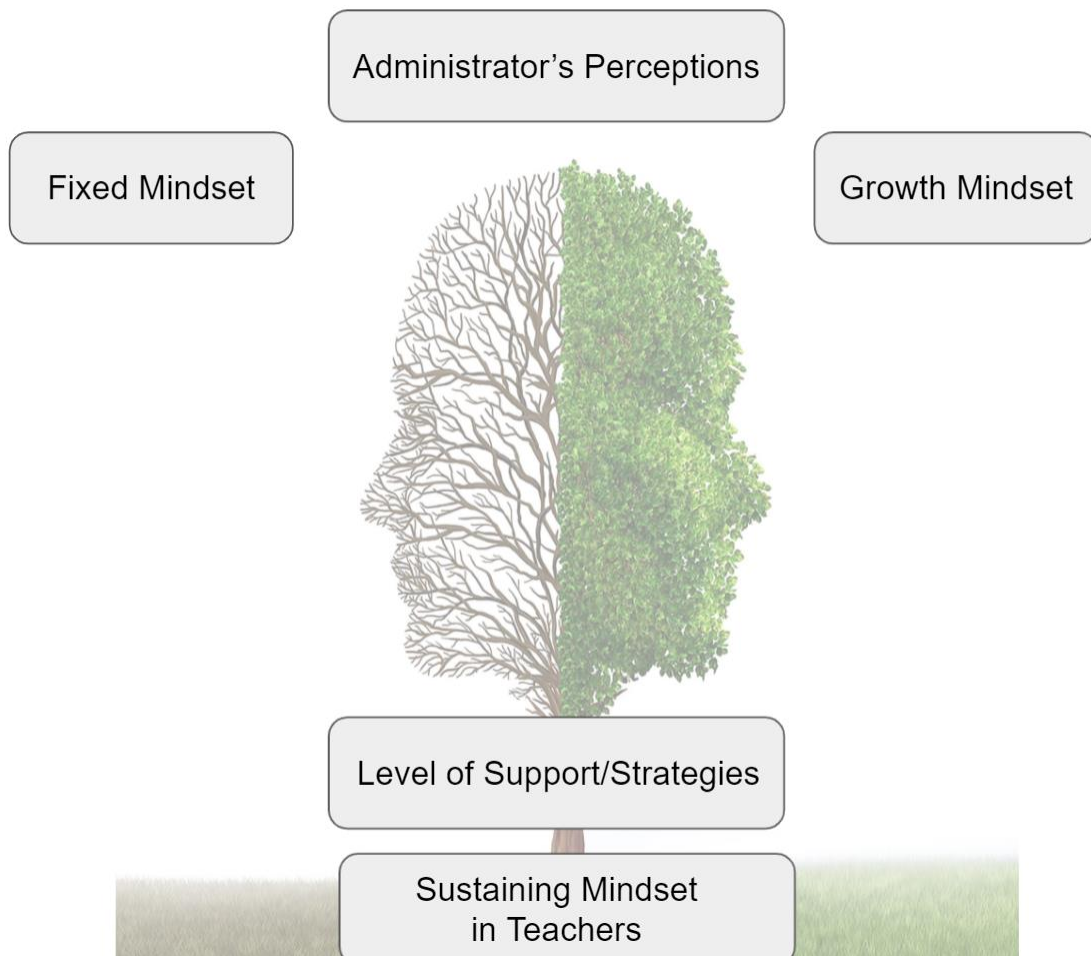
Two research questions frame this study:

1. *What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers?*
2. *How do Virginia public elementary school administrators perceive the importance of developing a growth mindset of classroom teachers?*

The conceptual framework (see Figure 1) for this study analyzed how administrators view mindset (fixed/growth) in classroom teachers. This study also determined the administrator's level of support and strategies needed to sustain that mindset in teachers. This framework mirrors the purpose of the study.

Figure 1

Conceptual Framework - Fixed and Growth Mindset in Teachers



Note. Source of Growth Mindset Tree Image: <https://www.iecl.com/fixed-mindset-versus-a-growth-mindset/>

Definition of Terms

Fixed mindset is the assumption that attributes like intelligence and talent are fixed and cannot change (Dweck, 2006).

Growth mindset is the concept that intelligence, personality, and talent can all grow and change with effort (Dweck, 2006).

Grit is a combination of passion and perseverance as a result of resiliency and hard work in high achievers (Duckworth, 2017).

Professional development (PD) is a set of processes and activities aimed at improving educator's professional knowledge, abilities, and attitudes so they can increase students' learning (Guskey, 2000).

Limitations

This study, qualitative in nature, utilized interviews with elementary administrators to determine how they support, develop, and sustain a growth mindset in classroom teachers. This study had a limited range of generalizability because it heavily relies on the administrators' honest, reflective feedback while participating in the interview process from one school division (Roberts, 2010). Generalizing results for all elementary administrators may not be appropriate. Additionally, this study was limited to current administrators at the elementary level. Feedback from administrators who have previously worked at the elementary level may provide additional reflective data to support teachers in growth mindset practices.

Delimitations

This study, qualitative in nature, delimits the number of respondents based on the location of the school division. One reason the school division was chosen was based on the location and proximity to the researcher. Participants are limited to the number of elementary schools located within the county. This research study will exclude respondents from more suburban/urban areas of Virginia. This study, qualitative in nature, is delimited to phone or virtual interviews. The researcher may have benefited from a mixed methods approach (Roberts, 2010). Utilizing surveys and experiments, in addition to closed-ended questions may support pragmatic knowledge claims.

Purposeful Sample

This purposeful sample provided data from one small, rural school division located in Virginia, who focused on professional development using fixed and growth mindsets with school administrators (training the trainer model). In the training of the trainer model, a subject matter expert trains the employee in the use of a program and teaches them how to train others in the use of the program. Assumptions are made that respondents are well-versed in fixed and growth mindset and may be able to contribute to this body of work by sharing honest, reflective feedback about their experiences (Roberts, 2010).

Organization of the Study

The remainder of this study includes Chapters Two through Five, references, and appendixes. Chapter Two provides a literature review of fixed and growth mindset and its importance in the classroom. Chapter Three delineates the research design and methodology of the study. An analysis of the data and findings are shared in Chapter Four. The summary, conclusion, and recommendations are in Chapter Five. Finally, references and appendixes conclude the study.

Chapter Two

A Literature Review

In the field of education, many issues call for immediate attention. These issues include challenges that pertain to educational funding, safe schools, and classroom discipline (Alvarez et al., 2018). Another identified issue is student achievement. In general, society often recognizes success even though failure is inevitable. In an interview conducted by Oprah Winfrey with author J. K. Rowling, it was proposed that one's ability to resist or use failure often leads to greater success (Always, JK Rowling, 2014). Meekhof (2016) expressed that failure is a part of life that will eventually happen to all. People deal with failure in multiple ways; some choose to ignore it while others may encounter a major breakdown requiring years of professional help to adequately recover (Meekhof, 2016). In a Ted Talk, Pierson (2013) posed the question, *who do you think is most responsible for student learning?* The answer choices included were: a) teacher, b) student, or c) parent. There was no clear expectation for selecting a proper answer because the key was justifying and elaborating on one's answer choice. With a focus on school divisions, answer choices may be modified to student, teacher, or administrator. This research sought to explore ways in which teachers and administrators can work collaboratively to support student learning.

Fixed and Growth Mindsets

Dweck (2006), curious about how people deal with failure, spent years studying human motivation. Intelligence Quotient (IQ) tests, developed and researched by Alfred Binet, have been utilized to determine intelligence for over a century (Miller, 1984). An IQ describes a score earned on a test designed to measure intelligence. Binet's IQ test has been revised and edited over the years to compare and summarize children's static and dynamic intelligence (Professional Development Institute, n.d.). The average IQ score on an IQ test is 100, and any IQ score falling between 85–115 is considered average. Approximately 82% of the population has an IQ test in this *average* range. An IQ score of 130 or above is considered a superior level, while any score of 70 or below indicates significant cognitive delays and major deficits in adaptive functioning (Professional Development Institute, n.d.). Dweck (2006) and other scholars agree that a current-day Binet would plausibly be displeased to recognize that his research was being utilized for this isolated purpose today. Academic organizations use

intelligence tests and scores to forecast success, but inborn abilities are not the only factors that account for learning and success (Professional Development Institute, n.d.).

Dweck (2006) introduced the fixed and growth mindset to further express the phenomenon of motivation. Dweck (2006) explained that fixed mindsets are characterized by the belief that one is born with a certain amount of intelligence, moral character, and personality. Individuals with a growth mindset believe that basic qualities are things that can be cultivated through efforts. Dweck (2006) believed, “the passion for stretching yourself and sticking to it, even (or especially) when it’s not going well, is the hallmark of growth mindset” (p. 7).

Further, Dweck (2006) interacted with and instructed students in a seventh-grade mathematics class to determine if there was concrete neuroscientific evidence indicating that the brain, like other muscles in the body, can grow stronger with effort. Interventions were taught to students possessing fixed and growth mindsets in the study. Hence, Dweck (2006) designed a growth mindset workshop and assigned participants to one of two sets where both groups read an article about the capacity to enhance muscle-like intelligence. The study showed that the set perceived as the growth mindset team seemed to react advantageously to the items. As a result of this study, Dweck (2006) concluded that students who learned that their effort could influence outcomes experienced greater success. As noted, Yeager and Dweck (2012) recognized that as students’ progress through the academic system, adversity happens; however, educators still hold the responsibility to prepare students to be resilient and rise to the challenges to achieve success. Resilience can be defined as “good outcomes in spite of serious threats to adaptation” (Masten, 2001, p. 228).

Devers (2018) stated that fixed mindsets hold people back and those who, “see intelligence as malleable, learn from mistakes and see challenges as obstacles to be conquered” (p. 3). Further, Schroder et al. (2014) asserted that a belief in the malleability of self-attributes (a growth mindset) is associated with better performance and perseverance, especially when individuals are faced with challenging tasks. Research has shown that people holding the growth mindset think that effective achievement is mainly driven by effort, whereas fixed mindset people think that success is mostly determined by natural capacity (Dweck, 2006). Figure 2 outlines noted differences between fixed and growth mindsets by Dweck.

Growth Mindset and Grit

Grit, in education, is how long-term objectives can be achieved through overcoming barriers and difficulties (Duckworth et al., 2007). Hochanadel and Finamore (2015) stated that students need to create grit and tenacity, psychological characteristics, and internalize a mindset that involves perseverance. Grit is a combination of passion and perseverance as a result of resiliency and hard work in high achievers (Duckworth, 2016).

The researchers observed that a growth mindset develops when teachers teach students how to persist, thus, enhancing grit to overcome any challenges (Hochanadel & Finamore, 2015). Furthermore, Yeager and Dweck (2012) stated that students' implicit beliefs about the nature of their abilities influence resilience in the face of challenge and predict their eventual performance. Yeager and Dweck (2012) utilized existing research on implicit theories and their effects on academic performance.

Figure 2

Fixed vs. Growth Mindset Comparison

FIXED MINDSET	GROWTH MINDSET
Intelligence does not change (static)	Intelligence can be developed
Leads to a desire to “look smart” and therefore a tendency to:	Leads to a desire to “learn” and therefore, a tendency to:
<ul style="list-style-type: none"> ❖ Avoid challenges ❖ Give up easily due to obstacles ❖ See effort as ineffective ❖ Ignore useful feedback ❖ Be threatened by others' success 	<ul style="list-style-type: none"> ❖ Embrace challenges ❖ Prevail despite obstacles ❖ See effort as a path to mastery ❖ Learn from criticism ❖ Be inspired by others' success

Note. Revised from: <https://thepeakofperformancecenter.com/development-series/mental-conditioning/mindsets/fixed-mindset-vs-growth>

The researchers also reviewed research on explicit theories of personality and their effects on aggression and stress. Findings suggested that those with resilience can quickly

recover from difficulties (Yeager & Dweck, 2012). Furthermore, research has found that “psychological factors—often called motivational or noncognitive factors—can matter even more than cognitive factors for students’ academic performance. These may include students’ beliefs about themselves, their feelings about school, or their habits of self-control” (Dweck et al., 2014, p. 2). Research has also indicated that educational leaders could benefit if they look beyond academic performance to educate the whole child (Yeager & Dweck, 2012). Abboud (2017) identified four specific ways high school principals could promote a growth mindset. Principals should intentionally address the culture of the school, determine and communicate a clear school-wide focus, find creative ways to celebrate teachers’ successes, and invest in professional learning community (PLC) structures at their school (Abboud, 2017).

Duckworth et al. (2007) observed that some students in her seventh-grade mathematics class were outperforming others. The researchers observed that students with lower IQs were some of the best performers, while students with the highest IQs did not have higher grades. Duckworth et al. (2007) explored education from a motivational and psychological standpoint rather than intelligence. As a result, the Grit Scale was created to evaluate this phenomenon (see Figure 3).

The Grit Scale presents a series of questions and allows respondents to select any of the following answers choices: *not at all like me*, *not much like me*, *mostly like me*, and *very much like me* (Duckworth et al., 2007). The scale assigns points to the responses, which are tallied at the end to provide a grit score. The grit scale has been used to assist teachers in measuring and reflecting with learners on their own grit levels. Duckworth et al.’s (2007) four major components of grit consisted of interest, practice, purpose, and hope—all designed to clarify goals and align towards a single passion of supreme importance.

Duckworth (2018) asserted that interest is where passion originates. In essence, if one holds an interest in something, he or she will likely pursue it for a longer period due to its meaningfulness and purpose. In a Ted Talk, Duckworth (2018) reiterated that practice requires everyday stamina and consistency (endurance) in the face of adversity, the tendency not to abandon tasks from mere changeability, and uncomfortable hard work. Duckworth (2018) defined purpose as doing not only what matters to you, but what matters to the world. Essentially, having a growth mindset may develop the grit needed to discover one’s passion

(Duckworth et al., 2007). Furthermore, it was noted that grit is not inborn but must be cultivated and taught.

Figure 3

Grit Scale

Statements	Not at all like me	Not much like me	Somewhat like me	Mostly like me	Very much like me
New ideas and projects sometimes distract me from previous ones.	5	4	3	2	1
Setbacks don't discourage me. I don't give up easily.	1	2	3	4	5
I often set a goal but later choose to pursue a different one.	5	4	3	2	1
I am a hard worker.	1	2	3	4	5
I have difficulty maintaining my focus on projects that take more than a few months to complete.	5	4	3	2	1
I finish whatever I begin.	1	2	3	4	5
My interests change from year to year.	5	4	3	2	1
I am diligent. I never give up.	1	2	3	4	5
I have been obsessed with a certain idea or project for a short time but later lost interest.	5	4	3	2	1
I have overcome setbacks to conquer an important challenge.	1	2	3	4	5

Note. Revised version of the GRIT scale developed by Angela Duckworth in “GRIT” pages 54-56.

