

THE EFFECTS OF A GROWTH
MINDSET IN TITLE I SCHOOLS

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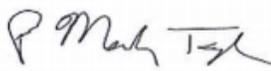
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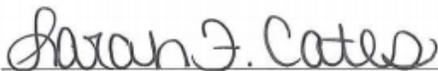
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Abstract

The purpose of this qualitative study was to examine the effects of growth mindset within Title I schools and how the attitudes of teachers and students influence growth mindset, grit, and motivation. With a limited amount of research on this topic, this study aimed to enhance the understanding of mindset to inform the decision-making process relative to increased student achievement. Data sources included a survey, semi-structured interviews with two elementary teachers, a focus group comprised of eight elementary teachers. Analysis of these data enhanced the understanding of what teachers value about their role, and how their roles affect the students, parents, the school, and the community they serve. The study's findings revealed the following themes: teacher attitudes; district support; research; relationships; student attitudes; feedback; incentives; intrinsic motivation; improvement; productive struggle; success; effort; self-belief; challenge; growth; and differentiation.

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I am eternally grateful to my village that has supported me throughout this journey. To my husband Larry, your support has made this dream possible. I am also grateful for my mama – I will never forget at the age of 18, asking if you thought I could teach students to be teachers and you saying I could do anything I wanted. I am so blessed to have supportive family and friends who never stopped encouraging me to continue working towards my goal.

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Lastly, thank you to my former teachers who have, unknowingly, inspired me to fulfill this dream.

Dedication

Everyone has a past, but only a few lucky ones, like me, have a husband who helps heal the wounds of yesterday and give wings for a successful tomorrow. Thank you for believing in me. Without your complete support, this dream would not be coming true. God knew what I needed when He sent me you. I love you, Larry.

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CHAPTER 1: INTRODUCTION AND BACKGROUND

Pajares and Schunk (2002) stated, “the beliefs that children create and develop and hold to be true about themselves are vital forces in their success or failure in all endeavors and, of particular relevance to educators, to their success or failure in school” (p. 2). Focusing on student interest, motivation, and skill development can help promote greater overall student academic achievement (Eccles, 2004).

Numerous studies indicate that students who hold a growth mindset can succeed much more often if they believe that their intellect can be developed. Students who believe that their intellect is immutable hold a fixed-mindset (Dweck, 2009). A fixed mindset is more debilitating, and a growth mindset is more protective when individuals must overcome significant barriers to success, including coming from economically-disadvantaged communities (Yeager, 2016).

A student’s mindset about intelligence is associated with academic achievement, which is also a belief that is potentially amenable to change (Yeager, 2016). The strongest, best-established predictor of academic achievement is the socioeconomic background of families (Reardon, 2011). Reduced access to healthcare, poorer nutrition, higher levels of stress, and reduced access to educational resources are some of economic disadvantages inhibiting students’ academic achievement (Thompson, 2014).

A growth mindset encourages more effort, perseverance, and ultimately higher levels of achievement in the classroom. Students persist with difficult assignments for longer and achieve better results. They are less likely to give up when faced with challenges or give in to assumptions of low ability. Children begin to believe they can achieve and substantially increase self-efficacy.

The implications suggest that for growth mindset to become prevalent in more classrooms, teachers must adopt this mentality and embrace how growth mindset can influence their teaching (Thompson, 2014). Many research-based educational organizations have recommended that more professional development and resources should be offered so that teachers are able to imbed growth mindset into their classrooms. Dweck (2010) identified a growth mindset as being able to improve intellectual abilities with practice. Being open to challenges, emphasizing effort over ability, and valuing mistakes as learning opportunities are important parts of growth mindset mentality. Embracing challenges and mistakes has been regarded as imperative in the individual growth and progression of student (Garlick, 2003).

Gaining confidence in the ability to overcome obstacles is a major benefit that students can expect with a growth mindset that extends well beyond the classroom (Dweck, 2008). Requiring students to be comfortable with making mistakes, take risks, and partake in challenges allowing them to correct deficiencies and expand their cognitive abilities are signs of an education system truly oriented toward learning and personal growth (Dweck, 2007). The brain can make new connections that facilitate deep learning based on the application of neuroscience research in the classroom (Garlick, 2003). Some teachers may not be fully aware of the benefits that can be garnered from inducing a growth mindset. The benefits of introducing this mentality to students can result in greater confidence, increased self-esteem, and greater levels of achievement, even while the application of a growth mindset in the classroom is at its early stages (Grant & Dweck, 2003; Robins & Pals, 2002).

Statement of the Problem

There are gaps in research when trying to understand growth mindset among economically-disadvantaged elementary school students. Several researches have investigated

growth mindset and presented findings associated with self-determination and self-efficacy as individual theoretical constructs. Additionally, few researchers have taken explicit interest in the mindsets of economically-disadvantaged elementary school students. With all the difficulties these students must face, can changing their mindsets make a difference in their academic success? Beliefs about intelligence have important consequences; various environmental challenges cause different consequences for some students.

Theoretical Framework for Study

Self-efficacy, derived from Bandura's social learning theory, is the belief in one's ability to perform the behaviors required to produce a desired outcome and is an important determinant of behavior change (Bandura, 1977). People are motivated to attempt behavior that they feel confident in performing. Those with high self-efficacy who believe they can perform well are more likely to view difficult tasks as something to be mastered, rather than avoided. People with a strong sense of self-efficacy view problems as challenges to be overcome and they recover quickly from setbacks, while people with a weaker sense of self-efficacy avoid challenging tasks, believing them to be beyond their capabilities. Bandura identified four major sources of self-efficacy, the most important being performance mastery. Vicarious experience, social persuasion and emotional arousal are also sources of self-efficacy expectations (Covington, 1992).

Conceptual Framework for Study

Students are surrounded by many environmental disadvantages—parenting practices that impede children's intellectual and behavioral development, single parenthood, parents' irregular work schedules, and inadequate access to primary and preventive health care. How would

leading them to growth mindsets change their trajectory to success? The theoretical perspectives of growth mindset and motivation indicated that this positive attitude toward growth and positive self-talk works in urban and suburban areas.

Positive psychology suggests that a reciprocal relationship may exist between self-concept and the development of expertise, while social psychology reveals that implicit theories about the nature of intelligence can have profound impacts on mindset (Stipek, 1998). There is a growing movement in the behavioral sciences towards exploring more situated, pragmatic, and ontological accounts of human learning. Thus, nurturing psychological constructs through learning environments may empower students, enabling them to learn more effectively.

This research explores the importance of growth mindset on students from economically-disadvantaged communities. These data and analysis gathered from the case studies of a district with a record of strong growth and achievement among economically-disadvantaged students are of critical importance for educators working with students in the Title I settings.

Purpose of the Study

The purpose of this research was to learn how educators foster a growth mindset in their students who live in economically-disadvantaged communities and to learn what outcomes they have observed from their practice. The intention of the study was to learn about the range of strategies and approaches utilized by teachers in the research school. Whether it be fostering and assessing the learning through critical challenges, risk taking, making mistakes, or monitoring progress, the results they notice may have great implications for future research and practice. The goal is to understand how this sample of teachers define individual success and build an environment tailored around growth and progress. The intent of this study was to further

establish the validity of a growth mindset for students of all backgrounds so that this mentality can become a prominent staple in every classroom.

Research Questions

The following questions form the basis of this study:

1. How do growth mindset interventions affect students in economically-disadvantaged communities?
2. What role does motivation play in mindset?
3. What happens when students are empowered to take ownership over their own learning?
4. How can educators encourage students to develop a growth mindset?

Rationale for the Study

Much research has been conducted about the effects of growth mindset on students in classrooms. The research includes mindset approaches working in inner city and suburban schools. Research has not established what a growth mindset can do for students in economically-disadvantaged communities and schools. This study provides insight into the effects of mindset in rural, Title I schools and the change of trajectory into students' lives.

Researcher Positionality Statement

As a 3rd grade student, the researcher observed a teacher tell a student that he/she would never make it out of high school, which helped the researcher develop a passion for this topic. All students have the power within themselves to change their mindsets. As educators, preparing students with the tools for that transformation is an asset to the communities' public education serves. Professionals cannot allow this type of conditioning to continue and it is necessary to enhance teacher training regarding mindset.

Definition of Terms

Determination—a quality a student must continue doing something and not stopping until it is done (Kofi, 2017)

Drive—the urge to attain a goal or satisfy a need (Holmberg, 2015)

Empowerment—being able to control one's life and claim one's rights through the process of becoming stronger and more confident (Speer, 1995)

Extrinsic Motivation—the use of external rewards such as money, fame, grades, and praise to change behavior (Cherry, 2018)

Fixed Mindset—an individual's belief that his/her basic qualities, such as intelligence or talent, are simply fixed traits and cannot be changed (Dweck, 2012)

Grit—the ability to reach long-term goals through perseverance and passion (Duckworth, 2016)

Growth Mindset—the belief students have when they understand that their intellectual abilities can be developed (Dweck, 2014)

Human Capacity—the process of systematically upskilling individuals to benefit society (Stewart, 2013)

Intelligence—the capacity to learn or to profit by experience (Dearborn, 1923)

Intrinsic Motivation—performing action or behavior because you enjoy the activity itself (Deci & Ryan, 1985)

Mindset—the collection of beliefs and thoughts that make up the mental attitude, inclination, a habit or disposition that predetermines a person’s interpretations and responses to events, circumstances and situations (Mindset.com)

Motivation—the reason or reasons one has for acting or behaving in a particular way (Ames, 2013)

PERMA Model—an acronym that stands for the five elements that accounts for what makes up the good life (Seligman, 2011)

Praise—the expression of approval or admiration for someone or something (Apter, 2009)

Purpose—the reason for which something is done or created or for which something exists (Taylor, 2013)

Resiliency—the capacity to recover quickly from difficulties; toughness (Henderson, 2012)

Rigor—the quality of being extremely thorough, exhaustive, or accurate (Sztabnik, 2015)

Self-efficacy—people’s beliefs about their capabilities (Bandura, 1994)

Title I Schools—a school receiving federal funds for students. The basic principle of Title I is that schools with large concentrations of low-income students will receive supplemental funds to assist in meeting student's educational goals. (U.S. Department of Education)

Limitations and Delimitations of the Study

These data were gathered from one elementary school in Middle Tennessee and was limited. It was limited to only the teachers of this specific school. This minimized responses on both questionnaires and interview questions. The study was also limited to the student population in the school where educators are implementing growth mindset strategies for

students. The limited geographical sample affects the ability to simplify the responses of this study in comparison to larger populations. The target population only included educators in this Middle Tennessee school.

Organization of the Study

Chapter One presents the background and purpose of the study. This includes the theoretical foundation and research questions. Chapter Two includes a review of literature connected to the focus of the study, examines related theories, and establishes how the study will contribute to the body of knowledge. Chapter Three contains information regarding the sample population that was investigated, instruments in the study that were used, and procedural information that was used to gather data. Outcomes of statistical evaluations, along with other findings are explained in Chapter Four. Synopses of results, conclusions concerning the research questions, and recommendations for future research are discussed in Chapter Five.

Summary

Students who live in economically-disadvantaged communities tend to achieve lower scores despite school-wide efforts. Students from disadvantaged homes do not attend college at the same rate as other students. Previous research has shown that there are differences in the mindsets of these students, which could contribute to differences in achievement (Turner, 1995).

CHAPTER II: REVIEW OF RELATED LITERATURE

The second chapter presents an overview of the connections that inform this qualitative case study. The first section discusses theories related to the study. Secondly, it discusses the relationship of growth mindset to other educational topics. Finally, this chapter discusses the economically disadvantaged communities in which at-risk students attend public school.

Self-Efficacy Theory

Self-efficacy plays a major part in determining chances for success. Children who become self-regulated learners in the process will be successful as students and as adults because they will have mastered the personal skills and necessary strategies for controlling their own behaviors, interests, and future. Rather than fighting the natural social tendencies of children, teachers who apply Bandura's theories to their classrooms will develop a group of students who are self-motivated and see themselves as agents of their own learning (Educational Curriculum and Assessment for Children, 2018).

Albert Bandura

Bandura stipulated there were four types of self-belief. It was during his studies on adolescent aggression that he became increasingly interested in vicarious learning, modeling and imitation. Mastery experiences allow people to build self-belief through having success in mastering a given task. Once a student masters a task, success allows for a growth in self-belief. Vicarious experiences allow for seeing the success in others and believing those tasks can be accomplished. Seeing other students succeed, allows students to believe that they can do it too. Verbal Persuasion uses others to convey that individuals can succeed at a given task. Being told

they can succeed, people start to believe it too. A person's emotional state will influence a person's self-belief, highs, and lows of confidence.

Human Capacity

The capacity of humans fosters possibilities of development and progress. A cluster study interpreted data about mindset and well-being supporting three groups—non-perfectionists, unhealthy perfectionists, and healthy perfectionists. Healthy perfectionists are the most satisfied with life. Targeting mindset change could be an effective intervention for unhealthy perfectionists (Discover. Learn. Share., 2018).

Academic Contexts

The impact of self-efficacy on academic achievement is significant. Denham, Basset, Zinsler, & Wyatt (2014) affirmed that the development of healthy children must include teaching them to take turns, listen, cooperate, initiate and maintain conversations, joining others in play, and basic relationship skills. A lack of personal ability is the reason many children provide for having social challenges, in turn, impacting a child's self-view (Erdley, Loomis, Cain, Dumas-Hines, Dweck, 1997). Erdley, et al. (1997) conducted a study of how children respond to failure in a social setting. The first study involved 4th and 5th grade students from a small Midwest town in the United States. The sample was mostly Caucasian, with mixed lower and middle socio-economic status. Children completed two questionnaires: one designed to measure children's mindsets and a second to measure children's social confidence. The children were then invited to write a letter to apply to a pen pal club. The researcher encouraged children toward a learning goal by emphasizing joining the club was an opportunity to practice and develop ways of making friends. Similarly, the researcher encouraged a performance goal by emphasizing the club as an

opportunity to see how good the child was at making friends. The child was then informed that the club was unsure of whether to accept the application or not and the child was invited to write a second letter. The participants were told their second letter had been accepted and were then asked to rate their feelings when their first letter was questioned.

“The children’s feelings were measured by asking them to rate their agreement with the following statements: (a) Am I a likable person? (b) Am I not so good at making friends? (c) Are we too different? and (d) Did I not try hard enough?” (Erdly et al., 1997, pg. 267). Some children refused to write a second letter. Children considered to have a growth mindset chose to write longer letters; as those with a fixed mindset chose to write a shorter letter (Steele, 2000). In addition, children with a growth mindset and a learning goal were more likely to communicate positive feelings toward the letter writing, even after experiencing rejection. Children’s mindsets framed how they responded to rejection: those with a fixed mindset were more likely to attribute the initial failure to a lack of personal social skills.

