

Transformational Leadership Practices to Inspire Growth Mindsets in Classroom Teachers

by

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Abstract

Teachers who have a fixed mindset may possess a resistance to change, which prohibits the teachers from adopting innovative instructional practices. Conversely, teachers who have a growth mindset remain optimistic and are willing to take on new challenges (Dweck, 2015; Meierdirk, 2016). The problem is a majority of teachers have experienced situations where negative teacher attitudes have hindered educational development (Ekecrantz & Schwieler, 2016). The literature has provided evidence of strong leadership affecting teacher motivation. A gap still exists regarding how school leaders inspire a growth mindset in teachers. Two independent theories shaped this case study. Transformational Leadership Theory (Burns, 1978) describes how school leaders implement practices that may inspire growth in classroom teachers. Growth Mindset Theory (Dweck, 2016b) establishes the belief in developing knowledge and talents over time, rather than simply being innate or inherited. The research questions and purpose of the study sought to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The qualitative, exploratory case study targeted a population of secondary school-based administrators and concentrated on a sample of eight such participants in a K–12 urban public-school district who used transformational leadership practices fairly often. Data collection methods included questionnaires, semi-structured interviews, and direct observations. Data were coded and analyzed to identify and describe themes to make inferences about which transformational leadership component(s) participants tend to use to inspire a growth mindset in classroom teachers.

Dedication

I would like to dedicate this dissertation to my amazing family. First, to my wife Kristine. You have been so supportive throughout this journey and your encouragement has meant the world to me. Thanks for always doing whatever it took so I could do whatever it took to accomplish this tall task. We have spent so much of our lives together; it can become hard not to get too comfortable and not to take each other for granted. Thanks also for keeping things fresh and keeping the kids and me on our toes and loving life. Next, to my son Evan. Your passion for and dedication to all of your interests is something I admire maybe more than you will ever know. Whether it is your love of sports or gaming or anything else you may become involved in later in life, may you always stay wildly passionate in your pursuit of success but also enjoyment in everything you do. Lastly, to my daughter Leah. You do not know it yet but your fierce independence and determination make you something special. I am confident you will find your way in this world because even if the world may not seem to present a clear path, you will undoubtedly find a way to blaze your own trail. Thank you all so much for being the kind of family anyone would feel fortunate to be part of. You make me very proud every day and I promise to continue to find ways to make you proud of me.

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Chapter 1: Introduction

New technologies, initiatives, and legislation surrounding modern education cause classroom teachers to adapt and align instruction accordingly. Often, teachers resist new instructional methods, strategies, or other innovations, which seem to depart from the experiences those teachers had as students (Snyder, 2017). School administrators and other instructional leaders should aim to transform teachers to be intrinsically motivated to exceed beyond the status quo to improve student growth and achievement. The leaders should inspire teachers to innovate and satisfy the needs of the modern learner (Tabassi, Roufechaei, Abu Bakar, & Yusof, 2017). Leaders can apply practices characterized by Transformational Leadership Theory, such as recognizing the potential skills of an employee, focusing on an end product, uniting staff in the pursuit of goals aligned with a shared vision, and finding ways to excite followers (Allen, Grigsby, & Peters, 2015).

School administrators and other instructional leaders are considered innovative when consistently transforming leadership styles to stay current with changes in a chosen field (Metcalf & Morelli, 2015). Leaders' innovative styles become vital to contributing to teachers' growth mindsets around advancing instructional practices (McCarley, Peters, & Decman, 2016; Tabassi et al., 2017). In the absence of innovative leadership or the presence of outdated or obsolete instructional methods, teachers who possess fixed mindsets around teaching ability are likely to be threatened by low-performing students and be tempted to blame the students (Dweck, 2015), making efforts to innovate in the classroom difficult.

Although most literature about growth mindset theory has concentrated on student adoption, some literature revealed a teacher's growth mindset has positive effects on student

performance and help provide a willingness for students to attempt new challenges (Ng, 2018). Teachers with a growth mindset encourage students to try harder because the teacher believes the students can improve over time. Teachers with a growth mindset use subtle techniques to help boost students' confidence in abilities and motivate the students toward achievement (Zeng, Chen, Cheung, & Peng, 2019). Likewise, for teachers to be motivated to continue to improve over time, school leaders need to promote and support a growth mindset in the teachers.

The introduction includes the background of the problem this study sought to address as well as a statement of the problem. The introduction contains the purpose and significance of the study and establishes the three research questions along with the theoretical and conceptual frameworks, which framed the research in the study. Furthermore, a list of essential term definitions is provided in the introduction. Finally, the introduction includes a discussion of the assumptions of the study along with the study's scope and delimitations and limitations.