Noncognitive Factors and Growth Mindset

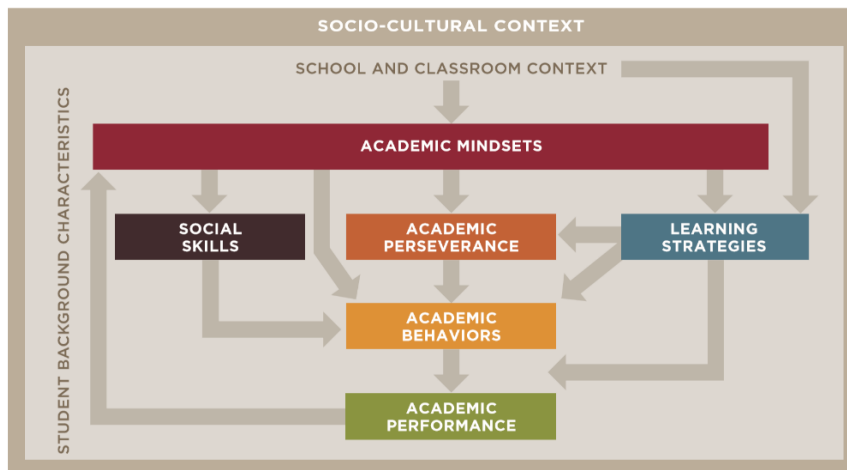
Farrington et al. (2012) completed a critical literature review on teaching adolescents to become learners, which focused on the role of noncognitive factors in shaping schools. The review found evidence to suggest the best leverage points for improving student performance include helping teachers understand the relationship between classroom context and behavior amongst students, proffering teachers’ clear strategies for promoting positive academic mindsets in students, and building positive academic mindsets in students. Additionally, Farrington et al. (2012) claimed that building teacher capacity helps students learn, understand, and develop.

Farrington et al. (2012) initiated five general categories of noncognitive factors related to academic performance, which include academic behaviors, academic perseverance, academic mindsets, learning strategies, and social skills. As seen in Figure 4, Farrington et al. (2012) set the School and Classroom Context (top horizontal heading) to represent that any given school and classroom context will reflect a wide variety of variables affecting student motivation and opportunity to learn. Furthermore, Student Background Characteristics (left vertical heading) is set to assume that student background would include all the individual characteristics a student brings into a learning situation.

Figure 4

How Five Noncognitive Factors Affect Academic Performance – Hypothesized Model

A Hypothesized Model of How Five Noncognitive Factors Affect Academic Performance within a Classroom/ School and Larger Socio-Cultural Context



How Five Noncognitive Factors Affect Academic Performance – Hypothesized Model

Academic behaviors are the visible external indicators that a student participates in school and tries to learn. According to Farrington et al. (2012), “These include regularly attending class, arriving ready to work (with necessary supplies and materials), paying attention, participating in instructional activities and class discussions, and devoting out-of-school time to studying and completing homework” (p. 8). Moreover, these behaviors are frequently referenced as behaviors of good students. Society expects that students who attend school consistently, complete assignments, study, and participate in class will perform well in school. Farrington et al. (2012) stated that greater engagement in academic behaviors, in turn, results in improved academic outcomes, including higher grades and test scores. Academic perseverance is “the

difference between doing the minimal amount of work to pass a class and putting in long hours to truly master course materials and excel in one's studies" (Farrington et al., 2012, p. 9). Furthermore, academic perseverance requires grit, tenacity, delayed gratification, self-discipline, and self-control according to the research.

Another point raised by Farrington et al. (2012) is the importance of creating a sense of community with a positive academic mindset. Academic mindset is a sense of belonging in the community, being able to change abilities through effort (a growth mindset), success, and acknowledging that the work has value and purpose (Mindset Works, 2017). Dweck (2006) refers to this as the power of yet, stating that when one fails, although painful, it creates a learning curve that one faces and deals with without letting it define oneself. Farrington et al. (2012) acknowledge that academic mindsets increase students' academic perseverance and improve academic behaviors, leading to better performance as measured by higher grades.

Furthermore, Farrington et al. (2012) included learning strategies as one of the five categories of noncognitive factors related to academic performance, suggesting that study skills, metacognitive strategies, self-regulated learning, and goal-setting take precedence. It is important to explore these noncognitive factors to assess their relationship with student academic performance. The University of California Berkeley (UC Berkeley; 2019) described learning strategies as strategies that help initiate learning based on activities that demonstrate how students learn best. Essentially, classrooms set the stage for academic learning and motivation for students. This literature review will highlight some of the suggested best practices to increase academic performance.

Study Skills Strategies

Loveless (2019) introduced the study habits of highly effective students. According to this research, mindset and performance could increase utilizing 10 study habits. Applying oneself increases knowledge and the ability to learn and decipher information. The key to becoming an effective student, according to Lovelace (2019), is learning how to study smarter, not harder, as formulated in these study habits.

1. Never cram studying into one session.
2. Plan times to study.
3. Study at the same time.
4. Each study time should have a specific goal.

5. Never procrastinate a planned study session.
6. Start with the most difficult subject first.
7. Always review notes before starting an assignment.
8. Ensure there are no distractions while studying.
9. Use study groups effectively.
10. Review notes, schoolwork, and other class materials over the weekend. (pp. 1-2)

The research provided suggestions tailored to students entering college; however, these study skills strategies can be adapted and taught to younger grades to allow them to develop effective study habits before college.

Metacognitive Strategies

Cognition is the scientific term referring to the mental processes involved in gaining knowledge and comprehension, including thinking, knowing, remembering, judging, and problem-solving (Dabarera et al., 2014). According to Dabarera et al. (2014), metacognition is the knowledge and understanding of one's own cognitive processes and abilities and those of others, as well as the regulation of these processes. Moreover, metacognition can be described as the ability to make one's thinking visible or thinking about thinking. Metacognition encompasses one's regulation of thoughts and the ability to change those thoughts. Dweck's (2006) research concluded the process of learning is not fixed and one's ability to learn and understand can be influenced by cultivating habits. What follows in this literature review are strategies assist in cultivating habits of a growth mindset.

Think-Pair-Share

Think-pair-share allows students to activate prior knowledge in their minds before pairing with a partner or group (UC Berkeley, 2019). Students are provided an opportunity to individually think about an idea or question, then they are paired with another student for a discussion. After, the students share aspects of the discussion with the whole group. The facilitator is encouraged to listen to responses, and ask students to elaborate, provide examples, or clarify their thinking. The facilitator should remain neutral and encourage reactions such as alternative views, agreements, or disagreements (UC Berkeley, 2019).

Quick Write

A quick write is approximately a five-minute long opportunity to engage students in writing about a topic (UC Berkeley, 2019). Quick writes can be used to activate prior knowledge, engage students in thinking about the topic, encourage students to reflect on their reading, or serve as a formative assessment to gauge student understanding. Quick writes provide students with concepts and frameworks for their own writing. Quick writes could provide pre-assessment opportunities for teachers as well as help students accumulate a body of work from which to draw inspiration for longer, more developed works (UC Berkeley, 2019).

Turn and Talk

According to the UC Berkeley (2019), a turn and talk as an alternative way for students to collaborate and prepare to learn. In a turn and talk, students are tasked with turning to the person next to them and responding to a question posed by the facilitator. This typically takes roughly two minutes and provides each student an opportunity to share. The facilitator may choose a few groups out of the larger group to share their answers (UC Berkeley, 2019).

Jigsaw

In a jigsaw, students work in small groups to read informational material and share the information with the rest of the group. Typically, the facilitator organizes the material into sections ahead of time, providing the group with prompts such as, *what is the main idea?* or *Do you agree or disagree with the article?* In addition, students may be asked to develop questions related to the reading (UC Berkeley, 2019). One version of jigsaw requires all participants in the group to become *experts*. Multiple experts ensure that everyone in the group understands the concept and can share their thoughts and opinions about the concept being taught. Next, the students form collaborative groups and meet with others from different groups where each expert in the group shares information with the new team members. Having witnessed the presentation of the original group members, the expert will likely feel more comfortable presenting to the new collaborative group members (UC Berkeley, 2019).

Pausing in Lecture

The pausing in lecture strategy requires the addition of wait time for students to reflect on what is being taught (UC Berkeley, 2019). In general, the facilitator pauses for 6–10 seconds

after an inquiry before requesting an answer from the student. The response is then given as a quick write to allow all students a chance to understand and reflect on the concept. Pausing in lecture could turn into the think-pair-share, quick write, or turn and talk.

Posters and Gallery Walks

Poster and gallery walks provide an opportunity for group work and movement (UC Berkeley, 2019). The facilitator gives student groups an assignment on a sheet of chart paper to display their work. Once completed, the poster is displayed on the wall, with one group member remaining with the poster. The other group members take a gallery walk to each poster, visiting and learning about the other groups' work (UC Berkeley, 2019).

Four Corners

Four corners also provide the opportunity for movement (UC Berkeley, 2019). Using this strategy, the facilitator displays a question for students to ponder. One claim is allocated to each corner of the classroom and students are tasked with visiting the corner of the classroom in which they agree. If they agree with multiple corners, a decision is required; however, if they do not agree with any choice, they must go to the center of the class (Berkeley, 2019). For example, a question could be, *Which shoe most reminds you of reading?* The claims could be “a cowboy boot, flip flops, sneakers, and bedroom slippers.” Once in the corner of their claim, students discuss their thinking and reasons the claim resonated with them most. The facilitator may use the positions to form different groups or to have group discussions about listening and understanding each other's claims. At the end of the session, students may be given another opportunity to change groups based on the evidence presented (UC Berkeley, 2019).

Project-Based Learning (PBL)

As UC Berkeley (2019) suggested, project-based learning can be used to get students to investigate issues and challenges occurring world-wide. A PBL activity is student-centered and student-driven; students are intentionally grouped to support, collaboration and meet their individual needs. The students are tasked with designing a project following a rubric that demonstrates their learning target. With this strategy, students have a voice and a choice in the final product (UC Berkeley, 2019).

Self-Regulated Strategies

Farrington et al. (2012) emphasized the importance of self-regulated strategies as another noncognitive factor related to academic performance. Self-Regulated Learning (SRL) enables the learners' potential to self-control, self-monitor, self-motivate, and self-regulate the learning process (Mekala & Radhakrishnan, 2019). With SRL, students are taught metacognitive strategies such as planning, organizing, monitoring, and evaluating their thought processes (Mekala & Radhakrishnan, 2019). Utilizing SRL within instructional practices includes helping the learner to brainstorm, mind map, journal entry, and diary, and portfolio write. Essentially, SRL encourages students to self-correct if there is confusion or error in one's thinking (Farrington et al., 2012).

Goal Setting

Goal setting helps students manage their learning. Mindset Works (2019) suggested that students first create a learning goal then face their reality by sharing what they are good at doing. After which, students must admit their challenges. Mindset Works (2019) also shared that students should tap into their support system by asking for help and materials, and by reminding themselves of the plan. Additionally, students should come up with steps to take, recognizing what it will look like when they are almost at their goal (Mindset Works, 2019). Dweck (2006) encouraged students to be persistent, think flexibly and be open to continuous learning. Dweck (2006) also claimed that mindset and positive self-talk will equal a change in behavior.

Farrington et al.'s (2012) fifth and final noncognitive factor on academic performance is social skills. Social skills are the verbal and nonverbal skills individuals use to communicate and interact with each other. Students with strong social skills can adjust their behavior to fit situations, personal needs, and desires (Sharma, 2016). Some children learn social skills with ease, while others must be explicitly taught social skills. Good social skills are important for successful functioning in life. By learning these skills, a person recognizes how to make good decisions and choices and how to behave in diverse situations. Educators can assist students with social skills by providing students learning opportunities, guidance, and support (Farrington et al., 2012).

Professional Learning Communities (PLCs)

Dufour et al. (2016) described PLCs as an ongoing process of conducting meetings with various collaborative teams to engage in dialogue, collective inquiry, and action-based research to achieve better results for students. The use of PLCs provides systematic interventions and shared knowledge about the best ways to achieve goals (Dufour, et al, 2016). Thompson et al. (2004) further explained,

In professional learning communities the principal encourages teachers to pursue personal development as part of their job. In one approach, the principal helps teachers integrate what they learn in professional development by meeting in small groups to discuss classroom application of those learnings. People read articles and books and form study groups that encourage reflection, inquiry, sharing and dialoguing. Individual and team judgment is valued more than rules, policies, forms, and procedures. Most importantly, everyone is encouraged to take responsibility for their own learning and development, and this is considered to be a norm of the school's culture. (p. 6)

Professional learning communities focuses on results and responds to student's individual needs. Dufour et al. (2016) suggested PLCs ask the following questions of team members:

1. What do we expect students to learn?
2. How will we know they learned it?
3. How will we respond when they don't learn?
4. How will we respond when they already know? (p. 53)

If administrators want to be instructional leaders, they must move beyond traditional leadership styles to create professional learning communities where the goal is to develop people, including oneself (Thompson et al., 2004).

Feedback

According to Hattie and Timperley (2009) feedback is one of the most powerful influences on learning and achievement. They developed a model of effective feedback that identifies the properties and circumstances that make feedback work. First, one must recognize that feedback requires giving and receiving (Hattie & Timpereley, 2009). Additionally, Hattie and Timperley (2009) shared errors should be welcomed in a safe environment and that peer

feedback is invaluable. Shute (2008) suggested nine guidelines for using feedback to enhance learning, which include:

- focus feedback on the task not the learner,
- provide elaborated feedback,
- present elaborated feedback in manageable units,
- be specific and clear with feedback messages,
- keep feedback as simple as possible but no simpler,
- reduce uncertainty between performance and goals,
- give unbiased, objective feedback, written or via computer,
- promote a learning goal orientation via feedback,
- provide feedback after learners have attempted a solution (p. 30)

Bambrick-Santoyo (2018) shared the purpose of observation and feedback is not to evaluate teachers, but to develop them (p. 129). Observation and feedback is provided in school divisions.

Bambrick-Santoyo (2018) shared five errors to avoid when providing feedback:

- 1) Error 1: less is more
- 2) Error 2: lengthy written evaluations drive change as effectively as anything
- 3) Error 3: just tell them; they'll get it
- 4) Error 4: state the concrete action step. Then the teacher will act
- 5) Error 5: teachers can implement feedback any time (p. 155)

In order to see real change in classroom teachers, coaching teachers and providing feedback is necessary (Bambrick-Santoyo, 2018).

Supporting a Growth Mindset

Faculty and staff can aid learners with the development of grit and mindset, internalizing the incentive of continuous improvement, thus improving their likelihood to achieve long-term objectives (Duckworth et al., 2007). Hochanadel and Finamore (2015) studied fixed and growth mindsets in education and how students persist in the face of adversity stating that:

Identifying explanatory style using the Grit assessment is one way to determine where students can put their efforts to learn to persist in the face of academic challenges.