Markovic, Rose-Krasnor, & Coplan (2013) noted that adaptive social coping skills and growth mindset were seen in many of the same children. The study followed 175 children from ages 9-13, from Eastern Ontario, Canada. The participants were mostly Caucasian, and half came from families whose parents had completed some college or university. Shy children were more likely to use internalizing coping and less likely to use approach coping. In addition, children with a fixed mindset were most likely to use internalized coping. Specifically, shyness was related to lower reported approach coping among girls with a fixed mindset and boys with a growth mindset. Shy girls with a fixed mindset may attribute social stressors to personal attributes and may not feel in control of social situations. In contrast, shy girls with a growth mindset show little difference in strategy use from their less shy female peers. Social strategies

used by boys with shyness are also linked to having a growth mindset. Boys with social problems were at an increased risk for peer rejection (Kochenerfer-Ladd & Skinner, 2013).

Dweck and Repucci (1973) studied a group of 5th grade students to understand why some children give up and others persist in activities. The students were given a series of puzzles to solve; the first set of puzzles were solvable, but the second set were impossible to complete successfully. The researchers discovered that after engaging in the task with the unsolvable puzzle, some children's performance deteriorated despite success on the first task. Both groups of children had demonstrated an even puzzle-solving ability at the outset of the study; meaning children's difficulty with the task was attributed to their mindset and not ability. The researcher asked the children to score their abilities after each activity (Dweck & Repucci, 1973). External factors, a belief in a lack of control over outcomes, showed a helpless response to failure for students.

Motivation Theory

A variety of psychological theories have been established to provide explanations about motivation in academic achievement settings. Motivation theories ultimately explain, predict and influence learning behaviors. Stipek (1998) asserted that when individuals know why they behave like they do, they can change the way they behave. While a full discussion of the various theories of motivation go beyond the scope of this research, a brief history of major theories of motivation may be helpful in situating theories of intelligence within the larger context of motivation. During the 1960's, many theorists began the difficult task of searching for reasons why children were starting to show undesired behaviors in the classroom. Theories have moved from observable behavior to psychological variables; such as-beliefs, values and goals.

Early theories of motivation were centered upon stimulus and response. It is standard fare in undergraduate teacher preparation programs for students to learn about reinforcement theory, which conceptualizes motivation entirely in terms of observable behavior. The idea being that some element of reinforcement will induce continued desired behavior or will extinguish undesired behavior. In this timeframe, cognitive motivation came to the forefront, suggesting expectations influenced children in the classroom (Ross & Broh, 2000).

Atkinson's (1964) expectancy x value theory suggested that one must have more than an expectation of successfully completing a task. Students may work hard in expectation of future rewards, not because of the past (Stipek, 1998). Tasks must have value to the students completing it, either pride or usefulness (Champion their potential, 2018).

Goal theory builds upon previous work by establishing a relationship between values and goals. Some researchers believe goals are the reasons students engage in certain academic activities. It is from this work that Dweck's (1988) widely known research regarding theories of intelligence was developed. She developed the idea that performance goals and learning goals allowed for different perceptions of intelligence. These tendencies toward either a fixed or malleable perception of intelligence have a profound impact on students in the classroom and their chances for success later in life. Successfully changing a child's mindset should be considered as much an important intervention as reading and mathematics achievement (Springer Nature, 2018).

Motivation Theory is tasked with discovering what drives individuals to work toward a goal or outcome. Motivation plays an important role in helping students to learn and continue learning (Turner, 1995). Dweck (1999) presented her findings on motivational patterns and how they originate from self-theories and consequences through the experiences that created them.

Smiley and Dweck (1994) studied children's goal orientations following failure. The researchers used the children's task choice and reasoning to measure the children's goal orientation toward either a learning goal of developing their skills or a performance goal of documenting their abilities. Fifty-eight percent of the children chose to rework one of the unsolvable puzzles, citing either enjoyment or desire for challenge as motivation. Among the children who chose to repeat a solvable puzzle, they either cited no reason or a desire to avoid challenge as motivation. The researchers found no sex or age difference among the groups. Children who enjoy learning complete tasks for the challenge. Children who feel the need to perform choose easier tasks when given a choice (Steele, 1990). The researchers concluded the difference between the two goal orientations is that one is, "strongly invested in pursuing challenging tasks that may provide opportunities for increasing skill or pleasure and one invested in avoiding challenges in favor of assured outcomes and demonstrations of competence" (Smiley & Dweck, 1994, pg. 1733).

Additionally, children with a performance goal reported a greater decline in their rating of their ability to solve puzzles. When asked if they thought they could succeed at the unsolvable puzzles if given enough time, children with a learning orientation were significantly more likely to agree. In response to the unsolvable puzzles, the children with a fixed mindset produced a helpless pattern, characterized by greater performance worry, greater disengagement, more negative emotion, and lower confidence toward future tasks. The role of confidence levels in mastery or learning for children was analyzed. Low confidence children with a learning goal were not associated with more negative cognitions or emotions.

Confidence levels do not affect children with a learning goal orientation but have a significant and detrimental effect on children with a performance goal orientation (Springer

Nature, 2018). An important implication of Smiley and Dweck's work (1994) is that goal orientation comes to school with children. This has important implications for teachers of young children in helping students to understand thought patterns, which foster agency and adaptive coping skills.

Intrinsic Motivation

Internal (intrinsic) rewards are enough motivation for most people working toward a goal. Haimovitz, Wormington, & Henderlong-Corpus (2011) investigated views of intelligence and how that affected intrinsic motivation for learning. The participants included 978 students in grades 3-8 from eight schools in Portland, Oregon. They noted that children who enjoy learning are more likely to be persistent, to embrace challenge, and to engage deeply. However, children's intrinsic motivation for learning tends to drop off as they age. Differences were noted about mindset, intelligence, and goals using a survey at the beginning and end of the year (Top Collections at the Archive, 2018).

The researchers identified two key factors in determining whether children maintain their intrinsic motivation for learning: 1) children's beliefs regarding the malleability of intelligence; 2) and their tendency to seek personal validation through academic achievement. Fixed mindsets cause a decline in intrinsic motivation. These students received lower grades (Gherasim, 2012). This study revealed a link between a growth mindset and academic motivation across grade levels, suggesting even younger children are susceptible to the maladaptive effects of a fixed mindset.

Many children have been taught to focus on outcome as opposed to the process to improve their abilities (Cain & Dweck, 1995). Motivation for learning is created through the

mindset; if children can work through the process of learning, more motivation will be created. Extrinsic motivation will become intrinsic motivation with experience. Teachers can help children focus on process versus outcome by exploring learning in depth. For example, teachers may use inquiry learning, which espouses knowledge creation, investigation, research, and exploration.

Extrinsic Motivation

This type of motivation comes from outside (external) a person, such as a paycheck or praise. It has been debated if intrinsic and extrinsic are related or have no similarities. Research has shown they are not dependent of each other. Students are not required to have both types of motivation to carry them through school. They only need the one type that motivates them the most.

PERMA Model

The PERMA model was designed by Martin Seligman with five core elements of psychological well-being and happiness. Seligman believes that these five elements can help people reach a life of fulfillment, happiness, and meaning. This model can also be applied to institutions to develop programs to help people develop new cognitive and emotional tools.

P – Positive Emotion

This element of the model is one of the most obvious connections to happiness. Being able to focus on positive emotions is more than just smiling. It is the ability to be optimistic and view the past, present, and future in a positive perspective.

E – Engagement

It is important in life to find activities that need full engagement. Engagement in the activities in our lives is important for us to learn, grow and nurture our personal happiness.

R – Relationships

Relationships and social connections are one of the most important aspect of life. Humans are social animals that thrive on connection, love, intimacy, and a strong emotional and physical interaction with other humans. Building positive relationships with parents, siblings, peers, and friends are important to spread love and joy. Having strong relationships provides support in difficult times.

M – Meaning

Having a purpose and meaning is essential to living a life of happiness and fulfillment. Rather than the pursuit of pleasure and material wealth, there is an actual meaning to life. Such meaning gives people a reason for their life and that there is a greater purpose to life.

A – Accomplishments

Having goals and ambition in life can promote achievement and a sense of accomplishment. Realistic goals should be established that can help develop a sense of satisfaction when those goals are achieved. Accomplishments in life are essential for individuals to thrive and flourish.

Growth Mindset Theory

Growth Mindset Theory involves a practice that encourages students to view their academic capabilities and intelligence as malleable characteristics. The strategy of growth

mindset is based on two major ideas. The first is that individuals are not limited by their current state of achievement. The brain acts like a muscle: the more it gets worked, the stronger it becomes (learningnetwork.ac.nz, 2018). By leveraging these concepts, the belief that intelligence can change, and growth is nurtured.

Carol Dweck

Dweck's (1999, 2006) theory of mindsets looked for patterns in a child's social and academic ability and children's self-view. Sousa and Tomlinson (2011) expanded on this view to show the role teachers play in a student's mindset of growth, goal setting, and continuing development. Teachers must help children to understand the connection between effort and success. Because effort is changeable, it positions children as agentic in their learning and social development. Children with a growth mindset tend to be more tenacious and resilient (Dweck, Walton, & Cohen, 2014). A further implication of growth mindset theory is on children's motivation for learning and the development of an intrinsic pleasure in developing one's skills. This is important to the development of children as self-regulated learners.

Dweck's research has shown that mindset is a bigger predictor of academic success than innate ability alone (2007). Students with a fixed mindset frequently believe that hard work reveals a lack of ability; they cannot change their abilities—so why try? Effort is not needed based on abilities of students with a fixed mindset (Blackwell, Trzesniewski, & Dweck, 2007). Dweck's research asserted that a growth mindset allows for the belief that effort develops abilities (1999).

Carissa Romero

Carissa Romero has worked to scale up interventions of mindset with schools, community colleges, and online education providers. Video games are being used to improve student engagement and motivation. Incentive structures within these online games promote a growth mindset. Students begin believing that their intelligence can be changed using the gaming system, when it is the effort they put forth to win the game that causes the brain to grow (<http://www.dl.acm.org>).

“Brain Points” is a system that encouraged the development of growth mindset behaviors by directly incentivizing effort, use of strategy, and incremental progress. Through a study of 15,000 children, research has shown that the “brain points” system encouraged more low-performing students to persist in the educational game, Refraction, when compared to a control, and increased overall time played, strategy use, and perseverance after challenge. This showed growth mindset incentive structure had great potential in many educational environments. Yeager (2011) reviewed the theoretical basis for social-psychological interventions—i.e., interventions that sought to change students’ thoughts, beliefs, and feelings about school, learning, and themselves as learners. While interventions serve a purpose for students, they are not quick fixes to complex problems. A modern dialog of the benefits and pitfalls of research-based learning programs is needed.

Michigan State University (2018)

Written programs used to teach growth mindset are not guaranteed to work with successful benefits, based on 2018 research at Michigan State University. This current study fosters the belief that interventions do not work in most circumstances. Interventions have their

place in the world of academic growth but are not to be considered the primary solution for academic growth (ScienceDaily, 2018). Students can benefit from growth mindset interventions; however, these results must be interpreted with caution because very few studies have been performed on interventions.

Growth Mindset and Motivation

Growth mindset and motivation put students in control of their achievements in the classroom. Intrinsic motivation is the key substrate to learning and development. Educating students about growth mindset and how they can improve their learning experience is a step toward increased intrinsic motivation in society (MDPI, 2018).

The constructs of mindset and motivation have been important foci among educators seeking to positively impact student learning and outcomes. Intrinsic motivation is the underlying mechanism for students to have their own agency in acquiring knowledge. There has been a strong body of research on growth mindset and intrinsic motivation in learning (MDPI, 2018). Quantitative approaches have been the main source for assessing students' reports on motivation and learning outcomes (Akioka, 2013). These quantitative findings, while valuable, have not provided understanding of the processes in motivation.

Culture

A classroom culture of growth and progress leads to higher achievements and abilities. Essential to supporting children, educators set the standard for comprehensive, sustainable school improvement and create long-term success by providing a positive classroom culture (McREL International, 2018).

Teachers

Teachers must lead by example that learning and growing is a process. Research has shown that teachers who model and incorporate growth mindset into their own teaching and their language encourage much better results in their students. This includes using language around “effort” rather than “intelligence,” and talking about the process of learning and improving rather than native ability. Modeling is another way to modify or shape behavior aside from the usual reinforcement. Share and discuss biographies, anecdotes, and many other stories about people or certain models and the results of their behavior.

Teachers should present and expose learners to diverse models to avoid stereotyping. For modeling to be effective, students must first pay close attention to the model. Models who are attractive and seem competent and prestigious will receive greater attention than those who do not exhibit these qualities. In addition, students pay more attention to models who exhibit their own personal characteristics. By explaining the behaviors and the consequences, ideas presented by the model are reinforced. Telling students what has happened and why will help them to retain the lesson. Through verbal explanation, teachers and students’ ability to code the information and increase the likelihood that they will be able to reproduce the targeted behavior.

Students probably will not be able to reproduce a symphony after watching a master musician. However, observational learning should help them perform better while learning the basics. Once students have a solid basic skill set, they can master more complex skills in the same manner (Anderson, 2000).

Students

Students with the right motivation and a growth mindset will show higher gains in academics because they think they can, proving themselves correct. Motivation must be a part of classroom instruction. Students are motivated to engage when interested and have a purpose to learn new things (What We Do, 2018).

Growth Mindset and Determination

Significant research shows the importance of determination for students in elementary school through college for enhancing learning and improving important post-school outcomes. Continuous improvement and growth require students to show determination towards reaching goals. They have no one to prove it to but themselves. Determination skills are important for everyone. Working hard and overcoming challenges in achievements mean the most to students. That type of determination in an assignment comes from having a growth mindset (Balanced Life Skills, 2018). Determined children:

- Appreciate their strengths and acknowledge their limitations
- Set demanding, yet realistic goals for themselves
- Create plans to achieve their goals
- Make appropriate choices and decisions
- Accept responsibility for their choices and decisions
- Develop problem-solving skills
- Assert themselves when necessary

- Advocate for themselves
- Achieve their goals

Determined children make positive things happen at school, with friends in their community, and in their families (New Education, 2018).

Drive

Motivation is often defined as a need or drive that energizes behavior toward a goal. Creating a passion for learning is the heartbeat of the growth mindset agenda (PCS Edventures, 2018).