Background of the Problem

Acquiring new skills, talents, and abilities might seem impossible to people who hold fixed mindsets. When school leaders ask teachers to implement new initiatives during times of change, the leaders hope the teachers embrace the new practices. Teachers often resist when change is seen as a disruption, when the change has not been well considered, or when the change occurs reactively rather than proactively (Reinders, 2017). Additionally, teachers likely resist change when acquiring new learning seems impossible. As much as school leaders ask teachers to implement change, those who possess fixed mindsets will likely not be able to until adopting a growth mindset, slowing down the intended timeline for the change to occur (Snyder, 2017).

The literature provided evidence of when resistance to change is directly influenced by the degree to which the resistance to change challenges an individual's psychological makeup (Burnes, 2015). Since growth and fixed mindsets are grounded in a person's psychological makeup, having a fixed mindset could enable a person to develop a resistance to change. Additionally, Burnes discussed how resistance to change could be moderated by the way the resistance is managed. School leaders might be able to manage teachers' resistance. The leaders will likely benefit from learning teachers' reasons for resistance and from understanding the roles of change agents and change recipients and the interactions between the two roles (Snyder, 2017). Once clear about being change agents, school leaders can begin the work toward transforming teachers' fixed mindsets before developing into resistance to change.

When educational institutions and administrators focus efforts on constant improvement, school leaders primarily seek ways to improve teacher practices, which may, in turn, positively impact student performance (Zalaznick, 2018). It could be difficult for teachers to inspire growth in students if the teachers do not value growth or are not rewarded for showing growth (Dweck, 2015). Carol Dweck, who pioneered the research on growth mindset targeting students, noted the positive effects teachers' growth mindset has on students when teachers believe instructional skills are developed over time. When teachers believe students develop skills on a continual basis, growth becomes reciprocal (Martin, 2015). Not only should student growth improve, but each student then represents an opportunity for the teacher to develop and refine instructional skills and strategies.

Statement of the Problem

The problem is teachers who possess a fixed mindset are likely to possess a resistance to change, which prohibits the teachers from wanting to adopt innovative instructional practices. In an ideal school setting, both school leaders and classroom teachers embrace constant change and are ready to adapt to new instructional practices. Unfortunately, some classroom teachers resist implementing new or innovative instructional methods (Ekecrantz & Schwieler, 2016; Snyder, 2017). Conversely, teachers who have a growth mindset remain optimistic and are willing to take on new challenges (Dweck, 2015; Meierdirk, 2016). School-based administrators might use sound leadership practices to shift teachers' mindsets, reducing the resistance, which impedes instructional innovation in a school.

The importance of the problem is if school leaders significantly reduce or eliminate teachers' resistance to change or fixed mindsets, instructional advancement is likely to occur and student performance might improve. The extent of the problem is a majority of teachers have experienced situations where negative teacher attitudes have hindered educational development (Ekecrantz & Schwieler, 2016). Those impacted most by the problem are classroom teachers, and consequently, the students taught by those teachers. Change is critical to instruct modern students in ways that are relevant to students' lives and are aligned with modern learning needs and technologies (Dweck, 2015). School-based administrators have a significant impact on teachers' change efforts and innovation (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016).

There is minimal research on the link between transformational leadership in school leaders and growth mindset in teachers. The literature on the effects of Transformational

Leadership Theory provides evidence of how school leaders who use transformational leadership practices have been shown to increase teachers' work engagement (Caniëls, Semeijn, & Renders, 2018) as well as levels of achievement and commitment and better support the organization's vision and mission (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016; Tabassi et al., 2017). A gap in the literature exists since there is no explanation of the extent to which transformational leadership practices by school-based administrators inspire classroom teachers to adopt a growth mindset.

Purpose of the Study

The purpose of this qualitative, exploratory single-case study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The study was necessary to address fixed mindsets in classroom teachers, which could cause the teachers to resist school or district change efforts. The exploratory single-case study sought to help understand the connection between the use of transformational leadership practices by school-based administrators and classroom teachers' adoption of a growth mindset around student-centered instructional practices. The study's findings revealed how school-based administrators choose which transformational leadership practices to use in various situations.