Faculty should not focus on just making good grades, but how to challenge that person and teach them to create solutions. In addition, teaching a growth mindset and grit facilitates long-term goals and how to achieve them. (p. 49)

To assist learners in continuing to flourish, educators need to build learning environments. Bower (2017) recommended that educators approach teaching and learning with a growth mindset, believing in their students, and assisting students to grow by persevering and putting forth an effort to achieve academic success. Hildrew (2018) launched the idea of a growth mindset school with his staff, providing the concept to start with a clear vision in mind. The staff worked to design a plan around three components that patterned Dweck (2006):

- Understanding the concept of fixed and growth mindsets.
- Introducing neuroscience that underpins mindset theory.
- Exploring the influences, we can exert to shift mindsets (Hildrew, 2018, p. 43)

Sinek (2011) suggested that understanding concepts is paramount as a leader. Staff must understand their purpose and the why behind what they are tasked with achieving. After cultivating a clear picture of the mission, Hildrew (2018) recommended team leaders as coaches with a growth mindset. Dweck (2006) shared that almost everyone is on a continuum of fixed and growth mindset. As a result of this knowledge, Hildrew (2018) suggested using a growth mindset curriculum to problem solve, which involves understanding the subject, including background, context, and measures to fix issues. Similarly, Farrington et al. (2012) noted, “if indeed noncognitive factors are malleable and are critical to academic performance, a key task for educators becomes the intentional development of these skills, traits, strategies, and attitudes in conjunction with the development of content knowledge and academic skills” (p. 5). Witter (2013) suggested that educators help students set goals and find pathways to reach them, in turn, providing students with the gift of hope. Furthermore, Witter (2013) echoed that this project is not solely for schools but should include community resources such as volunteers, mentors, and businesses working collaboratively for student success. Donohoo et al. (2018) claimed that when teams of educators believe they can make a difference, exciting things can happen in a school.

Moreover, Donohoo et al. (2018) encouraged the power of collective efficacy, where a school’s cultural beliefs are characterized by high expectations for student success. The researchers also believed that “school leaders play a key role in creating non-threatening, evidence-based instructional environments (Donohoo et al., 2018, p. 43). They summarized by stating, “success lies in the critical nature of collaboration and the strength of believing together, administrators, faculty, and students can accomplish great things” (p. 44). Overall, this demonstrates the power of collective efficacy and closely mirrors Dweck’s (2006) *power of yet*,

which states that although one may not be there yet, with perseverance and teamwork, it can happen.

Looking Beyond Mindset

While the focus of this literature review shares data on the effects of growth mindset on student achievement, attention must also be drawn to the contrary and suggestions such as looking beyond having a growth mindset. Sun (2018), a mathematics education researcher, examined the relationship between teachers' classroom practices and students' beliefs about mathematics. The research surveyed 40 mathematics teachers and their students in six California middle schools; the survey was administered at the beginning and end of the school year. Based on the initial survey, a case study was conducted with eight of 40 classrooms over the school year. Sun (2018) determined that teachers who endorsed a growth mindset were not more likely to have students with a growth mindset. In contrast, findings suggested that teachers' classroom practices led to students having a fixed or growth mindset (Sun, 2018). Dweck (2015) states, "a growth mindset is not just about effort. Perhaps the most common misconception is simply equating the growth mindset with effort. Certainly, effort is key for students' achievement, but it's not the only thing" (p. 1). Furthermore, Sun (2018) found that although teachers claimed a growth mindset, a growth mindset was not a part of their classroom practices; thus, students tended to endorse a fixed rather than a growth mindset. Dweck (2015) suggests acknowledging the following:

- We all possess fixed and growth mindsets.
- We all will always probably possess fixed and growth mindsets.
- If we want to move closer to a growth mindset in our thoughts and practices, we need to be aware of our fixed mindset thoughts and actions. (p. 3)

Educational reform efforts typically focus on the rigor of curriculum and instruction; however, "if they do not also address resilience in the face of more challenging standards, then making such improvements (such as rigorous learning opportunities) may be less effective than hoped" (Yeager & Dweck, 2012, p. 306).

Dynarski (2016) believes that teacher observations have been a waste of time and money and stated that "the system is spending time and effort rating teachers using criteria that do not have a basis in research showing how teaching practices improve student learning (p. 1). The key factors are not whether teachers are teaching, but whether students are learning; this suggests that

leaders need to understand effective teaching and better ways to measure teacher effectiveness. Couros (2015) discussed why it is imperative to move beyond a growth mindset and create something meaningful. In addition, Couros (2015) described innovators' mindsets, where challenges are sought out and seen as opportunities for growth and development. Dweck (2010) acknowledged that no mindset applies to every situation.

Summary of the Research

Several research studies suggest that a connection exists between growth mindset and student achievement (Duckworth et al., 2007; Dweck, 2006, 2010; Yeager & Dweck, 2012). Moreover, studies by Blackwell et al. (2007) and Dweck (2010) revealed that students with growth mindsets significantly outperform their peers. Blackwell et al. (2007) state:

While recognizing that there can be real differences between individuals in the speed of their intellectual growth, and without denying that there may be differences in capacity, we suggest that a child's focus on assessing these differences can have unfortunate consequences for motivation. In contrast, a focus on the potential of students to develop their intellectual capacity provides a host of motivational benefits. (p. 260)

Yeager and Dweck (2012) found that "what students need most is not self-esteem boosting or trait labeling; instead, they need mindsets that represent challenges as things that they can take on and overcome over time with effort, new strategies, learning, help from others, and patience" (p. 312). These mindsets and talents are sometimes brought to school by kids but, they can also be taught (Dweck et al., 2014). Dweck et al. (2014) emphasized that academically tenacious students see school as relevant, seek out challenges, and can remain engaged for long stretches of time. The literature strongly supports that possessing a growth mindset resulted in student achievement (Duckworth, 2016; Duckworth et al., 2007; Dweck 2006, 2015). The literature also showed a connection between teacher mindset and professional development (Abboud 2017; Farrington et al, 2012). Abboud (2017) researched how high school principals in California support a fixed and growth mindset. Adapting this study will allow insight and clarity with elementary administrators in Virginia and the techniques utilized to support a growth mindset in classroom teachers.

Chapter Three

Methodology

Purpose of the Study

Administrators are charged with not only serving as the school building principal and instructional leader but also with building positive moral and professional relationships with teachers (Dufour et al, 2016). The dynamics of the principal-teacher relationship are important to consider. Dweck (2006) introduced growth mindset, stating that depending on the amount of effort put forth overtime, an individual can grow and change his or her intelligence, personality, and talent. The opposite of growth mindset, a fixed mindset, is the belief that your intelligence, personality, and talent cannot change. Changing people's beliefs, even the simplest of beliefs, can have profound effects (Dweck, 2006). The mindset approach has been applied to stress and mental health research, but it has been even more influential in education research.

Student achievement is important to a school's success. Opper (2019) shared the importance of looking beyond where teachers go to school and how long they have taught. A better way to assess teachers' effectiveness is by looking at their on-the-job performance in the classroom and students' academic progress. Hildrew (2018) suggested looking to the power of mindsets to help transform teaching, leadership, and learning. The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers.

Research Design/Methodology

A qualitative study was chosen to explore and identify the strategies utilized by administrators to develop a growth mindset in classroom teachers. Qualitative researchers are interested in understanding how people interpret their experiences, construct their worlds, and provide meaning to their experiences (Merriam & Tisdell, 2016). The use of an interview methodology allows for interaction amongst the interviewer and respondent. The crucial factor in qualitative research is not the number of respondents but the potential of each person to contribute to the development of insight and understanding of the phenomenon (Merriam & Tisdell, 2016). This study sought to understand practices of school-based administrators to help develop a growth mindset in teachers. Interviews provided an opportunity to explore and understand the phenomenology from administrator's perspective.

A qualitative study was relevant given the purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. This qualitative research design applied the interpretation of interview data from administrators in one small, rural county in Virginia. The Virginia school division chosen for this research focused on professional development using fixed and growth mindsets with school administrators (training of the trainer model). Professional development in a train the trainer model utilizes a subject matter expert. This subject matter expert provides professional development to employees in the use of a program and demonstrates how to train others. The respondents of this research have been selected because it is assumed that they will be able to add insight about the fixed and growth mindsets of classroom teachers at the elementary level based on the train trainer model implemented in the school division. Potential study participants had completed this training and were responsible for training others in their school building.

Research Design Justification

The qualitative approach to research is based on the philosophical orientation called phenomenology, which focuses on people's experiences from their perspective (Roberts, 2010). Qualitative research may include general or broad questions, data collection, observation, or open-ended interviews. Rather than numbers, the data are words that describe people's knowledge, opinions, perceptions, and feelings (Roberts, 2010). Abboud (2017) conducted research with high school principals in California to determine their experiences working with classroom teachers on fixed and growth mindsets. Utilizing the research design of Abboud (2017) may allow for insight from another state at the elementary versus the high school level, as it pertains to how administrators can support fixed and growth mindsets of classroom teachers. The researcher wanted to gain knowledge about the perspective and lived experiences of elementary school administrators and their work with fixed and growth mindset of teachers (Roberts, 2010).

Research Questions

Two research questions frame this study:

- 1. What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers?*

2. *How do Virginia public elementary school administrators perceive the importance of developing a growth mindset of classroom teachers?*

Site/Sample Selection

Data were gathered from administrators in one small, rural county in Virginia. The county of about 37,000 citizens has five elementary schools, two middle schools, and two high schools. Potential participants were sought from administrators in the school division with at least one year of administrative experience. This study utilized a nonprobability, purposeful convenience sample (Roberts, 2010). This purposeful sample was selected based on administrators being trained in fixed and growth mindsets. The population for this qualitative study sought to involve up to 10 participants based on the number of elementary administrators located in the one school division who met the criteria for the study. Due to the COVID-19 virus, all interviews conducted were through the online platform Zoom. Email communications were sent multiple times to 10 potential candidates. Ultimately, three school administrators from the selected school division were interviewed for this research study. One school had a population of about 580 students. Another school had a population of about 520 students. A third school had a population of 710 students.

Data Collection Procedures

The researcher received training in human subject's protection from the Collaborative Institutional Training Initiative (CITI) Program on the topics of Social & Behavioral Research-Curriculum Group, Social & Behavioral Research-Course Learner Group, and 1-Basic Course-Stage (see Appendix A). Virginia Tech's Institutional Review Board (IRB) granted human research approval in March 2021. Permission was requested from the appropriate personnel in the school division (see Appendix B) and then elementary administrators were contacted to request their participation in the study (see Appendix C). Participation in this research was completely voluntary. Those interested in participating were provided the purpose of the study, research questions, and a consent email acknowledging participation requirement.

The interview included six main questions with follow up questions, as needed. The data from each interview were recorded, transcribed, coded and analyzed for themes. An email with the transcription was sent to each participant to ensure the accuracy of thoughts and ideas.

Information obtained in connection to this study remains confidential and is saved on Virginia Tech's Google Drive account for two years following the completion of this study.

Instrument Design

An existing instrument for research questions and interview questions was adapted with permission from Dr. Peter Abboud and Dr. Doug Devore (permission found in Appendix E, F, G). The existing instrument was validated through a detailed online process from Brandman University's Institutional Review Board (BUIRB). Abboud (2017) reviewed the BUIRB's purpose statements, research questions, methodology, instruments, and consent form to ensure the protection and safety of human subjects, and that the study was ethical and complied with all laws. Adaptations of the instrument reflected work with elementary school administrators in Virginia from one school division instead of high school administrators in California. The adapted interview questions used were aligned to the research questions guiding this study. The interview protocol consisted of an informed consent and brief overview of the study. This instrument presented six interview questions that provided probes based on the interviewee's responses. Table 1 illustrates the aligned interview questions and research question one.

Table 1

Alignment of Research Question 1 and Interview Questions

Research Question	Corresponding Interview Questions
What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers?	<p>3. The research tells us that people who embrace challenges, persevere <i>through</i> obstacles, use feedback to improve, and learn from others' success have what is called a "growth mindset" that leads to success in the future. We also know that principals who model this mindset support the growth mindset of classroom teachers. Can you share some of the things you do to model growth mindset as a school leader?</p> <p>3a. What are some situations where you have modeled being a learner for your teachers</p> <p>3c. How have you seen these strategies sustain the growth mindset of teachers?</p> <p>4. Another thing that administrators do to support a growth mindset is to create a school culture of learning where it's safe to take risks and where there is no judgement when things don't go as planned. What are some things that you do to create this positive learning culture? How do you encourage instructional risk taking?</p> <p>4a. How do you celebrate teachers' successes at your school?</p> <p>5. The research shows that adult learning happens when teachers engage in reflection. How do you build in opportunities for teachers to reflect on their learning?</p> <p>5b. How have you seen these strategies sustain the growth mindset of teachers?</p> <p>6. We know that effective feedback helps people learn and contributes to a growth mindset. How do you ensure that teachers receive quality feedback when they are implementing new ideas or strategies?</p> <p>6b. How have you seen these strategies sustain the growth mindset of teachers?</p>

Additionally, Table 2 illustrates the alignment of research question 2 and the interview questions used for data collection in this study. The interview questions aim to collect administrator perceptions about developing and sustaining a growth mindset in teachers by focusing on strategies used amongst classroom teachers.

Table 2

Alignment of Research Question 2 and Interview Questions

Research Question	Corresponding Interview Questions
How do Virginia public elementary school administrators perceive the importance of developing a growth mindset in classroom teachers?	<ol style="list-style-type: none">1. The research shows that people with different mindsets respond differently to challenges, obstacles, and criticism from others. In your opinion, as an elementary school administrator, how do you think effective teachers should respond to challenges, obstacles, and criticism?<ol style="list-style-type: none">1a. This study is specific to how teacher mindset impacts professional learning. Can you share more about how you believe effective teachers should respond to challenges, obstacles, and criticism when it comes to their own professional learning?1b. Why do you believe that the characteristics that you just described are important?2. People with different mindsets also respond differently when they learn about the successes of others. What do you think is the healthiest way for a teacher to respond when he/she learns about the successes of other teachers?<ol style="list-style-type: none">2a. Can you share more about how you believe a teacher should respond to the success of others when it comes to professional learning? For example, the faculty is working to improve on a particular strategy and one teacher in particular has a breakthrough. How should others respond?2b. What role do you think effort plays in success?<ol style="list-style-type: none">2c. Why do you believe that the characteristics that you just described are important?3b. How have you seen that these strategies develop the growth mindset of teachers?4b. How have you seen that these strategies develop the growth mindset of teachers?5a. How have you seen that these strategies develop the growth mindset of teachers?6a. How have you seen that these strategies develop the growth mindset of teachers?

Data Treatment/Management

Data analysis is gathering open-ended data from participants by asking general questions and creating an analysis based on the responses (Creswell, 2014). Creswell (2014) suggested organizing and preparing the data for analysis, reading through the data, coding the data, and

following the 8-step coding process of Tesch. The researcher followed Tesch's (1990, as cited by Creswell, 2014) 8-steps of content analysis. Preparation of the data was utilized to determine that it could be transcribed, verbalized, and transferred into themes (Creswell, 2014). The 8-step process include reminding qualitative researchers of tips such as analyzing their data for materials that can address choosing topics based on past literature and common sense, coding for surprises not anticipated at the beginning of the research and finding codes that are unusual. The data from each interview were recorded, coded for themes, transcribed, and sent via email to each participant to ensure the accuracy of thoughts and ideas.