Student Belief

Mixed ability groups have the potential to improve everyone's performance, but the key is helping students believe in themselves. Students start to believe everyone can get smarter if they work at it with the development of a growth mindset (Morehead, 2012). Intelligence can develop over time in individuals with a growth mindset (Blackwell, Trzesniewski, & Dweck, 2007). Students' implicit self-theories about themselves and their abilities have profound effects within educational environments (Dweck & Molden, 2005). By encouraging students' beliefs in a growth mindset, that their brains can and will improve with effort, teachers can help students overcome obstacles that might have previously seemed insurmountable.

Jo Boaler stated evidence shows incredible potential growth of the brain using growth mindset messages in schooling practices. The importance of mindset and the ways that mindset messages are communicated in classroom and grouping practices must be taken into consideration by educators (Boaler, 2018).

When students believe in a growth mindset, they believe that their performance can improve with effort and that they can improve. When students are working from a fixed mindset, they will often see failure as final. Their abilities cannot improve, so the outcome of future attempts is already decided. However, a student with growth mindset will instead see this as a chance to learn and improve the next time.

Purpose

Like adults, students want to know the “why” (the purpose) of learning something; and like many adults, that is enough motivation to learn. A sense of purpose transforms students into confident, efficacious, lifelong learners (Anderson, 2000).

Growth Mindset and Praise

Praise is important to any child; how and what is praised is more important. Praising current positive traits negates the purpose of future performance. Students need to be taught the importance of effort in producing positive outcomes. A fixed mindset on current academic abilities will lead to a decline in motivation to try (Mueller & Dweck, 1998).

Motivation

Praising a child’s efforts has a greater impact on motivation toward growth than praising a child’s current show of intelligence. Hurlock’s (1925) advocated that praising the work of students has a more powerful effect on effort and performance than the criticism of no effort in the process.

Positive Effects of Praise

Praising the process of growth is just as important to students than praising end results. Teachers commonly provide experiences that set students up for success through easy tasks (Masters, 2013). The basic premise for this strategy is that students gain confidence through repeated success in unchallenging tasks, which then enhances their ability. Research indicates that there are no benefits to the learning and growth of the individual, although students may feel more confident after succeeding in an easy task (Masters, 2013). Students may enter a comfort zone that never really allows them to expand their abilities when students are constantly succeeding in tasks that do not challenge them. Rather, it is maintained through a concept known as the zone of proximal development-students learn best when they are challenged slightly beyond their comfort zone. When a student experiences challenges slightly more difficult than he/she is comfortable with, they are likely to make mistakes in the process. If children possess a fixed mindset, some students might feel a sense of defeat or lose motivation after failure (Dweck, 2007). As such, it is important for educators to positively frame failure and promote the idea that mistakes are essential for growth.

A great way for teachers to encourage students to approach challenges is by valuing mistakes as learning opportunities (Boaler, 2013). When students make mistakes, fostering a growth mindset can allow them to see failure is an opportunity to improve. Students trained to have a growth mindset will take the steps necessary to correct any mistakes and strive toward progression (Dweck, 2007). With a classroom environment that celebrates mistakes as opposed to punishing them, students can feel comfortable and confident approaching challenges with the knowledge that they may not succeed on the first attempt. True learning can be developed when students understand the relationship between effort and success (Masters, 2013).

Recognizing and celebrating improved student performance builds self-confidence toward more growth. Providing feedback will lead to the successful pursuit of meaningful goals (NASPA, 2018).

Negative Effects of Praise

It is not effective to praise the person's intelligence. Self-defeating behavior is created through the wrong kind of praise (learningnetwork.ac.nz, 2018). Steele (2011) summarized self-defeating anxiety leads to a threat affecting academic performance. Research showed that given the proper conditions, any group could be put under stereotype threat. Research also suggested that there are ways of defusing this threat through environment and interventions.

The right kind of praise motivated students to learn. Some research suggested that praising students' intelligence builds their confidence and motivation to learn. Others think inherent intelligence is the major cause of achievement in school. Even for the most competent students, this can be harmful (Longo, 2018). Dweck's research showed educators' specific interventions reversed a student's slide into failure during the vulnerable period of adolescence. She focused on how to praise students in ways that yield motivation and resilience (learningnetwork.ac.nz, 2018).

It is human nature to desire the feeling of appreciation and acknowledgement by others after success in a task. Whether it is passing a test, performing well in a sporting event, or even helping with chores, people generally like to have their success recognized. There is a misconception that praise helps to boost an individual's confidence and self-esteem, indirectly enhancing achievement. Praise is something that is often used to tell an individual that he/she did something well (Masters, 2013). According to Kamins & Dweck (1999), there are two types

of praise that can be given to a student after a successful performance, and each has different effects on the individual's academic achievement and mindset. Person praise may be given to a student after a successful performance. It refers to the intelligence or skill level of an individual. For example, a teacher may tell a student that he/she is smart or naturally skilled after attaining a high mark on a test. This form of praise indirectly induces the student with a fixed mindset, having negative effects on an individual (Baumeister, Hutton, & Cairns, 1990). When a student is told that he/she is naturally gifted, he/she may have difficulty conceptualizing the relationship between effort and success. As a result, he/she may feel that he/she does not need to work hard to succeed, because his/her ability and intelligence alone will sufficiently allow him/her to succeed in future tasks.

Process praise may have beneficial effects on future achievement (Kamins & Dweck, 1999). Process praise values effort and determination even when a student is not struggling, unlike person or skill praise that values the natural intelligence of an individual. With this form of praise, a student can associate the relationship between effort and success, which can contribute to future successful outcomes. To illustrate the significance of each type of praise, Mueller and Dweck (1998) examined students given the two types of praise upon successful completion of a task. They found that students who were praised for their natural ability displayed less task enjoyment, less task persistence, and worse performance in later activities compared to students who were praised for their effort. Being told they worked hard on a task, students showed persistence, increased task enjoyment and greater levels of future achievement.

According to Dweck (2007) it is beneficial for teachers to refrain from praising the intelligence or skill level of their students. This small modification can have many implications for developing a growth mindset in the classroom, even though it may be difficult to alter the

way in which teachers praises students. With praise, students value mistakes as learning opportunities, become open to challenges, and develop a greater appreciation for effort.

Growth Mindset and Academic Performance

Performance is the process students go through to learn something new or in a deeper context. When students believe that they can develop their intelligence, they focus on doing just that. Dweck (2007) asserted that an individual's mindset about the malleability of intelligence- the belief that intelligence and mastery are the product of effort- was more predictive of academic success than measures of innate ability. Furthermore, this mindset was responsive to both environmental factors and to interventions.

Focusing on the process of learning using a growth mindset model may be beneficial qualities in a classroom environment (Blackwell, Trzesniewski, & Dweck, 2007). It is fascinating to examine how two groups of students, with very similar grades at one point in time, can experience substantially different trajectories because of their mindsets and beliefs about intelligence. While the results from this study show how a student can benefit academically from a growth mindset, it does not necessarily imply that one who possesses this mentality should automatically expect success in every facet of life. Rather, the adoption of a growth mindset can influence behavioral responses and strategies to problem solving and alter how one approaches and perceives challenges. It is these small changes in an individual's cognitive framework that generates the ability to make the proper decisions that lead to successful outcomes.

Rigor

Embrace rigor, because in that struggle is where students grow academically. Their mindset will no longer allow them to give up without putting forth the effort to learn and complete challenges they face in a rigorous classroom.

Figure 2.1. The Learning Pit

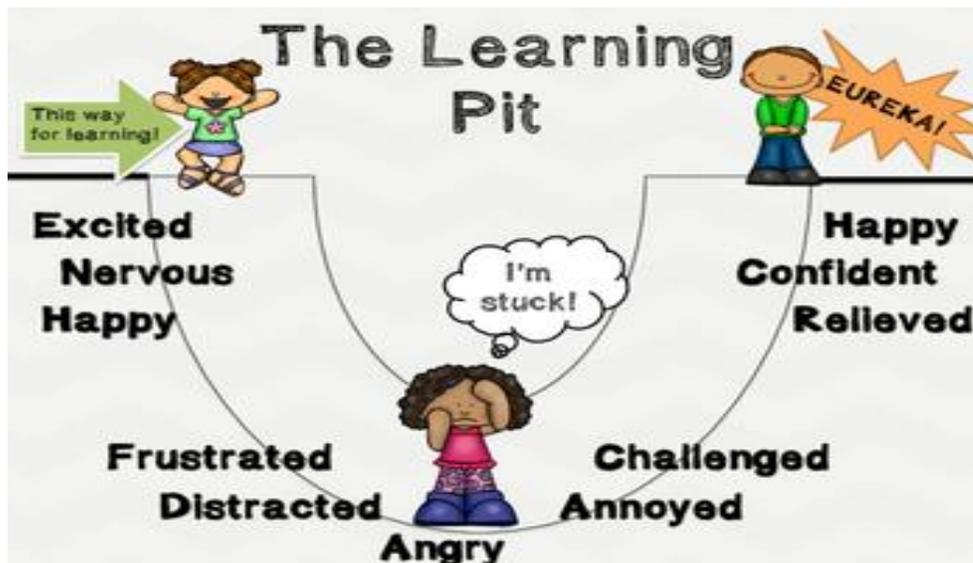


Figure 2.1. “The Learning Challenge is for the teachers, leaders and support staff who wish to guide their students in the development of critical, creative, caring and collaborative thinking. It is a model that provides learners with a language to think and talk about learning. It helps build participants’ resilience, wisdom and self-efficacy. And when it is used as a structure for learning, it can also improve teacher clarity and raise expectations of success.” (The Learning Challenge, 2018)

A positive change in responses to failure and setbacks may result from an individual adopting a growth mindset (Dweck, 2010). In a world where an experience of failure is likely to occur at some point in time, how one perceives this adversity can ultimately influence his/her subsequent actions. Some suggest that explanatory style may contribute to response to setbacks because some individuals are more resilient than others upon failure (Martin-Krumm, Sarrazin, Peterson, & Famose, 2003). Some individuals are likely to experience increased anxiety, lower levels of resiliency, and lower expectations of success. People with this pessimistic explanatory

style believe that their underachievement is caused by their ability that they cannot change, like that of a fixed mindset. Conversely, those with an optimistic explanatory style, believing their performance is not a stable quality and can be improved, mirrors that of a growth mindset. Identifying and working to correct any errors that may have occurred, these individuals are much more likely to respond positively to failure and setbacks.

Resiliency

Resilience is essential for success in the classroom. Resilient individuals correct mistakes and deficiencies—they do not give up (Nussbaum and Dweck, 2007).

Miele, Son, and Metcalf (2013) examined how their metacognitive judgments were affected by theories of intelligence. The researchers were specifically interested in how children's mindsets impacted their perception of effort as a sign of personal failure. The participants included 51 children from both the 3rd and 5th grades from an elementary school in New York. The participants were from culturally and ethnically diverse backgrounds and of lower socio-economic status. The children were asked to read two texts and then answered several multiple-choice questions designed to measure children's judgement of understanding, actual understanding, theory of intelligence, and beliefs about effort. However, half of the children were given a copy of the text using a visually clear text and half were given a copy of the text using an unclear font. These data demonstrated that the children with fixed mindsets regarding intelligence were less likely to endorse a positive view of effort toward achievement. Additionally, children who viewed the role of effort in achievement positively were more resilient toward the unclear font. These children believed their comprehension would remain strong despite the additional challenge. Additional effort needed is a sign for children with a

fixed mindset that they have reached their limit to understanding a task. Becoming self-regulated learners is linked to view of effort and task-persistence (Pellicer, 2003).

Nolan, Taket, and Stagnitti (2014) followed children participating in a study of resilience. The study examined resiliency in children facing challenges such as poverty, parental unemployment or chronic health issues, family violence, bereavement, separation, divorce, insecure housing or insecure employment (Discover. Learn. Share., 2018). Nolan, Taket, & Stagnitti (2014) followed 29 children and their teachers. Teachers supported resiliency through: providing consistency, building relationships, using play, learning from mistakes, and problem solving. Encouraging words and phrases such as, “persistence,” ‘have a go,’ ‘trying your best,’ ‘we all make mistakes to learn more’ were revealed to be important in reinforcing resilience.

People with innovation have ever quit; they have failed, but never quit. They do not stop; they continue to make the changes that are needed for success. This is essential for classroom success. When students see teachers quit, they model similar behavior. It is a vicious cycle of giving up.

Grit

“Angela Duckworth, who is widely regarded as the pioneer of grit research, defines grit as passion and perseverance for goals over the very long-term” (Duckworth, 2011, pg. 17). Duckworth’s (2007) defined grit as consisting of individual effort and interest. Grit and growth mindset are interdependent and mutually reinforcing. Duckworth (2016) stated in a recent TEDTalk discussion, “In fact, a meta-review by the U.S. Department of Education defined grit as perseverance to accomplish long-term or higher-order goals in the face of challenges and setbacks by engaging the student’s psychological resources, such as their academic mindsets.”

Students who have a growth mindset are more likely to persevere toward long-term goals, even in the face of challenges, because they believe they can make progress through hard work.

Pursuing long-term goals can be challenging; grit may be particularly important in these situations, especially academic work (Romer, Duckworth, Sznitman, & Park, 2010). Striving to attain most school-work related goals requires sustained concentration and self-regulation in the face of boredom and setbacks. Good students sometimes lack motivation when it comes to most schoolwork, and instead they rely on rewards like good grades or teacher praise (Duckworth et al., 2011). Nurturing supportive relationships, providing students with autonomy, and offering learning activities at an optimal level of challenge all positively impact students' motivation and academic achievement (Glennon, Hinton, Callahan, & Fisher, 2013). Yet even when students are generally intrinsically motivated, there will always be certain tasks along the way that require taking a long-term perspective and mustering up the will to get the job done. Grit can help students approach learning processes with big picture thinking that emphasizes mastery and process and views setbacks as bumps in the road (Dweck, 2006).

Compelling research indicates that grit is associated with positive academic outcomes. When measured by final grades, standardized tests, formative assessments, academic competitions, attendance, and enrollment into schools, studies have shown that grit is a predictor of academic success (Duckworth, 2011). Moreover, grit is considered a better predictor of success than IQ in both school and the workplace (Duckworth & Seligman, 2005). While research has thoroughly demonstrated the benefits of grittiness in students, it is still unresolved how teachers can nurture grit in students who lack this disposition. Clear understanding is needed to identify the skills that may underpin grit, and how educators can help students develop these skills.