Significance of the Study

As an exploratory single-case study, the research could provide greater insight into the connection between transformational leadership in school leaders and growth mindset in teachers and indicate a need for further research into the phenomenon. The literature has addressed the relationship between transformational leadership and employee innovative behavior remains

unclear (Pradhan & Jena, 2019). Some literature on the effects of Transformational Leadership Theory provided evidence of how school leaders who use transformational leadership practices have been shown to increase teachers' levels of achievement and commitment, and better support the organization's vision and mission (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016; Tabassi, et al., 2017).

Change is critical to instruct modern students in ways that are relevant to students' lives and are aligned with modern learning needs and technologies. School-based administrators have a major impact on teachers' change efforts and innovation (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016). The study could contribute ways to conceptualize a top-down leadership and professional development approach. In such an approach, school leaders might inspire a growth mindset in both newer and more veteran classroom teachers for the teachers to be more inclined to use innovative teaching practices.

Research Questions

The problem is teachers who possess a fixed mindset are likely to possess a resistance to change, which prohibits the teachers from wanting to adopt innovative instructional practices. The purpose of this study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The following research questions guided the study:

Research Question 1: How are school-based administrators using transformational leadership practices to inspire a growth mindset in classroom teachers?

Research Question 2: How are school-based administrators' transformational leadership practices affecting classroom teachers' growth mindset focused on increasing student-centered

instruction?

Research Question 3: How do school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction?

Theoretical Framework

Two independent theories shaped the case study. The first, Transformational Leadership Theory (Burns, 1978), framed how school leaders choose whether or not to implement practices to intentionally inspire growth in classroom teachers. Additionally, through four components of transformational leadership, the theory framed which areas leaders concentrate on most to provide a more collaborative approach to school improvement (Campbell, 2018). The second, Growth Mindset Theory (Dweck, 2016b), framed the belief in knowledge and talents being developed over time, rather than simply being innate or inherited. Teachers with a growth mindset believe students continually grow and improve through more innovative, student-centered instructional strategies (Fitzgerald & Laurian-Fitzgerald, 2016). Taken together, both transformational leadership and growth mindset theories were explored to explain how school-based administrators use leadership practices to inspire a growth mindset in classroom teachers during times of organizational change.

Conceptually, what guided the analysis of the data collected through the study was the way leaders choose which transformational leadership practices to use to inspire followers through four components of transformational leadership. Such components have alternatively been referenced several times in the literature as the Four I's of Transformational Leadership (idealized influence, inspirational motivation, intellectual stimulation, and individual

consideration) (Rana, Malik, & Hussain, 2016). Transformational Leadership Theory is composed of these four factors, which describe different ways leaders choose to emphasize collective rather than individual organizational goals (Bottomley, Mostafa, Gould, & León, 2016).

Definitions of Terms

The following definitions have been considered for a reader to better understand the study and the literature which guided the study. The definitions include terms that are significant to the study's problem, purpose, methodology, and theoretical and conceptual frameworks. The following terms have been provided to assist the reader in understanding the context in which the terms are used.

Exploratory case study. Case studies allow researchers to obtain an in-depth, multifaceted understanding of a phenomenon at a particular research site (Crowe et al., 2011) and seek to answer *how* and *why* research questions regarding issues when many variables of interest exist (Pearson, Albon, & Hubball, 2015).

Fixed mindset. A fixed mindset is the opposite of and the absence of a growth mindset. Individuals who possess a fixed mindset believe intelligence is fixed; a person either has the ability to do something or not (Meierdirk, 2016).

Growth mindset. A growth mindset frames the belief in knowledge and talents being developed over time, rather than simply being innate or inherited (Dweck, 2016b).

Idealized influence. The component of transformational leadership theory which refers to when a transformational leader serves as a role model and affects followers to idolize the leader (Lee Abdullah & Varatharajoo, 2017).

In vivo coding. In Vivo, or *in that which is alive*, coding refers to words or short phrases taken verbatim from actual language found in qualitative data (Saldaña, 2015).

Individual consideration. The component of transformational leadership theory which refers to when a leader shares a collective organizational vision, encourages hard work, and defines goals clearly (Rana et al., 2016).

Inspirational motivation. The component of transformational leadership theory which refers to leaders who, based on personal values and aspirations, have a broad vision toward the future (Karimi & Morshedi, 2015).

Intellectual stimulation. The component of transformational leadership theory which refers to finding ways to make followers more aware, innovative, and creative (Alqatawenh, 2018).

Multifactor Leadership Questionnaire (MLQ)/Multifactor Leadership Questionnaire, Form 5X-Short (MLQ-5X). A leadership questionnaire created in 1995 by Bernard Bass and Bruce J. Avolio as a way to assess the degree to which a person is a transformational, transactional, or laissez-faire leader. The MLQ-5X identifies characteristics of a transformational leader and allows leaders to self-evaluate leadership styles and effectiveness (Mind Garden, 2019b).