The research for this study involved minimal risk to the subjects, which meant they were equal to the risks one would encounter in everyday life. Participation in this research was completely voluntary and any information that obtained in connection to this study remains confidential. The researcher and her dissertation chair were the only ones with access to the data. All data were reported without reference to any individual(s) or institution(s). Pseudonyms used were Administrator A, Administrator B, and Administrator C. Audio transcripts were destroyed upon completion of the transcription and the member check procedures. Information obtained in connection to this study remains confidential and is saved on Virginia Tech's Google Drive account for two years following the completion of this study.

Reliability and Validity

Qualitative validity means that the researcher checked for accuracy of the findings, while qualitative reliability (Creswell, 2014; Gibbs, 2007) indicated the researcher's approach was consistent across different researchers and projects. The researcher set up a detailed case study protocol and database. The data from each interview were recorded, transcribed, coded, and analyzed for themes. Common themes were grouped together using open coding.

Each transcript was checked for validity to ensure no drifts of codes or shifts of meaning during the coding process. An email including the transcription was sent to each participant to ensure the accuracy of thoughts and ideas. Tables are utilized to show the common elements found in the participants' interview transcripts. Tables represent common highlights, similar words and phrases, and exact words, when the interviews focused on the perceived fixed and growth mindsets of teachers.

Timeline

Virginia Tech's IRB granted approval for human research in March 2021. Interviews were conducted and completed during the spring 2021 semester. Individual participants spent 20–30 minutes completing a virtual interview via the Zoom online platform during the months of April and May. The data from each interview were recorded, transcribed, and sent via email to each participant to ensure the accuracy of thoughts and ideas.

Methodology Summary

The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. The researcher interviewed administrators in elementary schools in the selected Virginia school division. The interview questions were aligned to the two research questions. All interview questions were developed to collect data to answer research questions guiding the study. After reviewing transcriptions, notes, and common themes, the researcher sought to account and control for personal bias.

Chapter Four

Analysis of Data

The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. Dweck (2006) found that having one out of two mindsets—fixed or growth—shapes our behavior at a very young age and develops our relationship with success and failure. People with a fixed mindset believe their basic abilities, intelligence, and talents are fixed traits (Dweck, 2006). Furthermore, Dweck (2006) explained that people with a growth mindset understand that their talents and abilities can be developed through persistence, teaching, and effort. Blackwell et al., (2007) showed students possessing a growth mindset showed academic tenacity and continuous improvement than those with a fixed mindset.

This research sought to highlight effective strategies that elementary administrators use to support, develop, and sustain a growth mindset in classroom teachers. The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. Two research questions frame this study: *What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers and how do Virginia public elementary school administrators perceive the importance of developing a growth mindset of classroom teachers?* This study identified evidenced-based practices utilized in a small, rural Virginia county by elementary administrators that supported high-yielding student achievement.

Data Collection

This study used a qualitative research design to explore and identify the strategies utilized to develop a growth mindset in classroom teachers. Merriam and Tisdell (2016) shared qualitative research are a blanket term that circumscribes various techniques of describing, decoding, and translating natural phenomena. All interviews were audio-recorded using the Zoom record feature to create an accurate and precise transcription of the interviews to analyze data. Merriam and Tisdell (2016) suggested focusing on the potential of each person to contribute to the development of insight and understanding of the phenomenon versus the number of respondents. This study utilized a nonprobability, purposeful sample (Roberts, 2010).

This purposeful sample was selected based on administrators being trained in fixed and growth mindsets.

This qualitative research applied the interpretation of interview data from administrators in one small, rural county in Virginia. The study involved three elementary administrators located in the school division. The interview protocol involved sharing all interview questions with the participants before agreeing to participate in this study. Each participant volunteered to participate and met the criteria for the study. The three respondents for this research were two elementary principals and one assistant principal. A major disadvantage was the low response of 30% of the sample population. According to Roberts (2010) personal interviews should yield a 95% response rate.

This study, conducted in the Spring of 2021, was conducted using the online platform Zoom for video conferencing. The respondents had a choice of leaving the camera on or off. Before each interview began, participants were provided a mini refresher course reminding them of the fixed and growth mindset research completed by Dweck (2006). All participants were open and willing to share ways in which they support a growth mindset in classroom teachers. Respondents were assured that their personal identity nor the identity of their school would be shared in the dissertation (Roberts, 2010). Each research question correlated to the interview questions, which were provided to participants to solicit feedback. Table 3 shows how the research questions guiding this study aligned with the interview questions. The interview questions asked administrators to explain their beliefs on topics like perseverance, feedback, modeling, risk-taking and the importance of how teachers respond when tasked with these commonalities.

Interviews were audio recorded and transcribed using the online tool “Otter” for further analysis. Audio transcriptions were reviewed multiple times by the researcher and confirmed by each participant for accuracy of thoughts and ideas before coding and analysis. Each transcript was checked for validity to ensure no drifts of codes (Creswell, 2014; Gibbs, 2007). Common themes were grouped together manually using open coding and compared with codes from the online tool Otter.

Reported Data by Study Participant

The population for this qualitative study consisted of three administrators from a small, rural county in Virginia. These administrators provided feedback by answering the questions

above (see Table 1 and Table 2) as defined by the research questions. Table 3 precedes responses by the administrator, representing the common elements, similar words and phrases, and exact word responses found in the participants' interviews focusing on the perceived growth and fixed mindset of teachers.

Table 3

Alignment of Research Questions and Interview Questions

Research Questions	Corresponding Interview Questions
<p>1. What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers?</p>	<p>3. The research tells us that people who embrace challenges, persevere <i>through</i> obstacles, use feedback to improve, and learn from others' success have what is called a "growth mindset" that leads to success in the future. We also know that principals who model this mindset support the growth mindset of classroom teachers. Can you share some of the things you do to model growth mindset as a school leader?</p> <p>3a. What are some situations where you have modeled being a learner for your teachers?</p> <p>3b. How have you seen that these strategies develop the growth mindset of teachers?</p> <p>4. Another thing that administrators do to support a growth mindset is to create a school culture of learning where it's safe to take risks and where there is no judgement when things don't go as planned. What are some things that you do to create this positive learning culture? How do you encourage instructional risk taking?</p> <p>4a. How do you celebrate teachers' successes at your school?</p> <p>4b. How have you seen that these strategies develop the growth mindset of teachers?</p> <p>5. The research shows that adult learning happens when teachers engage in reflection. How do you build in opportunities for teachers to reflect on their learning?</p> <p>5a. How have you seen that these strategies develop the growth mindset of teachers?</p> <p>6. We know that effective feedback helps people learn and contributes to a growth mindset. How do you ensure that teachers receive quality feedback when they are implementing new ideas or strategies?</p> <p>6a. How have you seen that these strategies develop the growth mindset of teachers?</p>

(continued)

Table 3 (cont.)

Research Questions	Corresponding Interview Questions
<p>2. How do Virginia public elementary school administrators perceive the importance of developing a growth mindset in classroom teachers?</p>	<ol style="list-style-type: none"> 1. The research shows that people with different mindsets respond differently to challenges, obstacles, and criticism from others. In your opinion, as an elementary school administrator, how do you think effective teachers should respond to challenges, obstacles, and criticism? 1a. This study is specific to how teacher mindset impacts professional learning. Can you share more about how you believe effective teachers should respond to challenges, obstacles, and criticism when it comes to their own professional learning? 1b. Why do you believe that the characteristics that you just described are important? 2. People with different mindsets also respond differently when they learn about the successes of others. What do you think is the healthiest way for a teacher to respond when he/she learns about the successes of other teachers? 2a. Can you share more about how you believe a teacher should respond to the success of others when it comes to professional learning? For example, the faculty is working to improve on a particular strategy and one teacher in particular has a breakthrough. How should others respond? 2b. What role do you think effort plays in success? 2c. Why do you believe that the characteristics that you just described are important? 3c. How have you seen these strategies sustain the growth mindset of teachers? 4c. How have you seen these strategies sustain the growth mindset of teachers? 5b. How have you seen these strategies sustain the growth mindset of teachers? 6b. How have you seen these strategies sustain the growth mindset of teachers?

Administrator A

When asked about how effective teachers should respond to challenges, obstacles, and criticism, Administrator A stated, “I think we all need to be open-minded. Students learn differently today than they did 10 or 15 years ago” (3:21).

Administrator A had this to say about growth mindset,

I believe teachers need to be open- minded and therefore, they need to be open to change. And they need to have a growth mindset with our students in that they need to see that learning is different. Children learn in a different way. They have to be open and willing to teach in a different way, looking at the whole child, and seeing what's best to meet their individual needs and what's most important. (3:21)

Administrator A suggested coaching sessions with the teachers to show that administrators are in the trenches as well (7:29). To support teachers in this effort, she mentioned coaching by explaining,

We each take teachers every quarter, and we go in and do coaching sessions with them. The teacher will teach, and together then myself, or the coach, or the AP, then we teach a lesson, we debrief about it. We plan ahead of time to help everyone grow not only the teacher, but it also helps us in education. (7:29)

Administrator A worked in PLCs, “giving teachers an opportunity to plan and reflect on things that worked, things that didn't work and bringing those things together” (13:01). She shared that working collaboratively with staff in PLCs with teachers allows her to sustain a growth mindset by “giving strategies, other resources, and just a safe place to talk and say this is what has worked” (13:01). She utilizes school divisions observation tools and formal and informal walkthroughs to provide immediate feedback sharing,

I compliment them if I'm doing an observation or walkthrough, kudos! And then something I do is, I always try to put notes in teachers' boxes, celebrate them...So always trying to make sure we recognize when you're going above and beyond for students. (11:52)

If an observation is more concerning, Administrator A may send in her reading coach and then the next week, “I might go in the next week or two and observe that teacher to make sure that the follow through was there. We tag-team our notes” (8:45).

Administrator A felt that it was important for her school family to know that “we're in this together” (13:50). Additionally, Administrator A stated,

We can always learn from one another. We shouldn't see it as a competition, or I'm better than you are. The strength that one teacher brings to the table, the other teacher may have strengths in a totally different area. We need to capture those strengths. We

need to build on them and just celebrate those successes and learn from one another.
(4:54)

To further this notion Administrator A believed, “teachers are lifelong learners, and I feel that we can learn from one another. We always have to celebrate one another. If we can’t celebrate one another, it’s not a good collaborative, cohesive team” (6:29).

Finally, Administrator A emphasized that growing and sustaining growth mindset takes, “flexibility for trial and error, collaboration, and sharing” (10:00). Administrator shared that it was okay for teachers to know that mistakes are allowed. Providing “opportunities to share, planning, data talks, and PLCs” are structures that this administrator felt could lead to collaboration (13:50). See Table 4 for additional themes that emerged from Administrator A.

Table 4

Administrator A – Identified Actions

Teacher Actions	Administrator Actions
Be open minded	Provide opportunities for peer observations
Recognize that students learn differently	Celebrate achievements
Model a growth mindset with students	Create a family culture
Be life-long learners	Reflect and rework
Work collaboratively with their peers	Encourage scaffolding and vertical team planning
	Coach teachers through planned coaching sessions
	Complete walkthrough observations and provide feedback
	Have open and honest communication during PLCs

Administrator B

Administrator B shared, “all teachers in fact, I think all people should be open-minded to challenges, obstacles, and criticisms because that’s reality” (2:51). She pointed out that perfection is not possible so people should be open to growth and improvement. Celebrating the successes of others was important to Administrator B. She further explained celebrating with the thought,

We grow and learn by celebrating any type of accomplishments that are attained by others, especially those that we work closely with. I think we should also be intrigued to find out exactly what they have done to bring about success in that area. (3:40)

Administrator B added to the conversation by stating effort plays a key role. “The more effort we put into anything, the outcome will be greater. While we may not always achieve the highest level based on the effort that we put into the situation, I do believe that there will always be growth when there is effort” (4:41). Likewise, she found ways to celebrate staff by stating, “We have a weekly bulletin that goes out and they’re actually able to highlight one another in that bulletin as well. We call it the M&M Award for meaning and much appreciate” (9:31). Administrator B also celebrates staff through social media outlets and by highlighting teachers through emails sent to the superintendent.

Administrator B discussed professional development to assist teachers. She felt that, “learning with teachers, leading PD, modeling strategies outside of the classroom (meetings) all lead to developing a growth mindset” (5:35). She believed in employing professional development, explaining, “I have never asked my teachers, my staff to do anything I am not willing to do” (5:35). This administrator went on to state,

I learn with them. If there is a professional development task that we have to accomplish based on what has been told to us by school administration, then we all participate in that professional development. Either I am leading the professional development, or I am in the room with them. (5:35)

Beyond leading by example, Administrator B talked about reflection at the beginning of the year and stated,

So often I found when I entered administration that teachers had expectations of students that they didn’t necessarily have of themselves. And so, I started the year off talking about that, so they are aware as they go throughout the year, to kind of keep that in mind,

to offer that grace and extend that grace, and to kind of also exhibit what they expect.
(10:57)

Administrator B focused on conversations with teachers, identifying weaknesses, and providing feedback to combat issues. Teacher preparation and planning takes place in her school to develop a growth mindset. Furthermore, Administrator B believed in difficult conversations stating, I believe in accountability. And I believe in sharing feedback that will help those I serve to be their best selves. We have to have those tough conversations where my leg may be shaking under the table, but we're still talking about it. (12:42)

Finally, she sustains a growth mindset by modeling techniques for teachers and communicating through PLCs to discuss research, strategies for improvement and resources. She communicated:

We have to model it. That's the key. Sometimes it's gonna go well. And sometimes it's not gonna go well. But they get to see both sides of that, and they get to see that they can move on from it. (8:18)

Both Administrator A and B used systematic structures to ensure teachers learn strategies to help them be successful. See Table 5 for a summary of additional themes which emerged from the interview with Administrator B.

Table 5

Administrator B – Identified Actions

Teacher Actions	Administrator Actions
Celebrate accomplishments obtained by others	Employ professional development
Be intrigued about others who are successful	Learn alongside teachers
Be open minded to challenges, obstacles, and criticism	Provide opportunities for teachers to self- assess
Have a mindset conducive to growth and improvement	Model professional development strategies
	Push teachers to plan
	Talk about reflection to grow

Administrator C

Administrator C articulated the following about the importance of teachers having a growth mindset, “I think they should have a growth mindset when it comes to those components. I always think teachers should have a plan of attack. I think they should use any kind of criticism to prioritize and also should use it to have some reflection time as needed” (2:55). Administrator C expressed continuous learning as an obstacle and provided a solution,

I think we have to have some sort of plan to continue it. We shouldn’t just start it and then stop it. We should come back to it. It’s something like doing it in the beginning of summer, and then again two or three times throughout the year in order to continue the process. Reflection will allow you to prioritize and better prepare as a teacher. (5:18)

Administrator C shared that teachers should not get jealous when others are doing well, but “instead, ask them questions related to their success and use some of their techniques in your own practice and classrooms” (5:37). He had a motto about effort sharing, “I think effort definitely plays 90% and I just feel like you get in what you put out. You never know who’s watching and who you will encourage to step up their game” (6:18).