Students with growth mindsets rely on grit to develop their abilities. Seeing failure as a challenge is a springboard for growth and for stretching existing abilities (PCS Edventures, 2018). Farrington et al. (2012) proposed a model for how non-cognitive factors affect academic success. For each of the five non-cognitive factors, they surveyed the literature and assessed its importance and malleability, i.e., whether it was susceptible to intervention. They concluded that targeting mindsets and learning strategies was the most promising approach.

Promoting student achievement, schools must focus on aspects of the school climate that affect the culture of the school (Pellicer, 2003). If staff believe in their students, their students will show them why they do. When staff members walk in their building, they need to have the mindset that they are there for their students' success – academically and social/emotionally. Academic performance will fail if students do not feel success in all aspects of the school environment. They need to know the adults in the building have “their back” so they can focus on achieving academically. Staff do their jobs, so students can do their jobs.

Growth Mindset and Empowerment

Empowering students with strategies for future growth allows them to reach their fullest potential. Goals crafted by the student and goals encouraged by the educator create many opportunities for feedback and goal pursuit (NASPA, 2018). Goals serve to use knowledge, strategies and skills to spark action by leading to interests and discoveries (Locke & Latham, 2002). Inviting students to consider how they might formulate new strategies or access previously unutilized resources to aid them in the process of developing their strengths fosters an ideal growth mindset educational model highlighting the investment of effort and the creation of a strength's growth plan as critical components in a developmental process (Strength Potential, 2018).

Student Control

Allowing students some control in the classroom lets them use these new strategies in a safe environment. Providing students with choices and opportunities for self-direction can support them to understand the connection between their strengths and their personal goals. Offering guidance in the application of their strengths in the most effective ways can elicit feelings of competence (NASPA, 2018). When students view themselves as able to improve their intelligence and their academic abilities through effort, they are more likely to feel internal control over their academic achievement. Growth mindset encourages students to feel in control of their academic performance and leads to increases in academic engagement, achievement, and positivity in the classroom (Evans, 2003).

Self-Efficacy

Through self-efficacy, empowerment allows students to develop and progress confidently toward the goal of learning. Dewey (1938) believed that “the purpose of education is to allow each individual to come into full possession of his or her personal power, a notion that is in alignment with a growth mindset educational approach (p. 18).”

A growth mindset can also foster positive self-esteem—a characteristic related to one’s feelings about themselves and their self-worth, in addition to increases in learning opportunities and resiliency (Robins & Pals, 2002). These individuals blame themselves and feel hopeless if they are unsuccessful in a task after the initial attempt. Individuals who believe that intellectual ability is a fixed characteristic are likely to say negative comments about themselves regarding failure. The main problem with this self-theory of intelligence is that people are likely to experience fluctuations in self-esteem because of inconsistency in performance. Conversely,

deficits in self-esteem after an unsuccessful performance are less likely to occur in people who believe that mental ability is something that can be improved. Those with a growth mindset are less likely to experience fluctuations in self-esteem due to the consistency in which they respond to feedback. Despite poor performance, these individuals are more likely to have an optimistic view of failure, build from their mistakes, and reflect on what they learn. The ability to keep a consistently optimistic and positive attitude on oneself despite failure is an advantageous quality that can benefit an individual in many areas of life.

Despite the abundance of research suggesting that a mindset oriented toward growth and progress can have a substantial influence on one's overall achievement and well-being, there are many people that still believe intelligence is a stable characteristic that dictates success. One sample suggested that this belief of intelligence may cause students to undermine their ability, thus impeding them from reaching their full potential. Over 60% of students display at least some characteristics of a fixed mindset (Dweck, 2008). It is critically important that teachers and students fully understand what intelligence means and how knowledge of brain science research can ultimately be advantageous for personal achievement.

Self-Esteem

Increasing confidence is essential to self-empowerment; taking steps to set and achieve goals—both short and longer-term and developing new skills are a part of the process to increase confidence (Change Something, 2018). As students discover their own strengths, they can share that new information and work to think of other people in terms of their strengths. When educators are mindful of students' strengths, they can help students become empowered while strengthening the mentoring relationship (NASPA, 2018).

Economically Disadvantaged Communities in the United States

Economically disadvantaged communities, like advantaged areas, have unique characteristics. Economically disadvantaged families see the future as having more negative events than positive ones (Robb, Simon, & Wardle, 2009). Gray matter mass in children's brains is affected by poor nutrition at breakfast (Taki et al., 2010). Students who live in economically disadvantaged communities must not only wonder when they will eat a meal, but they also must worry over safety concerns—in their home and their neighborhood. Exposure to community violence contributes to lower academic performance—an unsafe home neighborhood or a dangerous path to school (Schwartz & Gorman, 2003).

Students from economically disadvantaged families demonstrate increased hopelessness over time. They experience disruptive or traumatic events or lack a measure of connectedness—to family, to the community, or to a religious affiliation (Bolland, Lian, & Formichella, 2005). Encouraging relationships with peers from various socioeconomic backgrounds and cultures and provides students with a sense of belonging.

Demographics

The demographics unique to an economically disadvantaged community relate to education levels and livelihoods. Parents from economically disadvantaged families work as much as parents of advantaged families (Economic Policy Institute, 2002). Brain development, academic success, and social competence are all caused by general distress (Evans, Kim, Ting, Teshler, & Shannis, 2007). Distress also reduces attentional control and impairs behaviors (Liston, McEwen, & Casey, 2009), increases chances of impulsivity (Evans, 2003); and working memory diminishes (Evans & Schamberg, 2009). The brain's capacity to learn and remember is

severely impaired from unpredictable stressors (Yang et al., 2003). Children in economically disadvantaged communities have many daily worries. They may have to worry about when they will eat, where they will sleep, and where they will live.

Socioeconomic Status

Socioeconomic status is a measure of a family's relative position in a community, determined by a combination of parents' income, occupation, and level of education. Poverty is the state of one who lacks a certain amount of material possessions or money. However, there has been such an influx of people going under the poverty line that it is now being considered as a major category of the economic status in communities. Until recently, only a small percentage of Americans have been categorized in this manner. Because of education levels and lack of opportunity, the socioeconomic status of most communities is low.

Learning Opportunities

Learning opportunities in economically disadvantaged areas are minimal; opportunities may be brought into the community at cost—a price many cannot afford. Poor children are less likely to go on vacations or on other fun or culturally enriching outings. They are half as likely as well-off children are to be taken to zoos, museums, theaters, or the library (Bradley & Corwyn, 2002). Computers, preschool programs, and having access to literature and educational reading materials are some of the factors that help with the development of academic skills.

Economically Disadvantaged Schools in the United States

When a principal is focused on creating a climate conducive to success, a school is perceived to be successful by its teachers and students (MacNeil, Prater, & Busch, 2009).

Principals should always have the positive mindset of success. When faculty and students see

the positive attitude toward success, they want to work harder for more success. Achievement or mastery is important, and it is essential to show that progress toward those goals is also a success. Students will realize (perceive) that they can succeed academically in the process.

Students in economically disadvantaged communities have a unique set of characteristics. Many students are on free or reduced lunch. Students take groceries home to their families on Fridays just to be able to eat on the weekends using a BACKPACKS program. Valuing education and the importance of hard work are two of the many overlapping values that economically disadvantaged families feel are important for their children to learn (Gorkski, 2008). An open home-school communication between parent and teacher is particularly important for children in economically disadvantaged communities for helping to facilitate better educational outcomes. Children living in this environment are more likely to give up or become passive and uninterested in school (Gorkski, 2008).

Poverty is a major at-risk factor in the classroom that impacts learning (Leroy & Symes, 2001). Children who grow up in economically disadvantaged communities have been known to have a smaller vocabulary than advantaged children do; this by itself raises the risk of failure. Many children on this path are considered failures before they even walk into a classroom. Being able to identify and understand children who are at-risk is critical to support their growth and development. Performing below those from higher socioeconomic backgrounds on tests of intelligence and academic achievement is common for children from economically disadvantaged backgrounds (Bradley & Corwyn, 2002).

Economically disadvantaged students show cognitive problems, including difficulty generating new solutions to problems, difficulty monitoring the quality of their work, high levels of distractibility and short attention spans (Alloway, Gathercole, Kirkwood, & Elliott, 2009).

Demographics

Typically, economically disadvantaged schools have become community centers for families. School may be the only safe place in a student's world. Many studies have shown that parents in economically disadvantaged communities are unable to attend many after school activities involving their children. It is beneficial to include every aspect of a community within the daily school life. A sense of community and pride promotes growth among administrators, businesses, teachers, parents, support staff, students, and any other stakeholder of the school; this includes all taxpayers (Teaching, 2018). Attempts to change instruction successfully is based on level of involvement (Riordan, 2003). Ensuring that their building has a structured learning environment with aligned programs and a supportive atmosphere is the work of a school leader (Teaching, 2018).

Socioeconomic Status

Schools of many economically disadvantaged districts are the biggest job creator in the community. Compared nationally, less economically disadvantaged adults have high school diplomas than in advantaged schools. The unemployment rates in economically disadvantaged school districts are extremely high.

Learning Opportunities

Teachers and other certified staff can create many learning opportunities for students. Poorer communities struggle to meet the learning needs of their students and aid them in fulfilling their potential because of under-resourced schools (Scounsel, 2018). Sadly enough, principals are faced with the grim reality of dealing with little or no money to provide research-based methods to face the current challenges in education today. "Modern education cost more

than ever. Society needs to be aware of the needs and challenges the current world of public education faces to truly change what is happening with education funding” (C. Satterfield, personal communication, June 15, 2017). Using outside resources for schools to be successful has become necessary to create, implement, and evaluate strategies (Teaching, 2018).

Promoting a vision and goals, and by ensuring that processes and resources are in place to allow teachers to teach, will help leaders to influence student learning (Leithwood & Riehl, 2003). Allowing students time to experience the intellectual and social skills needed to become successful human beings makes it imperative that teachers look beyond the economically disadvantaged environment.

Summary

It is exciting to see student and teacher mindsets change and them wanting to put forth the effort to succeed because they now think they can and there is no one in class telling them that they cannot do the impossible. Teachers and students take on challenges and stick to them, not worrying about how smart they will appear (Dweck, 2006). In the growth mindset, students care about learning. Research has found significant positive effects on student academic engagement, achievement, and the development of new skills using growth mindset activities in the classroom. Through a pair of studies, an incremental theory (growth mindset) led to students feeling more capable and more motivated to achieve in mathematics.

By including an aspect of growth mindset that negated societal expectations of poor performance on math tests by women, female students in an experimental condition were able to score much higher on mathematics tests than their female peers who were not exposed to growth mindset. One study investigated the relation between beliefs in malleability and empathy. It

found that growth mindset beliefs towards empathy followed similar patterns regarding beliefs toward academics and intelligence. School systems, administrators, teachers and students all fear innovation. Numerous people are afraid of failure. Collectively, all should all have the mindset of– “What if it does not fail and all students gain achievement?” When students are not afraid to fail, they become unafraid of gaining knowledge and challenging boundaries in their learning (Riordan, 2003).

CHAPTER III: METHODOLOGY

Introduction

The purpose of this study is to learn the effects of mindsets on students living in communities with low resource advantages. This research highlights strategies used in classrooms by teachers in Title I schools with significant academic growth and success. This study encourages educators to consider and explicitly address their students' academic self-efficacy beliefs to provide more engaging and effective instruction. Teacher perceptions of educational performance caused by students' mindsets were studied qualitatively. The approach to research, data, methods, and analysis, along with specifics of participants in the study, are included in this chapter.

Research Questions

- How do growth mindset interventions affect students in economically-disadvantaged communities?
- What role does motivation play in mindset?
- What happens when students are empowered to take ownership over their learning?
- How can educators encourage students to develop a growth mindset?

Research Approach

Perceptions of teachers in the classroom were gathered qualitatively in the research design. Data were gathered from individual teacher interviews and focus groups consisting of several teachers. Qualitative design was used to identify the best strategies for students in economically-disadvantaged communities. A focus group collected data from high-impact teachers, and triangulation was provided through individual teacher interviews and observing

classroom materials, student assignments, student-teacher interactions, and student behavior (Myers & Avison, 2002). This format allowed for data collection to occur through narratives and interviews. Collecting teacher perceptions and finding common themes was the foundation of the study. The voice of the teachers was the most important component of this study. The best strategies to develop a growth mindset in students from economically-disadvantaged areas came from highly effective teachers in the classroom.

An email inviting all classroom teachers in the research school to participate in the study was disseminated, and teachers volunteered to participate via email. All the volunteering teachers in grades 2-5 completed a provided growth mindset questionnaire. Based on the scores from the questionnaire, individual teachers with a high self-efficacy and growth mindset were interviewed regarding their perspectives of a growth mindset in the classroom. Student performance, based on teacher perceptions, was linked to self-efficacy and growth in achievement as another source of data. An interview guide was used during one-on-one interviews facilitated by the researcher. These interviews were recorded and later transcribed. Field notes were also taken to collect observations during the interviews. Each teacher was provided a transcript from the interview to check for correctness and to determine if teachers wanted to clarify any points or make additions.

In addition to being asked questions separately, eight teachers participated in a focus group. Individual interviews with 14 participating teachers, and later, the focus group with eight participating teachers, derived from the one-on-one interviews allowed for an abundance of rich data for research.

The researcher used a focus group to acquire knowledge from participants for a greater understanding of the topic from several viewpoints. One can learn through teacher ideas about

the study topic (Nagle & Williams, n.d.). Obtaining data from communication among members of the group was the emphasized source. Interaction among active participants was the important method used because it helped to clarify the individual's viewpoints. Topics related to the research questions were posed, then individuals used their personal stories and perceptions to expand on the topic. Interpersonal communication was used for interpreting how a growth mindset affects achievement and participation among students (Kitzinger, 1995).

Participants and Setting

One Title I elementary school located in Middle Tennessee was selected to participate in this study. This award-winning school has received recognition for continued growth year after year. The school has a population of approximately 500 students in grades PreK-5 with the following demographics: 35 African American students, 450 Caucasian students, and 15 Hispanic students. According to school data, 87% of students are labeled as economically-disadvantaged, and 18% of students have a disability.

All the general education teachers in grades 3-5 participated during the questionnaire process. Fourteen teachers provided data through individual semi-structured interviews. Eight of the 14 teachers participated for the focus group. Two teachers from each grade level formed the focus group. Using teachers from different grades in the focus group ensured variance among teacher comments. Responses to the initial survey informed the direction of the focus group conversations.

Procedures for Data Collection

The Carson-Newman University Institutional Review Board granted permission for data collection, which was necessary prior to beginning this study. The research school was selected

due to its Title I status. Permission was obtained from the district's director of schools and the school's principal, authorizing data collection. Objectives and related information were fully explained in the district application. All participants completed an informed consent form and were notified that they could withdraw from the study at any time.