Administrator C added to the conversation of promoting a growth mindset of teachers by supplying teachers with additional information such as “links, good books, and good reads” (7:52). Furthermore, this administrator set an example by continuing his own education. Administrator C is currently enrolled in an educational leadership doctoral program. At the end of the year Administrator C used summative evaluations meetings to review how teachers did and set expectations for the next year. He provided teachers ways to share concerns and sought answers to their concerns and followed up.

Social media was a common theme for Administrator C. He used Twitter to “tweet out any kind of success” (14:40). Furthermore, this administrator visited classrooms and “embarrassed teachers in front of their kids” (14:40). He felt it was important to let the students know why they have the *best teacher*. Administrator C added that “reflection, staying positive, and preparing for the future all help with developing a growth mindset” (16:53). Additionally, he shared that “probing for questions, finding answers, or knowing where to find answers were equally important” (18:52).

Finally, to sustain a growth mindset, Administrator C focused on modeling. This administrator also lauded end of the year summaries, evaluations, and reflection by noting, “I do have a reflection with them towards the end of the year. I try to kind of praise them on the positive and flip the negative with like, perhaps you can even try this next year” (16:53). See Table 6 for a summary of additional themes that emerged from the interview with Administrator C.

Table 6*Administrator C – Identified Actions*

Teacher Actions	Administrator Actions
Be involved in professional learning throughout the year	Share successes on announcements and social media
Model successful techniques in their practice	Build trust by seeking answers to questions not known
Model and process a growth mindset	Reflect with teachers on their learning
Use feedback to reflect and prioritize	Provide feedback
Celebrate the success of others	Celebrate successes in front of students and faculty

Data Analysis

Interview data collected from administrators in a small, rural county in Virginia were analyzed to review common themes. The researcher followed Tesch's (1990 as cited by Creswell, 2014) 8-steps of content analysis. Preparation of the data was utilized to determine that it could be transcribed, verbalized, and transferred into themes (Creswell, 2014). The 8-step process is illustrated in Figure 5.

Figure 5

The 8-Step Coding Process

Step	Description
1.	Develop a sense of the whole by reading all transcripts carefully. Note ideas that come to mind as reading.
2.	Select one document to review while asking yourself, “What is this about?” Avoid thinking about the substance in what is read, but instead the underlying meaning conveyed. Make notes in margins.
3.	Once the task as been applied to multiple participant data, make a list of topics—clustering similar topics identified. Form topics in columns to sort as appropriate (i.e., major topic, minor topic, unique topic, other).
4.	Using the list of topics, review collected data, again, using abbreviations of topics identified as codes next to appropriate segments of transcripts.
5.	Determine the most descriptive phrasing for topics; these become categories. Lists of categories may be reduced by grouping related categories when appropriate. Lines or other tools may be used to indicate interrelationships between categories.
6.	Decide on final abbreviation for each category and alphabetize.
7.	Organize data belonging to each category in one place and complete preliminary analysis.
8.	As necessary, recode data and repeat analysis.

Note. Adapted from J. W. Creswell, 2014, *Research Design: Qualitative, Quantitative, and Mixed Method*.

To cover and understand what was behind the phenomenon, the researcher conducted in-depth, open-ended interviews (Roberts, 2010). Audio was transcribed using the internet tool Otter after the interviews. The researcher reviewed the audio transcriptions several times and had each participant perform member checks by affirming the accuracy of their thoughts and ideas. In alignment with Step 1 in Figure 5, the researcher read each of the three interview transcripts and noted ideas that came to mind during the read. Examples of notes made by the researcher include key points such as steps administrators take to encourage risk-taking and connections

recurring between the sources. After reading all interviews, one interview was selected to apply Step 2. The transcript selected was involved Administrator B. As indicated in the process noted in Figure 5, notes about the underlying meaning were made in the margin of the Administrator B transcript. Since the study had three participants, Step 2 was applied to each transcript in order to determine a list of topics as part of Step 3. As suggested in Step 4, the researcher listed the topics, reviewed the collected data, and identified codes. To identify codes, the researcher organized the data by research question for each administrator. In the next step, the researcher organized the data by interview question. Codes were developed based on the responses for teacher actions and administrator actions (see Tables 4, 5, 6). If there was a relationship, codes were connected by highlighting. A comparison revealed these codes aligned with the internet tool Otter, used for audio transcription. Coding helped discover themes, allowing for transitioning to Step 5, where interrelationships between categories were established based on common themes. The themes are a result of reviewing the relationships presented in coding (see Appendix I). As specified in Step 6, categories were abbreviated and alphabetized. Finally, for Step 7, the data were organized by category to complete a preliminary analysis. Table 7 displays the themes reflected by administrators who supported teachers in developing, growing, and sustaining a growth mindset. Emerging themes included feedback, growth mindset development, professional development, professional learning communities, and valuing a growth mindset.

Table 7

Common Themes from Participant Interviews

Identified Themes	Administrators
Feedback	A, B, C
Growth Mindset Development	A, B, C
Professional Development	A, B
Professional Learning Communities (PLCs)	A, B
Valuing Growth Mindset	A, B, C

Research Question 1 was *What strategies do Virginia public elementary school administrators use to develop and sustain a growth mindset in their classroom teachers?* The most common themes were teaching strategies related to growth mindset, celebrating success, providing professional development to teachers on best practices, and learning from one another. Administrator A shared “the strength one teacher brings to the table; the other teacher may have strengths in a totally different area” (4:54). Administrator B attended professional development opportunities with her teachers and then used the strategies learned in her own presentations and interactions with staff. Administrator C models a growth mindset by researching topics and links and sending the information to teachers. He shared, “I’m always looking for ways to do things. Just probing them, asking them higher level thinking questions” (7:52).

Additional themes were PLCs, administrators leading the way, and providing teachers with feedback. Administrator A completed observations or walkthroughs on observation forms to provide immediate feedback. Administrator B turned to tough conversations sharing, “I believe in sharing feedback that will help those I serve to be their best selves” (12:42). Administrator C felt that leading the way was important and met with his team of teachers regardless of observation year. “I try to kind of praise them on the positive and flip the negative with like, perhaps you can even try this next year” (16:53).

Research Question 2 was *How do Virginia public elementary school administrators perceive the importance of developing a growth mindset in classroom teachers?* The most common themes were being open minded to the needs of students, putting forth effort, recognizing that students learn differently, and continuing to be a lifelong learner. Administrator A emphasized, “I believe teachers need to be open minded, and therefore they need to be open to change” (3:21). Administrator B concurred by stating, “Nothing is ever perfect. And because of that, we have to always have a mindset that is open and conducive to growth and improvement” (2:51). Administrator C stressed moving beyond a *lazy mindset*. He reiterated this when it comes to professional learning, “I guess we’ll start it and then stop. We don’t come back to it. We need to have it three, four, or five times a year” (4:01).

Summary of Results

This chapter contains the results of data analysis and connects the analysis back to the research questions. The four themes resulting from this study summarize the contributing factors

that a small, rural county used to support the growth mindset of classroom teachers. As indicated in Table 7, the themes identified are feedback, growth mindset development, professional development, professional learning communities, and valuing a growth mindset.

Chapter Five

Findings, Implications, And Recommendations

Chapter Five incorporates the findings, implications for implementation, suggestions for future studies, and personal reflections. The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. In this qualitative research study, the researcher explored and identified the strategies utilized to develop a growth mindset in classroom teachers. This qualitative research design applied the interpretation of interview data from administrators in one small, rural county in Virginia. The Virginia school division chosen for this research focused on professional development using fixed and growth mindsets with school administrators (training of the trainer model). Professional development in a train the trainer model utilizes a subject matter expert. This subject matter expert provides professional development to employees in the use of a program and demonstrates how to train others. The respondents of this research were selected because it is assumed that they were able to add insight into the fixed and growth mindsets of classroom teachers at the elementary level based on the training of the trainer's model.

The study involved three elementary administrators located in the school division. Each participant volunteered to participate and met the criteria for the study. The three respondents for this research were two elementary principals and one assistant principal. Two research questions frame this study: *What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers and how do Virginia public elementary school administrators perceive the importance of developing a growth mindset of classroom teachers?* This chapter states the findings, implications, suggestions for future research, and the conclusion. along with the personal reflections by the researcher.

Summary of Findings

After the analysis of the data, several findings were identified. Those findings, their associated data, and research support the following:

Finding One

Administrators indicated that professional development was utilized to support learning strategies and best practices for teachers related to growth mindset. Dweck et al. (2014) suggest most interventions to increase academic tenacity involve activities that differ

from what students ordinarily experience during a normal period. During the Zoom interview, 66% of the administrators (see Table 7) shared the need for implementation of professional development to support learning strategies and best practices for teachers. One administrator mentioned coaching by explaining,

We each take teachers every quarter, and we go in and do coaching sessions with them. The teacher will teach, and together then myself, or the coach, or the AP, then we teach a lesson, we debrief about it. We plan ahead of time to help everyone grow, not only the teacher, but it also helps us in education. (7:29)

Administrator B believed in employing professional development explaining, “I have never asked my teachers, my staff to do anything I am not willing to do” (5:35). Administrator B went on to state,

I learn with them. If there is a professional development task that we have to accomplish based on what has been told to us by school administration, then we all participate in that professional development. Either I am leading the professional development, or I am in the room with them. (5:35)

Farrington et al. (2012) completed a critical literature review on teaching adolescents to become learners, which focused on the role of noncognitive factors in shaping schools. The review found evidence to suggest the best leverage points for improving student performance included helping teachers understand the relationship between classroom context and behavior amongst students, proffering teachers clear strategies for promoting positive academic mindsets in students and building positive academic mindsets in students. The school administrators in this study used professional development as tool to foster effective teachers who challenge their students with high expectations.

Additionally, Farrington et al. (2012) claimed that building teacher capacity helps students learn, understand, and develop. Coaching teachers and leading by example during professional development would be considered as building teacher capacity. The UC Berkeley (2019) described learning strategies that help initiate learning based on activities that demonstrate how students learn best. Essentially, sharing these strategies with classroom teachers could set the stage for academic learning and motivation for students.

Finding Two

Administrators indicated that they educated teachers in growth mindset development. Dweck et al. (2014) noted one of the most important aspects of academic tenacity is the capacity to rise beyond current concerns and persevere in the face of academic setbacks. Administrators felt strongly about educating teachers in growth mindset development. Of the administrators interviewed, 100% supported growth mindset development (see Table 7). Dweck (2006) explains that fixed mindsets are characterized by the belief that one is born with a certain amount of intelligence, moral character, and personality. Individuals with a growth mindset believe that basic qualities are things that can be cultivated through efforts. Further, the research states, “the passion for stretching yourself and sticking to it, even (or especially) when it’s not going well, is the hallmark of growth mindset” (Dweck, 2006, p. 7). Administrator A believed teachers needed to be open to change as well as open-minded stating, “they need to have a growth mindset with our students in that they need to see that learning is different” (3:21). Administrator B also shared, “an open mindset is conducive to growth and improvement” (2:51). To add to the conversation, Administrator C promoted a growth mindset of teachers by supplying them with additional information such as “links, good books, and good reads” (7:52). Furthermore, this administrator set an example by continuing their own education. Administrator C is currently enrolled in a doctoral program for Educational Leadership. Donohoo et al. (2018) claimed that when teams of educators believe they can make a difference, exciting things can happen in a school.

Finding Three

Administrators indicated they implemented Professional Learning Communities so that teachers were provided opportunities for sharing and collaborating amongst peers related to growth mindset. The data revealed 66% of the administrators support (see Table 9) utilizing PLCs, as shown in Table 7. Administrator A worked in PLCs, “giving teachers an opportunity to plan and reflect on things that worked, things that didn’t work and bringing those things together” (13:01). Administrator B talked about reflection at the beginning of the year and stated,

So often I found when I entered administration that teachers had expectations of students that they didn’t necessarily have of themselves. And so, I started the year off talking

about that, so they are aware as they go throughout the year, to kind of keep that in mind, to offer that grace and extend that grace, and to kind of also exhibit what they expect.

(10:57)

Administrator B conducted reflection time in PLC meetings with her teachers to provide an open space for ongoing reflection and dialogue. If administrators want to be instructional leaders, they must move beyond traditional leadership styles to create professional learning communities where the goal is to develop people, including oneself (Thompson et al., 2004). Dufour et al. (2016) described PLCs as an ongoing process of conducting meetings with various collaborative teams to engage in dialogue, collective inquiry, and action-based research to achieve better results for students. Within PLCs, systematic interventions are shared and knowledge about the best ways to achieve goals are reviewed (Dufour et al, 2016).

Finding Four

Administrators provided timely feedback and follow-up to teachers in building growth mindset. According to Hattie and Timperley (2009), feedback is one of the most powerful influences on learning and achievement. The data showed that 100% of the administrators support providing feedback to teachers, as noted in Table 9. The data revealed feedback for data-driven instruction and academic success. Administrator A celebrated teachers by,

I compliment them if I'm doing an observation or walkthrough, kudos! And then something I do is, I always try to put notes in teachers' boxes, celebrate them...So always trying to make sure we recognize when you're going above and beyond for students.

(11:52)

Administrator B shared,

Hearing this question, I think about those tough conversations more so than those easier conversations. Sometimes it's really difficult to give feedback. And for that reason, I know administratively, we've kind of shied away from having those conversations. But I am an accountability principal in every word in every aspect of that word. I believe in accountability. And I believe in sharing feedback that will help those that I serve to be their best selves. We have those tough conversations where my leg may be shaking under the table, but we're still talking about it. We're coming up with solutions. So not just you

did this wrong. But this is an area in which you need to grow. And here are some tools to help you grow. (12:42)

At the end of the year Administrator C used summative evaluations meetings to review how teachers did and set expectations for the next year.

Finding Five

Administrators indicated that they value a growth mindset in classroom teachers.

Table 9 indicates that 100% of the administrators agree that they value a growth mindset in classroom teachers. Administrator A shared, “they need to have a growth mindset.” (3:21).

Dweck et al. (2014) assert that exceptional teachers and schools consistently reinforce the idea that

their children “belong” in school and can thrive and grow. Administrator B said, “I do believe that there will always be growth when there is effort.” (4:41). While Administrator C revealed, “I think they should have a growth mindset when it comes to those components.” (2:55).

Implications of Findings

There are several implications for administrators associated with the findings of this study. These implications could be used as guidelines for developing and sustaining a growth mindset in classroom teachers.

Implication One

School divisions and administrators could ensure teachers are provided opportunities for growth mindset professional development in support of learning strategies for best practices in teaching. This implication is associated with finding one.

School divisions and administrators could ensure teachers are provided opportunities for growth mindset professional development in support of learning strategies for best practices in teaching. Teachers should seek out opportunities for professional development based on strengths and weaknesses. Dweck, et al. (2014) emphasized effective teachers consider the mindset of their students by asking higher level thinking questions, considering students’ gaps in learning, and their emotional needs. Farrington et al. (2012) undertook a thorough assessment of the research on teaching children to learn, with a focus on the role of noncognitive factors in school reform. The review found evidence to suggest the best leverage points for improving

student performance include helping teachers understand the relationship between classroom context and behavior amongst students, proffering teachers' clear strategies for promoting positive academic mindsets in students, and building positive academic mindsets in students. Additionally, Farrington et al. (2012) claimed that building teacher capacity helps students learn, understand, and develop. Using professional development opportunities in these areas could support best practices in classrooms. The hope is that increasing teacher capacity will nudge the students to greater understanding (Dweck et al., 2014).

Implication Two

School divisions and administrators benefit when teachers are trained in growth mindset development. This implication is associated with finding two. School divisions and administrators should ensure teachers are trained in growth mindset development. Dweck (2006) interacted with and instructed students in a seventh-grade mathematics class to determine if there was concrete neuroscientific evidence indicating that the brain, like other muscles in the body, can go stronger with effort. Taught interventions were used to identify and target students who possessed fixed and growth mindsets. The researcher designed and assigned one of two sets of growth mindset workshops to participants where both groups read an article about the capacity to enhance muscle-like intelligence. The study showed that the set perceived as the growth mindset team seemed to react advantageously to the items. As a result, Dweck (2006) concluded that students who learned that their effort could influence outcomes experienced greater success. Devers (2018) stated that fixed mindsets hold people back and those who, "see intelligence as malleable, learn from mistakes and see challenges as obstacles to be conquered" (p. 3). Further, Schroder et al. (2014) asserted that a belief in the malleability of self-attributes (a growth mindset) is associated with better performance and perseverance, especially when individuals are faced with challenging tasks. Research has shown that people holding the growth mindset think that effective achievement is mainly driven by effort, whereas fixed mindset people think that success is mostly determined by natural capacity (Dweck, 2006).

Implication Three

Administrators should consider establishing Professional Learning Communities so that teachers are provided opportunities for sharing and collaborating amongst peers to support a growth mindset. This implication is associated with finding three. Administrators

should form PLCs in schools to provide opportunities for sharing and collaboration amongst peers related to a growth mindset. Thompson et al. (2004) explained,

In professional learning communities the principal encourages teachers to pursue personal development as part of their job. In one approach, the principal helps teachers integrate what they learn in professional development by meeting in small groups to discuss classroom application of those learnings. People read articles and books and form study groups that encourage reflection, inquiry, sharing and dialoguing. Individual and team judgment is valued more than rules, policies, forms, and procedures. Most importantly, everyone is encouraged to take responsibility for their own learning and development, and this is considered to be a norm of the school's culture. (p. 6)

Implication Four

School divisions should encourage administrators in providing timely feedback to teachers and follow up related to developing a growth mindset. This implication is associated with finding four. School divisions should encourage administrators to provide timely feedback to teachers and follow up related to developing a growth mindset to ensure that recommendations have been taken into consideration. Shute (2008) suggested nine guidelines for using feedback to enhance learning, which include:

- focus feedback on the task not the learner,
- provide elaborated feedback,
- present elaborated feedback in manageable units,
- be specific and clear with feedback messages,
- keep feedback as simple as possible but no simpler,
- reduce uncertainty between performance and goals,
- give unbiased, objective feedback, written or via computer,
- promote a learning goal orientation via feedback,
- provide feedback after learners have attempted a solution. (p. 30)

Implication Five

School divisions should provide training for administrators in how to support a growth mindset in classroom teachers. This implication is associated with finding five. School divisions should provide training for administrators in how to support a growth mindset

in classroom teachers. Ricci (2007) emphasized building a growth mindset learning community where students are challenged to change their thinking about their abilities and talents. Ricci (2007) recommends providing lessons on the malleability of the brain, displaying visual posters of growth mindset concepts, enriching the classroom with pictures of people who exhibit a growth mindset, and creating differentiated, responsive classrooms.

Suggestions for Future Research

Major findings of this research reveal the need for additional professional development, growth mindset development, PLCs, and feedback to support teachers in developing, supporting, and sustaining a growth mindset in classroom teachers. Considering the findings and implications, it could be beneficial to conduct research in the following areas:

1. Researchers could consider a study on how the growth mindset of teachers affects student achievement. This research focused on a school division who trained administrators to train teachers in growth mindset development. It would be interesting to look at data from a teacher who possess a growth mindset and determine how and if that mindset is passed on to students.
2. Researchers could consider a mixed-method approach to determine how elementary administrators support a growth mindset in classroom teachers in a specific content area. This research focused on interviews using qualitative data. It would be interesting to add a quantitative approach by using existing testing data in the subject area of reading to determine if student academic progress aligns with the strategies utilized by administrators to develop, support, and sustain a growth mindset in classroom teachers.
3. Researchers could consider focusing on teachers who currently utilize growth mindset practices in the classroom. This research focused on how administrators in a small, rural county developed, supported, and sustained a growth mindset in classroom teachers. It would be interesting to determine how teachers in an urban/suburban environment feel about the support needed from administration to develop, support, and sustain a growth mindset.

Conclusion

The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. Two research questions frame this study: *What strategies do Virginia public elementary school administrators use to support and sustain the growth mindset of classroom teachers* and *how do Virginia public elementary school administrators perceive the importance of developing a growth mindset of classroom teachers?* People who possess a growth mindset tend to challenge themselves in the face adversity and never give up (Dweck, 2006). For example, a basketball player with a growth mindset who gets cut from the team will figure out how to improve their talent and work hard until the next tryout. Whereas a basketball player with a fixed mindset who gets cut from the team, may decide he/she is not good at any sport and will never tryout for anything again. Educators play a role in helping students see the relevance of goals, growth, and academic tenacity (Dweck et al, 2014). The research from this study revealed four major themes: professional development, growth mindset development, PLCs, and feedback. The themes highlight the relationship amongst administrators in a small, rural county who support classroom teachers in growth mindset development. Based on the findings, implications for administrators were recommended for developing and sustaining a growth mindset in classroom teachers.

Personal Reflections

I am a cheerleader! I cheered in junior high school, serving one year as captain. Additionally, during my high school years, I cheered as a member of the junior varsity and varsity cheerleading squad. Fast forward four years and I also went on to cheer in college. Imagine my delight when I had the opportunity to be a middle school cheerleading coach! I was known for my smile, my jumps, my school-spirit, and the ability to be one of the best bases. Throughout the years, I dabbled into other sports; however, cheerleading was always my favorite. Being an athlete came with lots of self-talk. You can do it! Don't quit. Keep trying. Discovering the work of Carol Dweck added a voice to the mantras I had been speaking to myself most of my life.

Dweck (2006) introduced the concept of a growth mindset, stating that depending on the amount of effort put forth over time, you can grow and change your intelligence, personality, and

talent. The opposite, a fixed mindset, is the belief that your intelligence, personality, and talent cannot change. Changing people's beliefs, even the simplest of beliefs, can have profound effects (Dweck, 2006). Dweck's work has done just that for me. My life has been filled with challenges and obstacles that could have caused me to give up. People around me spoke into my life and told me, "It's time for you to stop being a base, and it's time to fly!" I began my doctoral journey focused on reading—one of my educational endorsements, before switching to Adverse Childhood Experiences (ACEs). According to the Center for Disease Control and Prevention, ACEs are the 10 types of childhood trauma measured in the CDC-Kaiser Permanente Adverse Childhood Experiences Study. I could answer YES to seven of the 10 questions related to childhood trauma.

As I began to abandon research topic number two and delve into research topic number three, Dweck's work reminded me that despite my humble beginnings, I should focus on the positive. As I had been taught, I should keep believing in myself and repeating, "I am enough!" In my head I have "quit" the doctoral program many times; however, in my heart I had to strengthen my mindset (growth) and challenge myself. It has been both painstaking and gratifying at the same time. This is a reminder to all reading my research on growth mindset to never give up. Joy comes in the morning.

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Appendix A
Human Research Certificate



Completion Date 15-Feb-2021
Expiration Date 15-Feb-2024
Record ID 40987503

This is to certify that:

Karen Settles

Has completed the following CITI Program course:

Not valid for renewal of certification through CME.

Social & Behavioral Research
(Curriculum Group)

Social & Behavioral Research
(Course Learner Group)

1 - Basic Course
(Stage)

Under requirements set by:

Virginia Polytechnic Institute & State University (Virginia Tech)



Appendix B

Superintendent Consent Form

Superintendent's Consent Form

Greetings! I am doctoral student Karen Settles, and as part of my dissertation research for the doctoral degree in Educational Leadership and Policy Studies at Virginia Polytechnic Institute and State University in Blacksburg, Virginia, I am interviewing elementary school administrators to explore how they support a growth mindset in elementary classroom teachers. Isle of Wight County was selected to take part in this interview because of your school division's experience and support in promoting the growth mindset of classroom teachers.

The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. I will be looking to learn about administrator's perception of growth mindset and how they develop and sustain it in teachers.

Participants in the study will be involved in a 30 to 45 minutes that includes six main questions with some follow up questions, as needed. Participation is completely voluntary and any information that is obtained in connection to this study will remain confidential. Interviews will be conducted over the phone or via the online platform Zoom.

There are minimal risks associated with participating in this research study. No promise or guarantee of benefits will be made to encourage participation. All the data will be reported without reference to any individual(s) or any institution(s). If needed, pseudonyms will be used. My university chair, as the primary researcher, and I will be the only researchers and collectors of data.

Your school division may benefit from this research by gauging the feedback from your elementary administrators to further support your initiatives. Based on the results of the data your school division may be able to explore additional ways to develop and sustain the growth mindset of classroom teachers.

Thank you in advance for your consideration. I can be reached via email at settles8@vt.edu or karen.settles@cpschools.com.

Sincerely,

Karen Settles

Appendix C

Administrator Consent Form

Dear Administrator,

Greetings! I am doctoral student Karen Settles, and as part of my dissertation research for the doctoral degree in Educational Leadership and Policy Studies at Virginia Polytechnic Institute and State University in Blacksburg, Virginia, I am interviewing elementary school administrators. You are invited to take part in this interview because you have been identified as an elementary administrator with one or more years' experience as an administrator and you can possibly contribute to the exploration on how elementary administrators support the growth mindset of classroom teachers.

Purpose of the Study: The purpose of this study was to identify the strategies that school administrators indicate they use to develop and sustain the growth mindset in classroom teachers. I will be looking to learn about your perception of growth mindset and how you develop and sustain it in teachers.

Procedures: If you agree to participate in the study, the interview will take 30 to 45 minutes and will include 6 main questions with some follow up questions, as needed.

Participation in this research is completely voluntary and any information that is obtained in connection to this study will remain confidential. Interviews will be conducted over the phone or via the online platform Zoom. At any point during the interview, you may ask that I skip a question or stop the interview altogether. With your permission, I would like to record this interview so that I ensure accurate recording of your responses. After I record and transcribe the data, I will send it to you via email so that you can check to make sure that I have accurately captured your thoughts and ideas.

Risks: There are minimal risks associated with participating in this research study.

Compensation/Benefits: No promise or guarantee of benefits have been made to encourage you to participate; however, you may benefit from collaborating with other administrators on exploring ways to develop and sustain a growth mindset in classroom teachers.

Anonymity/Confidentiality: All the data will be reported without reference to any individual(s) or any institution(s). If needed, pseudonyms will be used. My university chair, as the primary researcher, and I will be the only researchers and collectors of data.

Freedom to Withdraw: This research is completely voluntary, and you can decide to withdraw at any time or choose not to answer questions during the interview without adverse consequences. If you choose to withdraw from the study, please contact the researcher @ (757) 339-4382, via email at settles8@vt.edu or karen.settles@cpschools.com

Statement of Consent: I voluntarily agree to participate in this study. I have read the Consent Form and conditions of this study. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent to participate in this study.

The researcher has my permission to audio record me as part of my participation in this study.

Signature of Participant

Date

Signature of Investigator

Appendix D

Interview Protocol

Good Morning/Afternoon/Evening,

Thank you for agreeing to participate in this interview. As part of my dissertation research for the doctoral degree in Educational Leadership and Policy Studies at Virginia Polytechnic Institute and State University in Blacksburg, Virginia, I am interviewing elementary school administrators. The purpose of the interview is to help identify and describe the strategies that Virginia public elementary school administrators utilize to develop the growth mindset of classroom teachers. I will be looking to learn about your perception of growth mindset and how you develop and sustain it in teachers. The interview will take 30 to 45 minutes and will include 6 main questions with some follow up questions, as needed.

Informed Consent

Participation in this research is completely voluntary and any information that is obtained in connection to this study will remain confidential. All data will be reported without reference to any individual(s) or any institution(s). If needed, pseudonyms will be used. After I record and transcribe the data, I will send it to you via email so that you can check to make sure that I have accurately captured your thoughts and ideas. Audio transcripts and study records will be kept private and stored for three years.

If Interview is over the Phone/Virtual: Did you received the Consent Form I sent you via email? Do you have any questions or need clarification? Given the information in the document, do you agree to participate in this study? [Later ask for an emailed signed copy of the Consent Form for my records]

At any point during the interview you may ask that I skip a question or stop the interview altogether. With your permission, I would like to record this interview so that I ensure accurate recording of your responses.

Do you have any questions before we begin?

Interview Questions

Before we begin, I'd like to give some context for what this study is referring to when it comes to "mindset." For the purposes of this study, we will be using the definitions set forth by the research done by Carol Dweck. Dweck has determined that there are two types of mindset called "growth mindset" and "fixed mindset." Individuals rarely exhibit one type of mindset all the times but tend to behave differently in different situations. Oftentimes, individuals have some form of a moderate mindset. Individuals with a fixed mindset believe that people's abilities are fixed and cannot be changed much. Those with a growth mindset believe that abilities can be changed over time with effort.

Interview question 1: The research shows that people with different mindsets respond differently to challenges, obstacles, and criticism from others. In your opinion, as an elementary school administrator, how do you think effective teachers should respond to challenges, obstacles, and criticism?

Probe 1a: This study is specific to how teacher mindset impacts professional learning. Can you share more about how you believe effective teachers should respond to challenges, obstacles, and criticism when it comes to their own professional learning?

Probe 1b: Why do you believe that the characteristics that you just described are important?

Interview question 2: People with different mindsets also respond differently when they learn about the successes of others. What do you think is the healthiest way for a teacher to respond when he/she learns about the successes of other teachers?

Probe 2a: Can you share more about how you believe a teacher should respond to the success of others when it comes to professional learning? For example, the faculty is working to improve on a particular strategy and one teacher in particular has a breakthrough. How should others respond?

Probe 2b: What role do you think effort plays in success?

Probe 2c: Why do you believe that the characteristics that you just described are important?

Interview question 3: The research tells us that people who embrace challenges, persevere through obstacles, use feedback to improve, and learn from others' success have what is called a "growth mindset" that leads to success in the future. We also know that principals who model this mindset support a growth mindset in classroom teachers. Can you share some of the things you do to model a growth mindset as a school leader?

Probe 3a: What are some situations where you have modeled being a learner for your teachers?

Probe 3b: How have you seen that these strategies develop the growth mindset of teachers?

Probe 3c: How have you seen these strategies sustain the growth mindset of teachers?

Interview question 4: Another thing that administrators do to support growth mindset is to create a school culture of learning where it's safe to take risks and where there is no judgement when things don't go as planned. What are some things that you do to create this positive learning culture? How do you encourage instructional risk taking?

Probe 4a: How do you celebrate teachers' successes at your school?