Teachers provided pre-test scores from students. Analyzation and comparison of pre-tests and post-tests occurred. Testing data were received from the participating school in grades 2-5 in the areas of English Language Arts and Math.

The focus group of eight teachers met three times. Topics of discussion were provided through knowledge and personal experience of teachers pertaining to growth mindset in classrooms. Audio recordings of each meeting were transcribed and coded in a written journal. The length of the meetings varied between 45 and 90 minutes in duration. During focus group sessions, teacher participants' attitude of how a student's growth mindset is affected by a teacher's perspective of what a student can achieve was collected.

A Pearson Correlation was conducted to determine the relationship between students' mindset and the mindset of their teachers. This was conducted at the school level as opposed to an individual level. All variables were coded, and dummy variables were applied to non-dichotomous variables prior to running analyses.

Coding is a process of all three types of codes: open, axial and selective. The researcher listened to and read transcripts of the focus groups and interviews. The researcher open coded first, using labels (motivation, self-belief, determination, praise, drive and empowerment) for the research, then used axial coding to make connections among all these data. Subsequently, the

research focused more closely on the topic using selective coding. This began in a broad manner with open coding and later emphasized selective coding for all pieces of data.

Finally, peer debriefing and member checks occurred. These two types of data allowed for triangulation of the research. Through member checks, participants were able to review and discuss all data and information gathered to verify the researcher derived from the conversations what the participants contributed to the study. Peer debriefing, also called analytic triangulation, is the process whereby a researcher calls upon a disinterested peer—a peer who is not involved in the research project—to aid in probing the researcher's thinking regarding all or parts of the research process. A colleague reviewed the study to strengthen the process of the research gathering throughout the study.

Theoretical Framework

The theoretical framework for this study is Albert Bandura's belief theory. Bandura (1997) performed research on the topic of beliefs and stated that a person's self-efficacy, or belief in one's own ability to accomplish a goal, is a strong determining factor in the outcome of a person's efforts. His studies revealed how people embrace goals that they believe they can achieve and avoid goals they feel inadequate in reaching. McGarty, Yzerbyt, and Spears (2002) reported that these beliefs about one's ability to accomplish goals are formed through social, cultural, and cognitive experiences. People living in the same area develop common beliefs and attitudes based on similar lifestyles. Zimmerman (2000) stated that self-efficacy is vital to a student's ability to learn. Academic self-efficacy is specific to certain tasks or domains and can depend on former experiences with a subject. Positive academic self-efficacy beliefs could

motivate students to work harder to learn a concept and choose more challenging tasks. Whether positive or negative, students' attitudes and beliefs can shape their futures.

Ethical Considerations

Carson-Newman University authorized the research through an Institutional Review Board. Permission from the principal and school system was also obtained. The teachers willing to voluntarily participate were contacted and informed consent forms were signed.

To respect confidentiality of participants, the name of the school was not stated within the research, and personal names were not used. Permission was secured to audio-record or quote participants, when needed. Transcription of data was consistent and honest. Participants read and verified all transcriptions. Data were stored in journals and on hard drives. Titles and numbers were used to identify participants.

Procedures of Data Analysis

Patterns and themes of self-belief and positivity to growth in the classroom were observed and reviewed. Observations, interviews, and questionnaires were all coded. Identities were protected through the coding process. Referencing of participants was through title and number. Open coding distinguished concepts and categories. Axial coding identified relationships and connections. Peer debriefing examined and evaluated methods, data reported, validity, and credibility.

Summary

Data were gathered through qualitative research methods to answer the research questions. A natural setting allowed participants to take an active lead in the study. Current test

scores were analyzed to show the effects of mindset on performance. The results learned from this study will be beneficial for educators who teach economically disadvantaged students to apply in their teaching practices.

The following steps were utilized in this method of research:

A survey consisted of closed questions was administered to fourteen volunteering teachers. Eight of the fourteen teachers participated in a focus group. The focus group met three times to answer open-ended questions. Interviews and focus group meetings were audio-recorded and then transcribed. Data were coded so that patterns, themes, and connections were identified.

CHAPTER IV: ANALYSIS OF DATA

The purpose of this qualitative study was to show results of the four research questions on growth mindset in rural communities using the case study approach. These data came from the results of a growth mindset survey completed by thirteen participants, personal interviews with two participants, and a focus group consisting of six participants. A link to the survey was sent through email allowing participants to complete the survey at their convenience. From the results of the survey, eight participants were selected to participate in the focus group. Two of the participants were also individually interviewed to establish validity of results and triangulation. For triangulation in the study, the focus group data, interview data, survey data, and artifacts were used to develop the answers of the research questions.

Convenience sampling was used for the selection of participants in this study. The participants teach in grades 2-5 in a multi-award winning district. The names of each of the participants were removed and replaced with descriptors that are used with consistency throughout the analysis and discussion of the findings.

Description of Participants

Demographic information was gathered as an introduction to the focus group and the interviews. Participants answered basic background information questions listed in the interview guide.

Participant 1 has been a full-time educator for sixteen years. He has taught in grades second, third, fourth and fifth. His leadership in the building includes membership on the RTI-B team and as a Dean of Discipline. He has voluntarily attended many professional development sessions on the growth mindset and is an avid reader of Carol Dweck's research.

Participant 2 has been a full-time educator for twelve years. She teaches fourth grade math and science. In the past, she has taught third and fifth grade. For two years, she voluntarily attended UMath seminars provided by the district. UMath and related resources support a growth mindset, where teachers encourage students to grapple with concepts from concrete to abstract, often with a variety of approaches to meet learning needs in their journey through productive struggling within a wide variety of adaptive, accessible learning environments.

Participant 3 has been a full-time educator for six years, only teaching third grade. Her leadership roles include serving as the chairperson of English language arts (ELA). Currently, a student in the leadership program at Cumberland University.

Participant 4 has been a full-time educator for sixteen years as a third-grade teacher. For leadership in her building, she is the third-grade math chair and is a member of the attendance committee. Working in an inclusion class for several years is what sparked her interest in growth mindset research.

Participant 5 has been a full-time educator for five years. While she has previously taught third grade, she is now a fourth-grade teacher. She credits her principal for developing her interest in the growth mindset. She has never participated in a professional development dealing with the growth mindset.

Participant 6 has been a full-time educator for seven years. She currently teaches all subjects in the fourth grade. She previously taught second and third grade. A member of the attendance committee, she is also the science lead for her grade level. She has voluntarily attended several trainings addressing growth mindset.

Participant 7 has been a full-time educator for ten years. She has taught second, third, fourth and fifth grade. She is on the ELA team at the county level. She is also on the Crisis Prevention team to help de-escalate behaviors and physically restrain as a last resort if the student is in danger of harming themselves or others.

Participant 8 has been a full-time educator for twelve years. She teaches fourth grade, teaching math and science. She is not a member of any leadership committee.

Research Questions

The survey and interview questions for this study were designed to facilitate dialogue that would allow an in-depth analysis of the study's four foundational questions:

- How do growth mindset interventions affect students in economically-disadvantaged communities?
- What role does motivation play in mindset?
- What happens when students are empowered to take ownership over their own learning?
- How can educators encourage students to develop a growth mindset?

Thirteen participants completed fifteen true or false statements on the growth mindset survey. This led to finding the eight participants for the interviews and focus group. Survey questions with results are in Appendix A.

Key areas addressed in the interview guide were: (a) teacher perspectives and beliefs, (b) teacher practices, (c) supports and challenges and (d) next steps regarding growth mindset. The participants were asked twenty-eight questions to provide data needed to answer the four research questions. The interview questions are in Appendix B.

As a part of the research, data were collected through personal interviews from two of the participants. Data from these participants classrooms were collected to test the effects of the teacher's mindset on students. One of the participants is considered to have a fixed mindset but willing to explicitly teach growth mindset to students. The other participant has a growth mindset as a teacher. The following charts show the growth of students on a given Common Formative Assessment in Math.

Table 4.1. Results of Common Formative Assessment

	Pre-Assessment	Post-Assessment
Advanced	5%	50%
Proficient	35%	20%
Basic	25%	10%
Below Basic	35%	20%

Class results from a 4th grade classroom that was explicitly taught using growth mindset interventions

Table 4.2 Results of Common Formative Assessment

	Pre-Assessment	Post-Assessment
Advanced	10%	12%
Proficient	16%	41%
Basic	21%	30%
Below Basic	53%	17%

Class results from a 4th grade classroom had an educator with a growth mindset

Dweck, Duckworth and Bandura's self-efficacy theory all played a role into the coding process to identify themes. Through the interviews and focus group, Bandura's self-efficacy

theory became the focus of these data. Self-efficacy, derived from Bandura's social learning theory, is the belief in one's ability to perform the behaviors required to produce a desired outcome and is an important determinant of behavior change (Bandura, 1977). People are motivated to attempt behavior they feel confident in performing. Those with high self-efficacy who believe they can perform well are more likely to view difficult tasks as something to be mastered, rather than avoided. People with a strong sense of self-efficacy view problems as challenges to be overcome and they recover quickly from setbacks, while people with a weaker sense of self-efficacy avoid challenging tasks, believing them to be beyond their capabilities.

When students believe in a growth mindset, they believe their performance can improve with effort and they can improve. When students are working from a fixed mindset, they will often see failure as final. Their abilities cannot improve, so the outcome of future attempts is already decided. However, a student with growth mindset will instead see this as a chance to learn and improve the next time. Growth mindset and motivation put students in control of their achievements in the classroom. Intrinsic motivation is the key substrate to learning and development. Educating students about growth mindset and how they can improve their learning experience is a step toward increased intrinsic motivation in society.

Research Questions and Theme Findings

Focus group members read the transcript to assure the correctness of these data. Peer debriefing was used as another technique to ensure valid information was collected working toward the research questions. A current school leader, the debriefer of this study, is a school principal at the doctorate level. She was able to meet after each meeting with participants. She looked over transcriptions, listened to recordings, and read handwritten notes. The debriefer provided challenge to thinking throughout the study.

Coding occurred at three levels for each research question based on information gathered from the focus group. The open coding process found concepts that participants had in common by answering questions, after reading these data several times, highlighting the topics that were seen more than a few times. The axial coding occurred to find the relationships of the concepts—circling and underlining the connections of the codes. Thirdly, selective coding finished this process. Selective coding allows for the core variable, or theme, to be realized based on all data points. This part of the process looked at all data overall to find the core concept. Coding occurred for each of the four research questions in this study. Surveys, interviews, and artifacts were used to justify the information provided through the focus group. All participants of the focus group were able to meet for three meetings.

Table 4.3 Example of the Coding Process for Question 3—What happens when students are empowered to take ownership over their own learning?

Raw Data	Open Coding	Axial Coding	Selective Coding
<p>“Start early and train students. Consistency is key, YET attitude.”</p> <p>“Biweekly graphs of data with a semester long goal that students document themselves.”</p> <p>“Not all students are going to be mastery, but all students can grow and improve.”</p>	<p>-Showing students ways</p> <p>-Growth is improvement</p> <p>-A lot of growth</p> <p>-Progress monitoring</p>	<p>-Students are improving</p> <p>-Always positive</p> <p>-Have excelled in other aspects of life</p> <p>-All students can grow and improve</p> <p>-YET attitude</p>	<p>Improvement by students</p>

Coding Process used for Theme 1 of Question 3

Question 1—How do growth mindset interventions affect students in economically-disadvantaged communities?

This would be a positive intervention to have in all schools, especially economically disadvantaged communities because it would encourage a sense of meta-cognition and improved student morale among students and faculty. Students living in lower-income households were more likely to have a fixed mindset. It makes sense that a child experienced with poverty and its associated factors may perceive that people have less control over their circumstances—and possibly even their ability to learn and develop skills.

Participants also confirmed that this type of intervention would benefit the educators in classrooms of Title I schools. Research has confirmed that burnout is higher in Title I schools than in other schools. The participants in this study agreed that they would benefit from learning from a growth mindset intervention at their level.

One example of a growth mindset intervention teaches students how the brain learns. The program described a student who has had academic struggles but through effort had seen improvement. This intervention then asked students to write a letter of encouragement to a future student. Students were required to incorporate what they have learned about how the brain grows, and how to be academically successful.

Through the coding process a total of five themes emerged from the focus group. Participant comments have been combined for each of the following themes: teacher attitudes need to stay positive, district support is needed in the classroom, research needs to be provided to teachers, student and teacher relationships need to be built, and student attitudes need to change in the education environment.

Table 4.4 Example of Coding Process for Question 1–How do growth mindset interventions affect students in economically-disadvantaged communities?

<p>“Introduce growth mindset at beginning of the year”</p> <p>“Staying open minded about learning, not developing a mental block to certain subjects or tasks”</p> <p>“YET, not giving up, building confidence in academic abilities”</p> <p>“In the future, students can share how growth mindset was instilled.”</p>	<p>-Beginning of the year</p> <p>-Staying open minded about learning</p> <p>-Not giving up</p> <p>-Building confidence</p>	<p>-Introduce growth</p> <p>-Not developing a mental block</p> <p>-YET</p>	<p>Student Attitudes need to change in the education environment</p>
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Coding Process used for Theme 5 of Question 1

Theme 1: Teacher attitudes need to stay positive

All focus group participants agreed that teacher attitudes need to stay positive in the classroom. As one participant put it “leave the negativity at the door”. Two of the participants mentioned that the economically-disadvantaged students in their classrooms already have enough negativity in their world; students do not need it in the classroom, too. One teacher said: Working in a Title I school and recognizing how much a teacher’s attitude towards a student can either help them develop and blossom or inhibit them from wanting to learn.

The focus group agreed that the most effective teachers in their building are those who are positive day-in and day-out. One teacher pointed out through seeing effective teachers and the gains they have with students versus teachers who believe differently. Two participants mentioned that younger teachers in the building are typically more positive than the veteran educators.

All agreed that they would like to think a growth mindset was fostered in their classroom; however, none of them felt like it is a daily occurrence. Dweck's research found that mindset needed to be fostered to be developed by students. One teacher remarked that she liked to think that growth mindset would be commonly fostered but feel like about 2/3 of teachers (especially in Title I schools) have a fixed mindset for the students they teach.

Self-belief, defined by Bandura, needs to be nurtured in the classroom. Research has established students work harder when they believe in themselves and others believe in them, too. One teacher stated: A lot of students seem surprised and encouraged-have a teacher who believes in them and is not willing to allow them to fail. Rare occurrence in Title I schools.