Probe 4b: How have you seen that these strategies develop the growth mindset of teachers?

Probe 4c: How have you seen these strategies sustain the growth mindset of teachers?

Interview question 5: The research shows that adult learning happens when teachers engage in reflection. How do you build in opportunities for teachers to reflect on their learning?

Probe 5a: How have you seen that these strategies develop the growth mindset of teachers?

Probe 5b: How have you seen these strategies sustain the growth mindset of teachers?

Interview question 6: We know that effective feedback helps people learn and contributes to a growth mindset. How do you ensure that teachers receive quality feedback when they are implementing new ideas or strategies?

Probe 6a: How have you seen that these strategies develop the growth mindset of teachers?

Probe 6b: How have you seen these strategies sustain the growth mindset of teachers?

Alignment of Interview Questions to Research Questions	
Research Question	Corresponding Interview Question
<p>Research Question 1</p> <p>What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?</p>	<p>Questions 3, 3a, 3b, 4, 4a, 4b, 5, 5a, 6, 6a</p>
<p>Research Question 2</p> <p>How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?</p>	<p>Questions 1, 1a, 1b, 2, 2a, 2b, 2c, 3c, 4c, 5b, 6b</p>

End of the Interview

This concludes our interview. Do you have any other information that you would like to add or share regarding your experiences with supporting a growth mindset in classroom teachers?

Within the next week I will send the transcription of our interview through email. If you have any corrections or additions, feel free to send them to me within one week. Thank you very much for your time and support in completing my research

Appendix E
Email to Dr. DeVore

Karen Settles settles8@vt.edu

Mon, Oct 28, 2019, 7:13 PM

Dear Dr. DeVore,

My name is Karen Settles, and I am an Educational Doctoral (Ed.D.) student at Virginia Tech located in Blacksburg, Virginia, a part of the Hampton Roads 2020 Virginia Beach Cohort. I am currently conducting research on growth mindset and grit from the works of Dweck and Duckworth.

While researching, I ran into a dissertation by Peter Abboud, "Supporting a Growth Mindset in High School Classroom Teachers," from which you were dissertation chair. I attempted to reach Dr. Abboud with no success. I am writing seeking consent to design my study from his study. I am interested in completing a qualitative case study with elementary principals in Virginia to see how they support a growth mindset in elementary classroom teachers.

I would love permission to replicate the research questions and interview questions from Dr. Abboud's dissertation, of course while adapting them from high school to the elementary principal. Can you please let me know if you are able to reach Dr. Abboud or if there is a process, I might have to go through for Brandman University to approve such a request? If you require any further information concerning my plans, please do not hesitate to contact me through email. Your swift reply is greatly appreciated as I move forward with working on my dissertation proposal.

Kind regards,

Karen Settles
Doctoral Candidate, Virginia Polytechnic Institute and State University
Dr. Carol Cash, Dissertation Chair

Appendix F
Email from Dr. Devore

Hi Karen

I am sure he would be OK with you replicating his study. I have not spoken with him for a while but will forward your email directly to him and cc you.

Doug

Doug DeVore, Ed.D.

Interim Associate Dean & Professor, School of Education
BUIRB Chair

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www.brandman.edu
A Member of the Chapman University System

Douglas ddevore@brandman.edu

Oct 28, 2019, 7:29 PM

Hi Peter

I hope this email finds you doing well, and you are enjoying life post defense!!

Below is a request from a dissertation student, Karen Settles, seeking to replicate your study. This is not uncommon (my original study from many years ago has been replicated a number of times). Actually, it is nice to have someone validate your research and collect data from a different sample. A student wanting to replicate another study is typically required by their IRB to provide evidence (normally an email communication) that the original researcher is OK with the replication. I have a cc'd Karen on this email and you can reply directly to her at settles8@vt.edu.

If you have any questions, please give me a call or email.

Doug

Doug DeVore, Ed.D.

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Appendix G
Email from Abboud

Peter Abboud pabboud@nvusd.org
to Douglas, me, Peter

Oct 28, 2019, 8:15 PM

Hi Dr. DeVore and Karen,

Sorry that you couldn't get a hold of me. I suspect my old Brandman email has been deactivated by now.

You are absolutely welcome to replicate my study. Please do cite it, of course, and let me know when it is published so that I can read it. I am very interested in your results!

--

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Appendix H

Alignment of Interview Questions to Research Questions

Research Questions	Corresponding Interview Questions	
<p>Primary Research Question What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?</p>	3.	The research tells us that people who embrace challenges, persevere <i>through</i> obstacles, use feedback to improve, and learn from others' success have what is called a "growth mindset" that leads to success in the future. We also know that principals who model this mindset support the growth mindset of classroom teachers. Can you share some of the things you do to model growth mindset as a school leader?
	3a.	What are some situations where you have modeled being a learner for your teachers?
	4.	Another thing that administrators do to support a growth mindset is to create a school culture of learning where it's safe to take risks and where there is no judgement when things don't go as planned. What are some things that you do to create this positive learning culture? How do you encourage instructional risk taking?
	4a.	How do you celebrate teachers' successes at your school?
	5.	The research shows that adult learning happens when teachers engage in reflection. How do you build in opportunities for teachers to reflect on their learning?
	6.	We know that effective feedback helps people learn and contributes to a growth mindset. How do you ensure that teachers receive quality feedback when they are implementing new ideas or strategies?
<p>Sub-Question 1 How do Virginia public elementary school administrators perceive the importance of developing a growth mindset in classroom teachers?</p>	1.	The research shows that people with different mindsets respond differently to challenges, obstacles, and criticism from others. In your opinion, as an elementary school administrator, how do you think effective teachers should respond to challenges, obstacles, and criticism?
	1a.	This study is specific to how teacher mindset impacts professional learning. Can you share more about how you believe effective teachers should respond to challenges, obstacles, and criticism when it comes to their own professional learning?
	1b.	Why do you believe that the characteristics that you just described are important?
	2.	People with different mindsets also respond differently when they learn about the successes of others. What do you think is the healthiest way for a teacher to respond when he/she learns about the successes of other teachers?
	2a.	Can you share more about how you believe a teacher should respond to the success of others when it comes to professional learning? For example, the faculty is working to improve on a particular strategy and one teacher in particular has a breakthrough. How should others respond?
	2b.	What role do you think effort plays in success?
	2c.	Why do you believe that the characteristics that you just described are important?
	<p>Sub-Question 2 What strategies do Virginia public elementary school administrators use to develop the growth mindset of their classroom teachers?</p>	3b.
4b.		How have you seen that these strategies develop the growth mindset of teachers?
5a.		How have you seen that these strategies develop the growth mindset of teachers?
6a.		How have you seen that these strategies develop the growth mindset of teachers?
<p>Sub-Question 3 What strategies do Virginia public elementary school administrators use to sustain the growth mindset of classroom teachers?</p>	3c.	How have you seen these strategies sustain the growth mindset of teachers?
	4c.	How have you seen these strategies sustain the growth mindset of teachers?
	5b.	How have you seen these strategies sustain the growth mindset of teachers?
	6b.	How have you seen these strategies sustain the growth mindset of teachers?

Appendix I
Interview Responses

Question/Probe	Research Question Alignment	Administrator A	Administrator B	Administrator C
<p>Interview question 1: The research shows that people with different mindsets respond differently to challenges, obstacles, and criticism from others. In your opinion, as an elementary school administrator, how do you think effective teachers should respond to challenges, obstacles, and criticism?</p>	<p>Sub-question 1: How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?</p>	<p>I think we all need to be open minded. Students learn differently today than they did five or 10 or 15 years ago. (3:21)</p>	<p>I think all teachers in fact, I think all people should be open minded to challenges, obstacles and criticisms because that's reality. (2:51)</p>	<p>Well, I think they should have a growth mindset when it comes to those components. I always think a teacher should have an attack plan. I think they should use any kind of criticism to prioritize and also should use it to have some reflection time as needed. (2:55)</p>
<p>Probe 1a: This study is specific to how teacher mindset impacts professional learning. Can you share more about how you believe effective teachers should respond to challenges, obstacles, and criticism when it comes to their own professional learning?</p>	<p>Sub-question 1: How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?</p>	<p>And so, I believe teachers need to be open minded, and therefore they need to be open to change. And they need to have that growth mindset with our students in that they need to see that learning is different. Children learn in a different way. (3:21)</p>	<p>Nothing is ever perfect. And because of that, we have to always have a mindset that is open and conducive to growth and improvement. (2:51)</p>	<p>Um, well, I guess, when it comes to professional learning, I think we have to have some kind of plan to continue it. Yeah. I think a lot of times, as far as professional learning, you know, we'll get into, I guess, more of a lazy mindset. I guess we'll start it and then we'll stop it. We don't come back to it. It's something, like doing it in beginning of the summer, and maybe we need to have it two or three or four times throughout the year. So, in order to continue that process or because if we don't, then a lot of</p>

				times we just I feel like teachers that just kind of level off you know. Yeah, that makes sense. Yeah. (4:01)
Probe 1b: Why do you believe that the characteristics that you just described are important?	Sub-question 1: How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?	And they have to be open and willing to teach in a different way. And I think that really looking at the whole child, and seeing what's best to meet their individual needs is what's most important. (3:21)	Nothing is ever perfect. And because of that, we have to always have a mindset that is open and conducive to growth and improvement. (2:51)	I think some of the characteristics isolate them enough. Before you know it reflection, allows you prioritize and then you are just better prepared to as a teacher. So that's what, we try to do here. Wow. (5:18)
Interview question 2: People with different mindsets also respond differently when they learn about the successes of others. What do you think is the healthiest way for a teacher to respond when he/she learns about the successes of other teachers?	Sub-question 1: How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?	I think that teachers are lifelong learners. And I feel that we can always learn from one another. I learned from our teachers in our building every day. And I've been doing this for over 20 years. I learned from my assistant principal every day. And I feel that learning from one another helps us grow. It provides us new teaching styles and teaching strategies. And one thing we do it our school (we haven't done it this year because of COVID), but we do a lot of peer observations. And we do them across grade levels so that teachers can go in and a fifth	I think it should be a celebration. I think that is how again, we grow and learn by celebrating any type of accomplishments that are attained by others, especially those that we work closely with. I think we should also be intrigued to find out exactly what they have done to bring about the success in that area. (3:40)	Oh, well, they should celebrate. We're all you know, we're all one team. So, I say celebrate the successes. It is no need to get jealous. (5:37)

		<p>grade teacher can maybe even capture something a first grade teacher is doing, and modify it to be for fifth grade learning. So, kind of like that scaffolding or that vertical planning. We kind of do that too, with some observations. (4:54)</p>		
<p>Probe 2a: Can you share more about how you believe a teacher should respond to the success of others when it comes to professional learning? For example, the faculty is working to improve on a particular strategy and one teacher in particular has a breakthrough. How should others respond?</p>	<p>Sub-question 1: How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?</p>	<p>They should respond with they are going to help one another and maybe even take that breakthrough and expand it even more. Or if it's a teacher that really hasn't had that breakthrough, but kind of see something that, oh, I could really do this in my classroom, we always have to celebrate one another. If we can't celebrate one another, and be there for each other. It's not a good collaborative, cohesive team. (6:29)</p>	<p>And then try to employ some of those same strategies in our own spaces. So, celebrations are definitely important and then the open mindedness to use some of those strategies where we are in our in our current roles. (3:40)</p>	<p>Probatum, ask them how did they do it? You know, ask questions related to their success and use some of their techniques. Maybe perhaps even their some of their practices and things in your own classroom. That's what personally how I think they should respond. (5:37)</p>
<p>Probe 2b: What role do you think effort plays in success?</p>	<p>Sub-question 1: How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?</p>		<p>I think it plays a key role. The more effort we put into anything, the better the outcome will be. (4:41)</p>	<p>Um, a lot. I think effort plays definitely 90%. Out, right. 90%. I just feel like you get in what you put out. That's kind of like my motto. You're not, if you don't put in, then you're not gonna get</p>

				a whole lot out. Then your effort is infectious. (6:18)
Probe 2c: Why do you believe that the characteristics that you just described are important?	Sub-question 1: How do Virginia public elementary school administrators perceive the importance of developing the growth mindset of classroom teachers?	But I think we can always learn from one another. And we shouldn't see it as a competition, or I'm better than you are. It's we're in this together. And the strengths that one teacher brings to the table, the other teacher may have strengths in a totally different area. We need to capture those strengths. And we need to build on them, and just celebrate those successes and learn from one another. (4:54)	While we may not always achieve at the highest level based on the effort that we put into a situation, I do believe that there will always be growth when there is effort. (4:41)	A lot of times you never know who's watching. If you're productive, you get good after people around you see it, and they'll say, oh, maybe I need to step my game up. Or maybe I need to be doing that. So, I think effort is just important as far your other colleagues and your team that you're on. (6:18)
Interview question 3: The research tells us that people who embrace challenges, persevere through obstacles, use feedback to improve, and learn from others' success have what is called a "growth mindset" that leads to success in the future. We also know that principals who model this mindset support a growth mindset in classroom teachers. Can you share some of the things you do to model a growth mindset as a school leader?	Research question: What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?	That's a great question. And we've done this, where we do coaching sessions with our teachers, we haven't done it this this year, once again, because of COVID. But we will go in me and my assistant principal, my reading coach, and my instructional coach. (7:29)	So, speaking of leading the way, that is another thing that I tried to do consistently in my building is employ that PD that we received in my own presentations and my own interactions with them. (5:35)	I'll just research things and send them links. This guy had a good study on this and all. I'm always sending them information. As far as that goes, I'm telling them good books, good reads. Maybe, this is this person has a good read. So that's kind of like the way I model myself, just growth mindset. I try to quote, maybe some people that are famous; famous authors, some of their practices. I'm always just looking

				for new ways to do things. Just probing at them, asking them higher level thinking questions. (7:52)
Probe 3a: What are some situations where you have modeled being a learner for your teachers?	Research question: What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?	We each take teachers every quarter, and we go in and do coaching sessions with them. The teacher will teach, and together then myself or the coach, or the AP, then we teach a lesson, we debrief about it. We plan ahead of time to help everyone grow not only the teacher, but it also helps us to grow. It keeps us in the curriculum, and in the forefront of education. (7:29)	Absolutely, well, my rule of thumb is that I will never ask my teachers, my staff to do anything that I myself haven't already done or is willing to do. So, I learn with them. If there is a professional development tasks that we have to accomplish based on what has been told us by school administration, then we all participate in that professional development. Either I am leading the professional development, or I am in that room with them. So, I don't ask them to do things that I myself cannot either refer back to give them feedback regarding, or either lead the way. (5:35)	Well, for a one, I always encouraging people to... I'm in school for one. I'm getting my doctorate as well in educational leadership. A lot of people know that and most teachers here know. I just try to research things, especially as far as... definitely for my, departments. (7:52)
Probe 3b: How have you seen that these strategies develop a growth mindset in teachers?	Sub-question 2: What strategies do Virginia public elementary school administrators use to develop the growth mindset of classroom teachers?	I really think, Speaker 1, what has helped us with that is it gives us respect with the teachers more because we're in the trenches teaching with them, and we don't forget what it's like to be a teacher. (8:20)	So, they see the same strategies and information that they've learned in their professional development sessions outside of my space, they see me using it as well. And hopefully that instills in them the	I'll do walkthroughs. Those kind of those kinds of things. (7:52)

			desire to employ some of those strategies. (5:35)	
<p>Probe 3c: How have you seen these strategies sustain a growth mindset in teachers?</p>	<p>Sub-question 3: What strategies do Virginia public elementary school administrators use to sustain the growth mindset of classroom teachers?</p>	<p>We go back and do walkthroughs, my assistant principal, and I have a spreadsheet and we'll go back and do walkthroughs. And we trade up and tag team. So, if I know my reading coach has been in and she did an observation and she might have a concern, then I might go in and then the next week or two and observe that teacher to make sure that the follow through was there. Or just the other week, myself and the reading coach went and observed together. So, we teamed our notes. And then we follow up with the teacher to say, hey, I really like how you did this. And then the reading teacher would say, well, you took this that we learned and you did this, how about if now you include this. So, it's a collaborative partnership with everybody and keeping that communication open. (8:45)</p>	<p>I think it kind of excites them to see it, sometimes used by their leaders. But I think it also shows them that it can happen. So sometimes we think certain tasks are impossible or too hard to attain. But when we see them use with ease, that will sometimes kind of inspire us to try to employ some of those same techniques in our space. (7:05)</p>	<p>Yeah! An example of one that I can tell you, I had a programming teacher. She was wanting to you know, spice up her classroom. She says it's kind of dull. I'm doing lectures. I'm doing some different things. I said, well, why don't you try, Socratic seminar where you're just you're not leading it. You're just kind of like, you're leading it, but you're just asking higher level thinking (questions) to have more conversation within your classroom. I sent her some links and videos. I showed her know how it's done. Here's some great examples. Then she invited me to come in and watch it. So that was, kind of an example, my best one, one of my better ones this year and it worked out. Now she actually uses it like more periodically throughout her lessons and things. (9:25) (Speaker 1) That's good. So, you</p>