Theme 2: District support is needed in the classroom

During the focus group meetings, it was mentioned more than once that district support is needed in the classroom. One teacher added: Strong leadership within the school that fostered a community that believes in growth mindset. On the other hand, two of the participants objected the district personnel were "too up in their business" of the classroom. They all agreed district support is needed and helpful, but teachers need to be respected enough to be professionals in their own classroom when it comes to growth of students. One teacher shared: Provide materials on challenging questions, provide academic tasks which provide opportunities for productive struggle and provide opportunities to collaborate and discuss growth mindset lessons with other teachers.

One participant suggested that district support come in the form of meeting physiological needs of students and leave the growth of students to teachers. One teacher remarked:

Some struggles include students with a low socio-economic status who sometimes have incarcerated parents, limited healthy food available at home, and utilities cut off, try to get with school social worker and counselors to make sure that these kids have their basic needs met to ensure that they are cared for so that we can start developing a growth mindset regarding education.

The focus group all disagreed on what the district support should look like in the classroom. These teachers want to be provided with many tools to use but want the freedom to use what they need with their students. One teacher imparted: In past years they have done well with knowing “learning pit”, this year students struggle with this more, this is because the curriculum changes from second to third, curriculum used in lower grades is very much teacher led with students doing very little of the heavy lifting. The Learning Pit Challenge is designed to help students think and talk about their learning. In some ways, it is a child-friendly representation of Vygotsky’s (1978) zone of proximal development in that it describes the move from actual to potential understanding. It can help develop a growth mindset (Dweck, 2006), prompt people to explore alternatives and contradictions, and encourage learners to willingly step outside their comfort zone.

Research confirms that all students can have a growth mindset. Some students thrive by simply being taught the science of the brain. Others, such as students with special needs, need more tangible lessons in growth mindset. In describing this, one teacher shared: If a student has behavior goals, point sheets are used on an hourly basis to assess pre-vocational skills and effort during instruction. Reading and math data collected on easyCBM progress monitoring on instructional level (not necessarily grade level) show that their effort and mindset effects their

performance. Class Dojo offers a great series of growth mindset at beginning of year to encourage students to change their thought process about learning.

Theme 3: Research needs to be provided to teachers

Participants agreed that there is a wealth of research to support the growth mindset. On the other hand, they disagreed on the amount of research on intelligence and brain research being justifiable enough to teach to elementary aged students. One teacher observed more research is needed on intelligence and the brain science to teach students. The participants agreed that it had value, as described by a participant: Brain science has value and should be taught because it is research-based.

Two of the participants admitted they do not have time to read the research. They want their administrators to tell them what is important for them to know in the classroom. Participants want the district to provide the research along with professional development seminars dealing with implementing the growth mindset in the classrooms.

While all agreed that the growth mindset theory and interventions have a place in the education of their students, there was not clear agreement on what was most important to apply in their individual classrooms. In Title I schools, basic physiological needs must be met first before students can care about whether they grow or not in the classroom. According to data reports, many students worry about where they will sleep or find their next meal. A participant noted: Maslow's Hierarchy of Needs and start from the bottom of physiological needs and safety needs as the main priority. If student has food, water, is clothed, and feels safe, begin to build a rapport that effect the students' friendships/relationships, esteem needs, and finally self-actualization needs {occurs}.

Theme 4: Student and teacher relationships need to be built

All agreed that time needs to be taken to build relationships. One participant declared that students in Title I schools need to know they can trust their teachers first. A participant added: Try to build a rapport with students. Tell them how much growth and improvement they have shown, either with behavior, maturity, reading or math level. My interactions are purposeful and meaningful.

Another participant asserted that once the trust is built, students feel safe and are more comfortable failing and learning from the failure. But one argued we should never let them think it is OK to fail, that classrooms should be places to make mistakes, not fail. Another participant added to this point: Setting a climate where it is ok to fail allows me to see more effort from my students.

With a grade level change, one of the teachers is struggling with growth mindset in this year's class. She admitted to this is her first year in a Title I school. As veteran teachers of Title I schools, the others helped her conclude that through her experience, the students would see her push through her struggle and find motivation without her teaching one lesson on growth mindset. Responding to this teacher's honest statement, a participant added: To be honest, still working on this, first year encountering lack of motivation, telling them it is ok to struggle, that is where learning takes place.

Theme 5: Student attitudes need to change in the education environment

Five participants agreed that the beginning of the year is when the growth mindset needs to be established. All six participants agreed that mindset is established, the easier growth, learning and risk-taking will come.

Some of the participants pointed out that their students block learning out and give up when they make mistakes, or their work does not meet the expectation. Duckworth, in her research, noted student thinking must change about learning; grit must be related to growth mindset so that mental blocks do not become the normal in the classroom. In support of this concept, one participant added: Staying open minded about learning, not developing a mental block to certain subjects or tasks.

This school in which the participants' work focuses the first two weeks of the school year to learn expectations and build relationships. During this time, growth mindset lessons are taught in some of the participants classrooms. Those who do this, clearly stated that their students can focus more on growing than on mastering the curriculum. One teacher interjected teachers must introduce growth mindset at beginning of the year.

All agreed that building confidence is a key to success in the classroom. They battled on the differences between confidence and self-belief. Self-belief, as described by Bandura's theory, leads to students believing in their abilities, which in turn, may decrease effort in the classroom. Whereas confidence gives thoughts of capability and effort may increase, and growth ensues. In describing this, a participant shared: not YET attitude, not giving up, building confidence in academic abilities.

According to Dweck, most people seem to hold to a fixed mindset. However, she says, you can uproot this attitude and teach your children to adopt a growth mindset and teach them the power of not yet. Children are great mimics, she says, and so when we adjust our own mindset to reflect what we want out of our children, they will follow.

As a student's attitude changes about learning, they will continue with their education with the confidence to help others grow, leading to many leadership abilities within themselves. This was illuminated by a participant comment: In the future, students can share how growth mindset was instilled.

In summary, published growth mindset interventions are not a requirement to see growth in the classroom. According to participants, educators and support staff need to bring a positive attitude of growth and learning into the education environment. Relationships need to be built and a sense of trust needs to be built for students to be able to build a growth mindset. Students need educators who have a growth mindset.

Question 2–What role does motivation play in mindset?

Motivation is key to improving growth mindset, especially when students are being challenged academically. It helps provide independence and problem-solving skills. The participants in this study were excited about sharing how academic feedback has made a difference in their school. Many students, however, need extrinsic motivation to begin developing their motivation to learn for the sake of learning and growing. As students become older in this school, intrinsic motivation begins to develop, and they want to achieve in the classroom. Once motivation is developed through the help of educators, students were able to motivate themselves to continue achieving in the classroom.

Through the coding process a total of three themes came through the focus group. Participant comments have been combined for each of the following themes: academic feedback needs to be immediate, incentives need to be provided to build motivation, and intrinsic motivation happens when incentives are removed.

Table 4.5 Example of Coding Process for Question 2–What role does motivation play in mindset?

<p>“Provide incentives for students to do well with their reading and provide them a snack every day during my class.”</p> <p>“Positive reinforcement and working with behavior students who need frequent rewards and goals to be successful.”</p>	<p>-Incentives</p> <p>-Positive reinforcement</p> <p>-More praise</p> <p>-Praise positive classroom behaviors and reinforce on a regular basis</p>	<p>-Students to do well</p> <p>-Frequent rewards and goals to be successful</p> <p>-The more effort is seen</p> <p>-Students are receptive</p> <p>-Positive effort during instruction time</p>	<p>Incentives need to be provided to build motivation</p>
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Coding Process used for Theme 2 of Question 2

Theme 1: Academic feedback needs to be immediate

Motivating students is the hardest part of teaching in a Title I school, shared two of the participants. One participant added students want to know immediately if they are doing well or not. Another insisted some students are not motivated to try if they do not know how they are doing on any assignment. Academic feedback, both positive and negative, provides these students motivation because someone cares enough to tell them how they are doing in class. One teacher summarized the idea: Appropriate and prompt academic feedback is key to student learning and motivation.

Positive encouragement builds the confidence of all students to begin to believe in themselves and their abilities or capabilities. Many agreed that students constantly need this. A few argued that it puts more pressure on them as teachers to find the good in all students, supported by the statement that it is always not good. Teachers do not need to give students false

security that they will always be successful in every venture. Others in the group expressed that constant verbal and tangible encouragement was needed.

All agreed that students performing and being noticed as putting in the effort become more motivated to work in the classroom. One mentioned that some students just want the attention from the adult in the room, not necessarily from the effort in the task. Another agreed, yet also replied that she would rather give attention towards something productive than to a behavior that needs to stop in the classroom. One teacher remarked if students know they are working toward completing a task and teachers are monitoring and providing encouragement, students will continue to perform and be motivated.

Theme 2: Incentives need to be provided to build motivation

One participant expressed that for students who have nothing—snacks, stickers, small toys motivate them to do anything a teacher wants them to do in school. One teacher elaborated to providing incentives for students to do well with their reading and provide them a snack every day during class. When students were able to not be in a classroom hungry, they were able to focus on learning and growing academically and socially. With incentives meeting the needs of individual students, the participant's students were able to focus and be motivated to succeed.

Incentives are the beginning of extrinsic motivation many students need to get from teachers before intrinsic motivation can be built. One participant debated her students come in asking “what are you going to give me for working hard.” Another participant chimed in that “we get paychecks for doing our jobs, students are allowed to get something for doing their jobs—being a hard-working student.” One teacher reasoned praise positive classroom behaviors and reinforce on a regular basis, with verbal praise, tickets at the end of class for participation, snacks

at the beginning of class even if they aren't in a good mood to build rapport, and weekly prizes on Fridays, students are receptive to these incentives and they work to maintain a positive effort during instruction time.

Incentives prove that all students are capable of being motivated to grow and put forth effort in the classroom. One teacher who has taught in an inclusion class reported she is able to get students that typically have meltdowns put in effort for something they want now. One teacher then argued "are students doing it for the sake of growth or because they want a treat." Another teacher adamantly announced, "Who cares? These students are doing the work now, aren't they?" One teacher revealed that positive reinforcement is needed when working with behavior students who need frequent rewards and goals to be successful.

The more incentives given, the more effort has been seen in the classroom. Many of these teachers were willing to take their own money and bought incentives for their students. Many of these teachers had students take interest inventories so incentives could be specific to students in their classrooms. Some of them argued that it should be the district's job to provide the incentives. All agreed that more incentives, equals to more motivation, equals to more effort, equals to more growth, and equals to more mastery. One teacher explained the more praise, candy, tickets, Class Dojo points, the more effort was seen.

Theme 3: Intrinsic motivation happens when incentives are removed

Once extrinsic motivation was built, intrinsic motivation could begin. Intrinsic motivation is how putting forth the effort in class makes a student feel and makes the student want to continue the effort to keep feeling good about themselves. Once students started being

motivated based on past success, they worked harder on everything in the classroom. One teacher defended that students always worked harder and wanted to succeed.

One participant stated it was exciting to watch students move from extrinsic to intrinsic motivation. Another offered growth soared once they were motivated for themselves and not for something.

All the teachers agreed that they wanted their students to be successful both in and out of school. They gushed their job was to create motivated students who will grow up to be motivated adults. Not all agreed on how to motivate students in that huge task, however, they all suggested praise was an important part of the motivation, especially when transitioning from extrinsic to intrinsic motivation. One teacher summarized praise was key for students to develop motivation to learn and be successful, both in and out of school.

In summary, motivation is a key component of growth mindset. Teachers can use all the interventions they can find dealing with growth, but if student motivation cannot be captured it is all in vain. For some students, feedback may be all they need to grow in academics. While others need extrinsic motivation to show success in the classroom. For most students, after seeing their own success extrinsic motivation moved to intrinsic motivation so that they were motivated by their own past successes. These educators agreed that all students need sort of motivation to want to achieve.

Question 3—What happens when students are empowered to take ownership over their own learning?

Students were more likely to engage in more difficult tasks, work better in peer-assisted learning environments with other students, and have more self-worth based on their level of

effort. Through the coding process a total of six themes emerged from the focus group.

Participant comments have been combined for each of the following themes: improvement by students, productive struggle (it is OK to fail), success leads to more success, effort increases when students see success, belief leads to increased improvement, and challenge accepted by students.

Table 4.6 Example of Coding Process for Question 3–What happens when students are empowered to take ownership over their own learning?

<p>“Regardless of socio-economic status or behavior issues, mindset directly effects how well students idealize their ability to achieve. A student with a growth mindset is willing to be challenged and accepts new tasks without doubting themselves.”</p>	<ul style="list-style-type: none"> -Believe in themselves -Mindset directly effects how well students idealize their ability to achieve -Any concept can be learned and mastered 	<ul style="list-style-type: none"> -Can change everything -Willing to be challenged and accepts new tasks without doubting themselves -Big things can happen 	<p>Belief leads to increased improvement</p>
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Coding Process used for Theme 5 of Question 3

Theme 1: Improvement by students

Empowered students become active participants in their own success. One teacher suggested biweekly graphs of data with a semester long goal that students documented themselves. When learning becomes relevant to their lives, all students can be taught to be more self-efficacious, a necessary skill to persevere and push their learning higher. Student voice was a powerful indicator of how invested they were in what they are learning, which can increase achievement. Strengthening students allowed them to set their own goals based on their own data offered one participant. One teacher mentioned showing previous years’ data on progress monitoring and ways that they have excelled in other aspects of their life.

We are purposefully handing over the power through guidance over to the students suggested another participant. One teacher echoed start early and train students, consistency is key, YET attitude.

All the teachers unanimously agreed any growth is good growth. One pointed out especially in a Title I school, growth is growth no matter how small. All complained that all the district wanted was mastery of the standards. One teacher lamented not all students were going to be mastery, but all students would grow and improve.

One of these teachers explained that not every one of these students is college bound why should we force them to become college ready in elementary school? Another agreed that improvement should be the main concern in elementary school. Another teacher chimed in adding that students need to enjoy learning new things. One teacher proclaimed any form of growth was important, students do not have to be proficient, unless that was where the student started. Keep digging in and showing them ways, they are improving.

Teachers can empower students in growth, through that growth students are able to master things at their own rate. All agreed mastery of skills should not be a race to be won. One observed mastery is not the finish line to learning. One disagreed and scoffed not according to our ever-changing standards.

Small groups help students become empowered in their learning. One teacher distributes a list of objectives for the week to complete in workshop. Students choose what they do, and when they do it. Small group topics are also listed. Students choose what they need to work on for the week with the teacher at small group. One teacher offered a lot of growth in students and are always positive brought attention to small group settings.

Theme 2: Productive struggle, it is ok to fail

All participants agreed students need to know it is acceptable to make mistakes. The key is learning from those mistakes explained one participant. One teacher reasoned mistakes and challenges play an essential role in a students' learning, students grow and develop through productive struggle, if students do not adequately experience opportunities to make mistakes and overcome challenges, students will not develop grit and perseverance.

All participants have a learning pit poster in their classroom. They related it is a requirement of the superintendent. Many of the participants use it as a teaching tool when things get hard. One teacher suggested have a learning pit poster and discuss how if we are not in the pit then we are not learning and as we struggle through the pit things become less and less challenging.

Two of the participants admitted they cry along with their students when the struggle is real for learning students. These two also communicated they get to celebrate with their students when they make it to the other side of the struggle. One teacher recalled having discussions with students about how if everything is always easy for them they are not learning, when things are hard, but they struggle through it and do not give up is when learning takes place.

Theme 3: Success leads to more success

As soon as students start doing tasks every day students will acquire some momentum. This momentum can keep students going for months until they complete the task at hand. One participant hinted it helped students become motivated by showing them they could be successful in smaller things, then when they test success, it tended to motivate them in bigger tasks.

Knowing that minds work that way should let students conclude that they do not have to be motivated to start something, but they just need to start doing it and then the momentum will take care of the rest. One teacher offered school was where students learn about and practice life skills, risk taking was an essential skill, students need to be successful, risk taking has a high value in student learning, risk taking in learning led to better and more effective problem-solving skills in students.

Students started studying for one hour/day then the momentum would appear shortly helping them to continue this trend. If they decided to stop one day, they would feel the urge to return to their normal level, which was studying one hour/day! One teacher proposed trying to provide them with enough encouragement and give examples of other ways they could overcome things in the future, provide students with options. Failure is an option. Giving students ways to cope with and learn from the failure empowers them to keep trying and problem solve, even if they fail the first time.

Theme 4: Effort increases when students see success

Participant 6 was adamant that last year's data needed to be discussed with students at the beginning of the next year. She noted students needed to see their past successes because they put in the effort to succeed more at the beginning of the year. Participant 4 agreed however, she charged last year's teachers may not share that information with the student's new teacher. And, participant 5, responded that was the disservice we serve to our students. The participants all agreed that teachers need to work as a team for students to show success and make it less of a competition among us chimed in Participant 2.

Setting expectations of effort for the classroom environment from the very beginning automatically gave students a reason to try academically. As common place as the rules on walking down the hall. Expectations allowed students to have power over their actions with boundaries. One teacher emphasized set an expectation that students try even if that means not getting it right, still try, by trying we have at least gone through the thinking process and will learn from that, even if an answer was wrong, we still learn through working it out and problem-solving.

When students feel empowered, they wanted to increase their effort because they felt it relied on their actions and no one else's anymore. They started taking credit for their successes and failures. One teacher proclaimed seeing more effort and motivation, holding themselves more accountable and effort has increased, they shared when they passed a lesson and data had increased tremendously.

All teachers agreed that current research confirmed that students should be doing the heavy lifting of work when it comes to learning. One teacher reasoned students were doing a lot of the heavy lifting. Not all the teachers agreed with the research. One teacher pointed out that young students needed our help to lift the work, so they do not become discouraged. Another teacher disagreed, stating, we cannot go around holding kids hands all the time. One teacher speculated when faced with challenges encourage students to focus on the known rather than the unknown, especially in math, they may not know it all, but they know something and start there, students try harder when focused on what they do know.

Achievement in the classroom happens through effort in the classroom. All teachers in the study agreed that effort produces achievement. Two of the teachers added that students will

only put in as much effort as their teacher will. One teacher stressed students achieved whatever effort you were willing to put forward positively impacted learning and well-being.

Theme 5: Self-belief leads to increased improvement

A student's self-esteem had a significant impact on almost everything she did, including on the way she engaged in activities, dealt with challenges, and interacted with others. Self-esteem also had a marked effect on academic performance. Low self-esteem lessened a student's desire to learn, her ability to focus, and her willingness to take risks. One teacher revealed regardless of socio-economic status or behavior issues, mindset directly affected how well students idealized their ability to achieve, a student with a growth mindset was willing to be challenged and accepted new tasks without doubting themselves. Positive self-esteem, on the other hand, was one of the building blocks of school success; it provided a firm foundation for learning.

The challenge in working with children with low self-esteem was to restore their belief in themselves, so they persevered in the face of academic challenges. One teacher believed any concept could be learned and mastered by any student. You do not need a formal program to promote self-esteem, however. Educators shaped self-esteem every day in the normal course of interacting with their students.

Although you cannot teach a student to feel good about herself, you could nurture her self-esteem through a continual process of encouragement and support. At its most basic, that meant showing appreciation for the things one did well, expressing confidence that one will improve in the areas in which one does not do well, and adapting instruction so she can

experience success. One teacher concurred if students believed in themselves or had confidence in their abilities it could change everything.

Teachers might employ a similar approach at school, as it helped students learn how capable they were. If a student trusted his or her own judgment, he or she was more likely to go on learning and expanding their knowledge in the future. One teacher expressed when students believed they could, big things could happen. Having confidence in the classroom from an early age could make all the difference in a student's choice to pursue higher education when they are older.

Theme 6: Challenge accepted by students

Participant 1 suggested to set up the year as a year of challenges. Students are willing to accept challenges, one teacher agreed students can learn no matter how challenging a concept may seem initially, some characteristics and behaviors a student with a growth mindset might display are grit, perseverance and an ability to maintain a positive attitude despite ongoing challenges in learning the academic concepts. Many liked to prove they could do something to impress the teacher. Once they accepted and conquered the first challenge, build up the next challenge chimed in Participant 3. One teacher suggested to provide students with higher academic scored work that would fully challenge them. Participant 2 explained that once students started meeting challenges, the students started begging for harder challenges. One teacher suggested plan tasks that helped students practice developing a growth mindset.

In summary, empowered students can take their growth into their own hands. They feel like their success relies on their effort. Educators in this study confirmed that empowered

students see more success because these students feel like they have control of something in their life.

Question 4—How can educators encourage students to develop a growth mindset?

There are many ways teachers could encourage a growth mindset in students. Educators could encourage growth mindset by using commercial interventions as an opening lesson or daily morning routine. There are many great programs dealing with growth mindset—the problem is many Title I schools need to use their budgets for other necessities in their schools. Khan Academy’s database has lessons, activities, and videos teachers could use K-12 to assist them with this instruction.

Students could also be responsible for grading their effort on a number scale and how that directly affects their grades/morale. When students took control of their learning, educators in this school saw huge growth in their students.

Through the coding process a total of four themes emerged from the focus group. Participant comments have been combined for each of the following themes: growth needs to be the focus of education, differentiation, support student growth, and student & teacher relationships need to be built.

Table 4.7 Example of Coding Process for Question 4—How can educators encourage students to develop a growth mindset?

<p>“Small groups to participate on level and stay engaged.”</p> <p>“Differentiated instruction to keep challenged and engaged.”</p> <p>“Academics are challenging and well above grade level, have back up challenging materials if finish early.”</p> <p>“Teach with various learning tactics because everyone learns differently.”</p> <p>“Being able to push students.”</p>	<p>-Students who are struggling</p> <p>-Push students</p> <p>-Various learning tactics</p> <p>-Small groups</p> <p>-Differentiated instruction</p>	<p>-Sending home class materials</p> <p>-Everyone learns differently</p> <p>-Participate on level</p> <p>-Stay engaged</p> <p>-Keep challenged and engaged</p>	<p>Differentiation, students learn differently, so teach differently</p>
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Coding Process used for Theme 2 of Question 4

Theme 1: Growth needs to be the focus of education

Half of the participants were adamant that growth needed to be the focus of education at the elementary level. One teacher offered it was not about being proficient, but about growth. The other half of the participants grumbled mastery of the standards is the most important. Participant 1 objected that in Title I schools the focus must be growth from any level, and that “I have never had a student come to me on level ready to master anything.” Participant 6 announced mastery was the most important because of state standards. They all agreed mastery was the goal, but any growth should be celebrated.

Many students need to know that the expectation at the beginning of the year was that they would grow. Teachers agreed that growth needed to be an expectation for the school year. It was important for students to know they could grow. One teacher articulated set the expectation from day one.

One teacher made sure that her students set goals by writing and publishing a book every year. The students looked at the previous year's data and decided on goals for the new school year. They wrote what their goals were, and the steps needed to reach those goals. Then, they illustrated themselves reaching those goals.

Participants all agreed that growth may be a slow process for some students. One teacher added that students needed to see teachers staying positive, even with small growth. Students learned from watching us, chimed in another. Another teacher voiced: Stay positive, look at any signs of growth, keep students at center of planning.

Theme 2: Differentiation, students learn differently, so teach differently

All participants agreed with the research that differentiation was key to learning for students. They all complained that there was no time to adequately do that for all learners. Participant 2 made a point that she taught through the workshop technique, so that many students were doing different things based on their individual data. The reason she created her classroom to be a workshop was differentiated instruction to keep students challenged and engaged. Participant 4 taught from her small group table. Her whole group lesson was taught in small groups so that she could meet the needs of students. She believed small groups allowed students to participate on level and stay engaged. Some of the teachers admitted they struggle to differentiate for the lowest of students because their curriculum sources do not meet the needs of those students. The former special education teacher in the group chimed in: Stay on students who were struggling by sending home class materials to assist them.

Through differentiation, teachers made sure they were easily able to push their students. Many of their academic centers were challenging and well above grade level. Some of the teachers have back up challenging materials if students finish early.

Additionally, students have been known in this school to feel left out of academics. They felt like they were too low to learn from the assignment or so high they got bored with the assignments. The synopsis of the group was to teach with various learning strategies because everyone learned differently.

Theme 3: Support student growth

Participants 3 and 4 remarked support of student growth should be a school-wide endeavor—from the top down. Participant 1 chimed in that pep rallies were needed to show support of growth—students got excited for games, let's get them excited about growing. One teacher added we should always provide encouragement and support in getting children to believe in themselves and what they were capable of.

All agreed that in Title I Schools support of student growth was important at school; because many students do not receive that at home. The attitude a teacher has about how much a student was able to learn made all the difference in the world to economically-disadvantaged students.

With proper education and support the mindset could be changed in any student. The focus group agreed that they needed to work on their students thinking to YET. Encouraging students and motivating them to want to be achievers. The mentality a teacher had towards his or her students' ability to learn directly impacted their performance. Students could achieve and show mastery of anything with good instruction and a positive mindset.

Theme 4: Student and teacher relationships need to be built

Participants 5 and 6 decided that the first two weeks of school needed to be focused on building relationships with their students. One teacher commented she did this by building rapport and encouraging a can-do attitude. Participant 1 agreed, stating if students do not get a relationship built with their teachers, students would not trust their teachers or their belief in them. The teachers in this study suggested for teachers to refuse to let students quit, do not take “I don’t know” for an answer. Start with what they know and work from there. Speak positively about your students’ futures while allowing them to understand failing was OK and making mistakes were OK, the biggest mistake was never trying and/or giving up.

In summary, educators can encourage a growth mindset in their students from day one in the classroom. Growth needs to be the focus in the classroom. In this study, the importance of supporting students through differentiation was a highlight. Relationships, overall, are an important part to the success and growth of students in Title I schools.

Summary

During this qualitative study, teachers could be open and honest about how they saw growth in their elementary school. Many of them shared stories of how they came to see the relationship between growth mindset, grit and self-belief. Throughout the interviews and focus group, student belief and confidence radiated through the stories. Building confidence in students that attend Title I schools was a battle these teachers faced daily. Many of these teachers have been heartbroken with the message’s students received at home compared to school. Several of them have commented that they must compete with the message’s students received from parents and the world.

When students believed in a growth mindset, they believed that their performance could improve with effort and that they could improve. When students were working from a fixed mindset, they would often see failure as the end of the road. Their abilities cannot improve so the outcome of future attempts was already decided. However, a student with growth mindset would instead see this as a chance to learn and improve the next time.

Research has shown that teachers who model and incorporate growth mindset into their own teaching and their language encouraged much better results in their students. This included using language around “effort” rather than “intelligence” and talking about the process of learning and improving rather than native ability.

Embedded growth mindset in a school or classroom culture included embedding it into the curriculum. Instruction should reflect the language, strategies, and expectations of effortful learning, risk-taking, and productive failure. Students needed to learn how to persevere in smart and strategic ways, ways that may be different from one content area to another. Teachers and peers needed to commit to the culture, as well as, reinforce and reward resilient behavior.

This chapter reported the findings of the study conducted through personal interviews and a focus group. Next, analysis of these data and future implications for study will be discussed in Chapter 5.

Chapter 5: Conclusion

In this chapter, the significant results and findings of the study are discussed. Also, the limitations faced while conducting the investigation are presented. The research questions addressed by the study included the importance of the growth mindset for the academic success of students and schools.

Having been widely documented, Dweck's (2008) Growth Mindset theory and its application are significant to educational achievement (Aronson et al., 2002; Blackwell et al., 2007; Good et al., 2003). Student mindsets and academic attainment are linked in many other studies. Student achievement has increased because of the positive influence of integrating mindset has had in the field of education. The effect of teachers on mindset interventions has been studied through current research. Schmidt, Shumow, and Kackar-Cam (2015) suggested that student mindsets are affected by teachers' beliefs and their interactions with each other. Teachers have played an essential role in student mindsets based on research.

The current study is looking in-depth at a particular demographic when it comes to the growth mindset, the setting of Title I schools. Teachers' experiences in Title I schools were the focus of this study. Future planning and instruction when it comes to the growth mindset in Title I schools was the purpose of this study. Through a focus group and individual interviews, experiences from the classroom were shared from eight teacher participants. Information-rich quotes were put into themes after the transcripts were analyzed. Emerging from the qualitative data the patterns and themes were clear, with multiple responses to support each category.

The qualitative data, because clear themes emerged, suggest that specific attitudes and behaviors taught in the classroom are influencing the way students approach the challenge of

rigorous, college preparatory classwork. The cultural background of students, the school, and the classroom culture have effects on grit and mindset. Students will be comfortable with errors and feel encouraged to keep trying if their effort is praised above results on data.

Findings

The questions that this qualitative study explored were:

- How do growth mindset interventions affect students in economically-disadvantaged communities?
- What role does motivation play in mindset?
- What happens when students are empowered to take ownership over their own learning?
- How can educators encourage students to develop a growth mindset?

Teacher Practices

Teachers suggested start with what students already know and allow them to work from there. Higher learners are more challenging to reach in the classroom. Challenging them with independent and small group projects is beneficial to teachers, students, and their growth mindset.