				<p>showed her how to be a facilitator, and now she's sustaining that by continuously doing it now and continuing to see, she probably can share some of those with some of her other colleagues. (10:24)</p>
<p>Probe 3a: What are some situations where you have modeled being a learner for your teachers?</p>	<p>Research question: What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?</p>	<p>As this is my sixth year as principal here, third year from my AP. And we really have worked hard to build a family culture here at _____, where teachers are door's always open. So, teachers feel it's a safe space to come and talk to us about anything. And we want to know, you know, what's working, what's not working? And then, you know, if they want to try something new, how we can support them? Do they need materials? Do they need another set of hands do they need things copied? And one thing my assistant principal did, she came to me two years ago and was like, hey, let's do these room transformations. Teachers want to change, turn their</p>	<p>We have to model it. That's the key. And so, like I shared earlier, by modeling it, sometimes it's gonna go very well. And sometimes it's not going to go well. But they get to see both sides of that, and they get to see that they can move on from it. But I'm also going to allow them to see again, the good and the bad, what went well and what didn't. And again, show them that sometimes that will happen and sometimes it will go very well. So, its risk taking absolutely and in every facet of the word it is risk taking. (8:18)</p>	<p>I always come, um, I guess, my approach is to, is to come off to my teachers as this, open always. I'm open minded. I don't come off as a closed minded individual to them. And I think that creates a way of them feeling more open to ask me different questions. You know and come to me so they don't feel like adaunt, and they're gonna feel stupid if they ask me a "stupid question" or their quote or unquote "stupid question." (11:07)</p>

		<p>room and to a pizzeria to do math, or they want to do a construction zone to do perimeter and area. And we had some money leftover and instructional funds. So, I said, "Go for it. Let's do it. "So, we bought all these really cool PT room transformation kits. So, teachers know they can use those supplies and materials to transform their room. (10:00)</p>		
<p>Probe 4a: How do you celebrate teachers' successes at your school?</p>	<p>Research question: What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?</p>	<p>Their success, you know, I compliment them if I'm doing an observation or walkthrough, kudos. And then something I do is, I always try to put notes in teacher's boxes, celebrate them. My AP was just in doing an observation today and she laughs. She's all wonderful, the whole brain lesson and left that teacher a note. So always trying to make sure we recognize when you're going above and beyond for students. (11:52)</p>	<p>We have a weekly bulletin that goes out and we highlight teachers and they're actually able to highlight one another in that bulletin as well. We call it the M&M Award for meaningful and much appreciated. I also have a huge social media presence on several platforms, social media, Instagram, Twitter, Facebook, and we recently even started tik tok. That was more so to reach out to the students here but we highlight are teachers there? Another thing that I do constantly because again, we tend to as</p>	<p>Well, I definitely, do a lot of tweeting. So, I'll tweet out any kind of success. We celebrate those in faculty meetings. We celebrate through email. I'll go to their classrooms sometimes, maybe even embarrass them in front of their kids. You know, you guys got the best teacher. Let me tell you what, Miss So and So just did. Just going to their classrooms telling them how good they are and telling them what I like. Between emails, tweets and celebrations together that's kind of how we celebrate. We'll get on the intercom. (13:28)</p>

			<p>administrators put a lot of things in writing, especially negative things. So, I make it a point to highlight my teachers and emails to the superintendent to notify them when they have accomplished something that is huge and worthy of notifying that level of leadership about, and I'll copy the teachers in that email so that they can see that it went to our leadership, and that they know how proud we all are of their accomplishments. (9:31)</p>	
<p>Probe 4b: How have you seen that these strategies develop a growth mindset in teachers?</p>	<p>Sub-question 2: What strategies do Virginia public elementary school administrators use to develop the growth mindset of classroom teachers?</p>	<p>It engages the children, it gives them real life experiences. And the teachers agree yes, this really worked. This is how I would change it next time. So, we give them that flexibility to trial and error. And then like two teachers used it one day, I'm like, Hey, this is what I would do when I did it. And then the other two teachers you did, I got a twist on it the next day, and said, Hey, I did it this way. So then</p>	<p>Now, I am a huge, huge supporter, and I tell my teachers all the time, that it's so important to prepare. So, I don't believe in taking a chance and not giving a lot of preparation to any anything, whether it's a presentation, whether it is an activity or something that just needs to be done with parents separately from what they would traditionally do. We should always plan accordingly. So, I'm going to push them to plan. (9:31)</p>	<p>Yeah. I would definitely say that it lights a fire. When you call out others in faculty meeting, "Hey guys, I just want to say congratulations to Ms. So, and So... let me tell you about some good things. Not even a Congrats. Let me just imitate what Miss Johnson did. I went to her classroom today, guys, and I have to share this. I'm gonna put you on the spot Miss Johnson. You have some teachers talking about, oh, he</p>

		<p>collaborating and sharing with one another, which I think is just very, very important, but we allow them to be flexible. And thank God and I truly believe in thinking out of the box, what's best for a child. (10:00)</p>		<p>never called me out. What do I need to do to maybe be called out? By doing so you might light a fire or a few. It's infectious, contagious. (14:40)</p>
<p>Probe 4c: How have you seen these strategies sustain a growth mindset in teachers?</p>	<p>Sub-question 3: What strategies do Virginia public elementary school administrators use to sustain the growth mindset of classroom teachers?</p>	<p>Yes, they're still doing it. Like I said, we just did two teacher observations on area and perimeter. Last week, kids had construction hats on, they had the construction vest on. Now we're having to clean more and stuff because of COVID and wipe things down. But they're still doing those things, because that's even what, that's what our kids need! (12:27)</p>	<p>But the other thing I think, is they also see when they don't go well. And so that shows them that there are those opportunities in those times to make some mistakes. And I mean, growth is also making mistakes as well. So, they're able to see that when I'm using those strategies and employing some of those techniques and my delivery to them. (7:05)</p>	<p>Um, yeah. It's an all year thing. Even just for me. Yeah, we don't stop that. It's not just me. We try to do it as a staff, the team. We have these little stuffed animals, little stuffed pigs, and we call them Pack for the Packers. And so, we have these little pigs, our mascot, and we pass those around during every faculty meeting. We let the teachers give it to somebody that they think that did something good. That's another little thing that we have, as far as building chemistry with each other and those kinds of things. (15:53)</p>
<p>Interview question 5: The research shows that adult learning happens when teachers engage in reflection. How do you build in opportunities for teachers to reflect on their learning?</p>	<p>Research question: What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?</p>	<p>PLCs, we have PLCs with our teachers, even you know, now, they're not as often as they were weekly, pre COVID. But we're doing them every other</p>	<p>Believe it or not, we actually talk a lot about reflection at the very beginning of the school year. That is an area that I feel is very important for</p>	<p>Um, well, for one, I can say a good one that I have is at end of the year summary with all my all my department teachers. I meet with, even if they weren't on their</p>

		<p>week. But just giving teachers an opportunity to plan and reflect on things that worked, on things that didn't work and bringing those things. And then you know, I'm in there, my AP is in there, our coaches are in there to give them other strategies, other resources, and just a safe space to talk and say, this is what's worked. (13:01)</p>	<p>teachers. So often, I found when I entered into administration, that teachers had expectations of students that they didn't necessarily have of themselves. And so, I started the year off talking about that, so that they are aware as they go throughout the school year, to kind of keep that in mind, you know, to offer that grace and extend that grace, and to kind of also exhibit what they expect. (10:57)</p>	<p>summative, like evaluation that year, I just meet with all of them. I've already now just finished completing it. I kind of give them like a little review summary. You can maybe instead of, you know how you did this, maybe you can try that next year. (16:53)</p>
<p>Probe 5a: How have you seen that these strategies develop a growth mindset in teachers?</p>	<p>Sub-question 2: What strategies do Virginia public elementary school administrators use to develop the growth mindset of classroom teachers?</p>	<p>It gives teachers that opportunity to share. We do planning in this, but we also do data digs and data walks with those two. It's just really being able to, you know, build our thinking and you know, this strand of the SOL. Okay, guys, we've got to work on this trend, how are we going to work on it together? And so just really having those open and honest communications in our PLCs has been a very rewarding experience. (13:50)</p>	<p>And so, with that being said, we do have, I guess you could call that professional development, because we talk about it early on. But then teachers who are being formally evaluated, also complete a self-assessment tool, where they actually use the evaluation tool that I use, and they kind of self-assess themselves. And they talk about their areas of strengths and weaknesses, I found that a lot of times they are harder on themselves than I am</p>	<p>We just reflect and we just talked about the year and going into next year. What do we think this is going to be? Here's what I think you should do. Here's what I think you can do even better. I try to stick away from the negative. I try to kind of praise them on the positive and flip the negative with like, perhaps you can even try this next year. (16:53)</p>

			in those areas. (10:57)	
<p>Probe 5b: How have you seen these strategies sustain a growth mindset in teachers?</p>	<p>Sub-question 3: What strategies do Virginia public elementary school administrators use to sustain the growth mindset of classroom teachers?</p>	<p>We'll note what we need to tease back and rework. Its things like that. But that open and honest communication feedback, I think is critical. (13:50)</p>	<p>But again, that's important, because that means they've taken the time to really look at each component of the evaluation tool, and look within themselves to identify their strengths and weaknesses. (10:57)</p>	<p>So, I just try to stick away from the negative talk. But I do have a reflection with them towards the end of the year. How the year went on, you know, just tell them, I have a great summer. I also try to tell them make this a "me" time. I talk about other things in reflection like going on vacation, like getting away from this for a while. What are you gonna do you? You need to be spiritually, you know, into this thing. Or it's like, you know, your health and go for a bike ride or read. But, get away from this for a while, the whole body. So big on doing that, reflecting on them with that as well. (16:53)</p>
<p>Interview question 6: We know that effective feedback helps people learn and contributes to a growth mindset. How do you ensure that teachers receive quality feedback when they are implementing new ideas or strategies?</p>	<p>Research question: What strategies do Virginia public elementary school administrators use to support the growth mindset of classroom teachers?</p>	<p>If we're in there observing, we do our observation form, a lot of it came out of CERN through a memory or observation tool that we use as a district. And so, we give that feedback to teachers. We'll meet with them, whether it's a formal observation</p>	<p>Just recently, this week, I had a situation where a teacher had been displaying frustration to the to the students and we know that students they live off of everything that we say and do. So, when that frown hits our face, or when we</p>	<p>I'm always wanting to say I don't like to blow smoke or give them hot air, If I don't know the answer. I always say, I'm going to probe it and I'm gonna get back with you. (18:52)</p>

		<p>or a walkthrough, so they immediately get that feedback. So, then they can circle back with us. (14:49)</p>	<p>slam that book down, or when we walk away in the midst of a conversation, they feel that and while we may not intend for it to come off that way, we deliver that to our students. And so, we have to fix that that's not something we get to do as adults and professionals. And so, in talking to that particular teacher, we had the conversation, we identified the areas of weakness, but then I gave him tools to help him to kind of combat that issue. (12:42)</p>	
<p>Probe 6a: How have you seen that these strategies develop a growth mindset in teachers?</p>	<p>Sub-question 2: What strategies do Virginia public elementary school administrators use to develop the growth mindset of classroom teachers?</p>	<p>And sometimes we'll put wonders on their likes on there to give teachers that information. And then if something really sticks out, we'll share that information in a PLC or a faculty meeting as well. I like how Ms. Such and Such did this, and somebody, may say, "Can you expand on that?" And then, they may expand on it and then a teacher may say, "Oh, I really want to try that with my kids." (14:49)</p>	<p>Hearing this question, I think about those tough conversations more so than those easier conversations. Sometimes it's really difficult to give feedback. And for that reason, I know administratively, we've kind of shied away from having those conversations. But I am an accountability principle in every word in every aspect of that word. I believe in accountability. And I believe in sharing</p>	<p>If don't know it, or if we were reflecting, and they asked me something that I don't know, then I'll go and do the research and get back with them. Typically, they know me, and I'm known to be really on time. If I don't know it gives me a chance to learn something. I just make sure I know the information so that I can be able to give them a quality answer. So whatever questions or reflections we have I</p>

			<p>feedback that will help those that I serve to be them that their best selves. And so, with that being said, we have those tough conversations where my leg may be shaking under the table, but we're still talking about it. And we're coming up with solutions. So not just you did this wrong. But this is an area in which you need to grow. And here are some tools to help you grow. (12:42)</p>	<p>just kind of pride myself on. (18:52)</p>
<p>Probe 6b: How have you seen these strategies sustain a growth mindset in teachers?</p>	<p>Sub-question 3: What strategies do Virginia public elementary school administrators use to sustain the growth mindset of classroom teachers?</p>	<p>PLCs, we have PLCs with our teachers</p>	<p>Because again, you know, sometimes that that could be 30-40 years of learning that bad habit, and we have to figure out how to redirect that. So, I will do some research, most often dependent upon what it is that we're dealing with. And I tried to give the teacher strategies for improvement. And sometimes there's resources that are beyond what I can provide. So, I connect them with other people that can assist. (12:42)</p>	<p>I just want to make sure that I do enough research within myself, I guess, to know the right things to say there to answer their questions. (18:52)</p>