Teacher Perspectives and Beliefs

When planning, students are at the center of discussions to see growth. Planning growth mindset principles into lessons may be beneficial for teachers and students. Many students refuse to work because they lack a growth mindset.

A lack of parental support and encouragement from families causes a struggle for students when it comes to a growth mindset. Many students in Title I schools come from families that have low expectations for learning.

Supports and Challenges

Positive Behavior Intervention Support (PBIS) strategies that can be used school-wide to monitor and collect data on positive reinforcement strategies. Class Dojo offers a great series of growth mindset schools can show at the beginning of the year to encourage students to change their thought process about learning.

Challenges in a Title I classroom are commonplace. Home life, parental involvement, and needs being met all play a significant role in the challenges teachers face trying to build a growth mindset in their classrooms.

Next Steps

Consistency is critical for schools, communities, teachers, and students. School districts and education systems could assist in realizing commitments to fostering a growth mindset by providing materials which provide opportunities for the productive struggle of students. Opportunities could also be provided to teachers for collaboration and discussions on growth mindset with other teachers.

Implications

These teachers believed that an environment based on growth mindset concepts could be created easily through ongoing professional learning and hearing other teaching experiences. Supporting academic achievement through mindset interventions, it could become a

methodology and a tool for teachers in the classroom. A whole school climate supports a positive impact on student achievement. Sparks (2013) concluded that while working on school improvement strategies, a shift needs to occur in teachers' and students' sense of themselves and each other. For there to be a noticeable effect, every part of school life needed principles of growth mindset applied for it to work, teachers believed. Understanding school climate, according to current research, is essential to the effort for achievement in students. According to teachers, it is feasible to implement a school-wide policy on growth mindset. Across the curriculum, teachers can use principles of mindset as a teaching method. As a tool for promoting student achievement, districts could implement a process for learning using a growth mindset. It should affect motivation and performance nationwide.

Ongoing professional development, stressed the teachers of this study, is needed to implement a climate of a growth mindset in schools properly. Training is especially important in the aspect of neuroscience to expand their knowledge in the area. Understanding how the brain develops might be beneficial to support student learning and development (Hohnen & Murphy, 2016). To instruct on the aspects of mindset, teachers would require effective training. Providing professional development for all teachers about mindsets and how best to cultivate the growth mindset in all students is needed. Teacher preparation programs should include studying brain development and the connections it builds over time. Educators will get a deeper understanding of how the brain processes more effectively by studying the topic of neuroplasticity.

More clear teaching strategies are needed so that students understand their thinking. They need to be coached to be metacognitive regarding their mindset. Based on the qualitative data, teachers in the classrooms are leading the students through lessons and activities that are

moving the students along the continuum toward a growth mindset, which is desirable. However, according to Dweck's implicit theory of intelligence, the effect would likely be more significant if students were keenly aware of how their thinking has changed, and what benefits they will likely reap because of the change. All students who are experiencing academic struggles could be assessed for their perceptions of intelligence, and a portion of the time spent on interventions could be used to teach the growth mindset. Dweck (2006) asserted that "a focus on study skills alone showed no gains in moving students toward a growth mindset, but study skills *with* instruction comparing the mind to a muscle that must be worked to become stronger made a significant difference." The qualitative data suggested that lessons and teaching strategies appear to be influencing students to adopt attitudes and beliefs not only about intelligence, but also about school in general, and their futures specifically.

Supported by research the teachers emphasized the growth mindset as a concept for creating a whole school climate and language. Shared previously, teachers expressed how achievement and student motivation could be affected. Developing professionally through knowledge sharing and experiences may be a worthwhile endeavor to increase the application of growth mindset dialect. A powerful strategy of being productive and proactive could assist teachers in acquiring new skills (Joyce & Showers, 2002). The most natural way of continued further training, the participants involved in this research felt, as a way to promote student achievement. Leaders at the school and district levels should consider this when planning professional development sessions. Regarding the growth mindset, materials, experiences, and knowledge should be shared among teachers during times of collaboration.

Parental influence on students, teachers saw as a viable difficulty to control, but also a likely means as role models for children. School interaction and communication with parents

raised significant implications through this research. Parents should be encouraged by the benefits and supported to engage in these principles at home. Fixed mindset, at least in low-income schools, is mostly because of low expectations by both parents and students for children to be high-achievers. Working with whole communities, allows schools to reach its full potential in creating a whole school climate with the support of the home environment.

For students and teachers who do not hold the growth mindset, additional instruction is needed for assisting them in understanding how intelligence can be acquired and that it is not innate. For students who do show at least some preference for the growth mindset, the implication is that they are not aware that their perception of intelligence was moving from fixed to malleable.

Recommendations for Future Research

Experiences of teachers using a growth mindset in the classroom were the basis of this study. The findings in this study supported the success and value of a growth mindset seen in previous research. A future study of a broader sampling of teachers might contribute to a more precise representation of public-school educators. Supporting this current study, a longitudinal approach would allow for an insight into how principles of growth mindset would benefit Title I schools. A larger and more demographically representative sample of participants should be used to add to current research.

In the long-term, more effectively applying these principles would provide deeper insight into the benefits of communication among school and home combined with attempts to implement a growth mindset through parents' language and praise. An investigation into teacher

mindsets and its effect on learning have been carried out (Gutshall, 2013) but research into the benefit for teachers is limited.

Reinforcing a growth mindset allows students the opportunity to see their skills develop over time; students who exhibit grit tend to stick with challenging tasks throughout the learning process. Impressive results from this study need further work on the effects of grit and mindset on academic performance to create a better understanding. Growth mindset and grit have an interdependent relationship; this dynamic needs to be understood further. The literature has a gap that needs to be filled relating to this relationship.

Additional questions arose during these data collection and analysis for this study. Specifically, other data are needed on how the various social factors affect mindsets. Undoubtedly, these academic data are of primary importance, but if qualitative factors are more fully understood, additional leverage for increased academic achievement might be discovered.

Looking more broadly at the literature related to mindsets, research is still needed to answer questions about long-held beliefs in the field of education about so-called *multiple intelligences*. Gardner's Multiple Intelligence theory (1983) might be unintentionally supporting the fixed mindset. Mendoza-Denton, Kahn, and Chan (2008) researched the connection of multiple intelligences with the entity theory of intelligence. Mendoza-Denton et al. (2008, pg. 318) determined that "by emphasizing what he called *native intelligence* reinforces the idea that students are good at some things, while bad at others." His work, along with that of other educational researchers, should be considered as learning theory evolves.

Limitations

The challenges faced by the researcher in carrying out this study were likely typical for many studies, especially when dependent upon participation by a relatively high number of teachers. This study was limited by a few key factors that may have led to specific results, although exciting findings were produced. The sample and size of the teacher pool was one limit of this study. Convenience sampling was used to locate teachers for this study. All these data came from participants from the same district, community, and school; the use of elementary school educators was relevant and useful. This, along with similar experiences may have steered data in one direction. Economic status and low academic achievement in this small district might have played a role in the data collection. Therefore, a possible drawback of the results was that this sample might not be a generalized representation of the broader example of teachers. Recommendations for future study include data collection from districts with multiple levels of community support, academic achievement, and broader age demographic. Additional survey respondents from different locations would minimize the risk that one or more of the teachers at this specific site is producing a larger or smaller effect size on whether students have growth or fixed mindset.

Conducting research in the teacher's building and not being removed from their work environment was another possible limitation of the study. Participants might have been limited with their answers to specific interview questions. They were assured of their right to withdraw from the study at any time and were offered complete confidentiality throughout the study.

A further limitation of the study was time constraints. Observing teacher experiences over time should be considered in future, longitudinal studies; it might lead to a much more detailed account.

Summary

Growth Mindset principles being implemented by teachers were positive experiences in the current study. Research has shown that growth mindset education assists in cultivating a culture that promotes the development of grit. The current research supports and enhances the findings of grit and resilience by highlighting the fact that implementing a growth mindset environment for teachers and students is beneficial in the long term. Students from disadvantaged backgrounds need academic interventions; however, they also need the ability to persist in the face of failure, to understand the connection between effort and success, and to understand that intelligence is not something one is either born with or without. There is no magic bullet to the development of growth mindset. It cannot be found in a purchased curriculum. It is a result of the beliefs, the expectations, the mindsets, and the developed culture. It is believing that all can grow; including teachers, parents, and students.

Appendices

Appendix A: Survey and Results

- People are born either smart or not smart.
 True: 2 participants False: 11 participants
- Some people are not very good or kind, and they cannot change that.
 True: 1 participant False: 12 participants
- The more you work at something, the better you will be at it.
 True: 13 participants False: 0 participants
- I do not like doing things that are hard for me.
 True: 7 participants False: 6 participants
- I sometimes get mad or upset when people tell me about my mistakes.
 True: 7 participants False: 6 participants
- You can choose to change the way you think.
 True: 13 participants False: 0 participants
- No matter how hard I try, there are some skills I will never be able to have.
 True: 8 participants False: 5 participants
- You must be born with talent for sports and music to be good at them.
 True: 4 participants False: 9 participants
- I am glad when parents and teachers give feedback about my performance.
 True: 12 participants False: 1 participant
- You can improve your talent in reading and math with practice.
 True: 13 participants False: 0 participants
- If spelling does not come easy to you, you probably will not ever be good at it.
 True: 1 participant False: 12 participants

- I enjoy learning new things even when I do not understand them at first.
True: 12 participants False: 1 participant
- The important parts of who you are as a person do not change.
True: 5 participants False: 8 participants
- You can learn new things, but you cannot change how intelligent you are.
True: 1 participant False: 12 participants
- People who are truly smart people do not need to try hard.
True: 1 participant False: 12 participants

Appendix B: Interview Questions

Background Information

- 1) How long have you been a full-time teacher?
- 2) What grade and subjects do you currently teach? What grades have you previously taught?
- 3) Are you currently involved in any extra-curricular leadership roles within the school community?
- 4) How did you develop an interest in the growth mindset?
- 5) What learning opportunities have you experienced that prepared you for fostering a growth mindset through your teaching?

Teacher Perspectives and Beliefs

- 6) How do you define a growth mindset? What does this term mean to you? What are some characteristics or behaviors that a student with a growth mindset might display?
- 7) And, what about a fixed mindset? How do you understand the meaning of this term? What are some characteristics and behaviors that a student with a fixed mindset might display?
- 8) From your perspective, which mindset is most commonly fostered in schools? Why do you think that is?
- 9) From your perspective, which mindset is most commonly exhibited by students? Why do you think that is?
- 10) In what ways do you think that a students' mindset impacts their learning? In what ways do you think it impacts their well-being?

- 11) What role, if any, do you believe mistakes and challenges play in learning?
- 12) What is the value in risk taking for learning?
- 13) In your experience, in what ways does praise for your students influence their learning and motivation?

Teacher Practices

- 14) How do you foster a growth mindset in your students? If I were to spend a day in your classroom, how would I know that you are committed to fostering a growth mindset in students? What kinds of things would I hear and see? What are some of the key instructional approaches and strategies that you use to do this? Can you provide me with some specific examples of how you foster a growth mindset in students?
- 15) Do you ever teach students explicitly about the nature of intelligence and brain science research? If yes, can you please speak to how you went about teaching this and what was the response from your students? If no, do you see any value in teaching about the brain to promote a growth mindset? And, is this something you would consider in your practice? Why/why not?
- 16) How do students respond to your approach to teaching a growth mindset? What indicators of learning do you see from them? Have you noticed any positive outcomes in terms of increased effort, motivation, or interest in learning?
- 17) How, if at all, do you encourage students to face challenges and take risks, even when failure is a possibility? Can you relay some examples of how you have done this? What outcomes did you observe from students?

- 18) How do you maintain a growth mindset in a student who is struggling and is not seeing the academic results they desire?
- 19) In what ways do you think the strategies in which you praise your students and provide feedback promote effort as opposed to skill? Can you relay some examples to support this? What outcomes have you observed from students because of your approach to feedback?
- 20) How do you assess student performance through a growth mindset orientation? How do you assess students through this lens? How, if at all, do you assess students' demonstration of a growth mindset?
- 21) What growth mindset strategies do you feel have the largest impact on students and why?
- 22) What strategies have you used to help a student who has developed a lack of motivation or learned helplessness, and what outcomes did you observe?
- 23) Some students, especially those that are gifted, may continuously show good academic performance but do so with minimal effort? How do you ensure that all your students are being challenged and oriented towards personal growth?

Supports and Challenges

- 24) What challenges do you experience with fostering a growth mindset in students? How do you respond to these challenges?
- 25) In what ways do your students struggle to adopt a growth mindset? How do you respond to these struggles?
- 26) What factors and resources support you in your commitment to fostering a growth mindset in students?

Next Steps

- 27) What range of resources or supports from within the education system would further assist you in realizing your commitment to fostering a growth mindset in students?
- 28) What is some advice you would give to a new teacher who is interested in implementing a growth mindset in their classroom?

Appendix C: Participant Consent Form

Date:

Dear _____,

My name is Chastity Lampley and I am a student in the Doctor of Education program at Carson-Newman University. A component of this degree program involves conducting a qualitative research study. My research will focus on learning what strategies teachers use to implement a growth mindset in the classroom, and what outcomes they observe from their approach. I am interested in interviewing educators who have had a full-time position for at least 5 years, are currently working in a primary setting, and have demonstrated commitment to promoting a growth mindset in their classroom and community. I think that your knowledge and experience will provide insights into this topic. Your participation in this research will involve three 45-60-minute focus group meetings/interview, which will be transcribed and audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient for you, outside of school time. The contents of this interview will be used for my research project, which will include a final paper. I may also present my research findings via conference presentations and/or through publication. You will be assigned a pseudonym to maintain your anonymity and I will not use your name or any other content that might identify you in my written work, oral presentations, or publications. This information will remain confidential. Any information that identifies your school or students will also be excluded. The interview data will be stored on my password-protected computer and the only person who will have access to the research data will be my course instructor Dr. Brenda Dean. You are free to change your mind about your participation at any time, and to withdraw even after you have consented to participate. You may also choose to decline to answer any specific question during the interview. I will destroy the audio recording after the paper has been presented and/or published, which may take up to a maximum of five years after the data has been collected. There are no known risks to participation, and I will share a copy of the transcript with you shortly after the interview to ensure accuracy.

Please sign this consent form, if you agree to be interviewed. The second copy is for your records. I am very grateful for your participation.

Sincerely,

Name:

Phone Number:

Email:

Course Instructor's Name:

Contact Info:

Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw from this research study at any time without penalty. I have read the letter provided to me by _____ and agree to participate in an interview/focus group for the purposes described. I agree to have the interview/focus group audio-recorded.

Signature: _____

Name: (printed) _____

Date: _____

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