Pattern coding. A research coding method, used as a second cycle method, in which researchers group summaries into a smaller number of categories, themes, or concepts (Saldaña, 2015).

Purposive sampling. A type of nonprobability sample. The main objective of a purposive sample is to produce a sample that can be assumed to be representative of a larger population

(Creswell, 2014).

Resistance to change. For this study, resistance to change defined as when classroom teachers are reluctant or resistant to implementing new or innovative instructional methods (Burnes, 2015; Reinders, 2017; Snyder, 2017).

The Four I's of Transformational Leadership. These are the subcategories or components of transformational leadership. The four I's include Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration (Bottomley et al., 2016).

Transformational leadership. Transformational leadership is a style of leadership where a leader works with followers to identify needed change, creating a vision to guide the change through inspiration. The leader executes the change in collaboration with committed members of the organization (Campbell, 2018).

Assumptions

Research procedures are established from broad assumptions, which are broken down into detailed methods of data collection, analysis, and interpretation (Creswell, 2014). The study was based on several assumptions about the participants, conditions, and environment. First, all participants who both took the MLQ-5X and participated in semi-structured interviews were assumed to have responded to questions in an open, honest manner. Next, participants who scored high on the MLQ-5X and participated in the interviews were assumed to use transformational leadership practices at least *fairly* often. The total score a participant can receive on four factors related to transformational leadership on the MLQ-5X is 80. Potential participants were deemed eligible to participate in the second and third rounds of data collection, interviews

and observations respectively, if the participant's total score in the four factors related to transformational leadership on the MLQ-5X equaled 60 or higher. Based on a score of 3 = *fairly often* on each of the MLQ-5X statements related to transformational leadership, a total score of 60 or higher meant a potential participant uses transformational leadership practices at least *fairly often*.

Furthermore, researchers might bring basic philosophical differences to research studies in the form of assumptions (Creswell, 2014). In this research study, the terms *school-based administrators* and *school leaders* were used interchangeably. Each school-based administrator was assumed to be a school leader and vice versa. Additionally, the participants, as school-based administrators, were assumed to be able to have a profound effect on teacher efficacy. Furthermore, full faculty meetings, administrator planning meetings, and individual or small group meetings with staff members were assumed to provide the best evidence to show how school-based administrators chose which transformational leadership practices to use to inspire a growth mindset in classroom teachers. Those settings were selected as the best opportunities for data collection during semi-structured interviews and direct observations.

Scope and Delimitations

Data for the study were collected from a small sample to make analytic generalizations to the larger population (Yin, 2018). One delimitation of the study was the location. The coverage of the study included a single urban public-school district within one state in the United States. Additionally, a delimitation was the study's focus on secondary-level school-based administrators within the district as participants. Another delimitation was to only use participants whose total score was 60 or higher in the four factors related to transformational

leadership on the MLQ-5X, which means the potential participant used transformational leadership practices at least *fairly often*. These delimitations could potentially affect the study's transferability. Transferability refers to the extent to which research questions or hypotheses can be applied to another context (Zhang & Wildemuth, 2016). Transferability was addressed in the study by applying purposive sampling. Participation in data collection rounds two and three was based on participants' MLQ-5X responses during round one. Based on the results from the MLQ-5X, only participants who self-assessed through the MLQ-5X using transformational leadership practices at least *fairly often* were chosen to proceed.

Limitations

Limitations in a research study refer to potential weaknesses in the study, which are out of the researcher's control. These limitations are acknowledged in hopes of preventing future studies from experiencing similar issues (Creswell, 2014). In the study, one limitation was the purposive sampling used to glean participants. In contrast to random sampling, the study's results cannot be generally applied to a larger population, only implied. Another limitation in the study was time. Since the data collection in the study was carried out over nine weeks, the data are a snapshot dependent upon the conditions which occurred only during such time.

Limitations in research studies can affect a study's credibility and dependability, which might invalidate the study's findings. Credibility refers to a study's internal validity. Dependability refers to the need for the research process to be open to scrutiny. One way in which credibility and dependability were maintained in the study was by applying methodological triangulation. Methodological triangulation involves using more than one instrument to collect data (Yin, 2018). The study involved three rounds of data collection

including instruments such as questionnaires, semi-structured interviews, and direct observations. Furthermore, clear procedures for coding and drawing conclusions from the qualitative data were established (Zhang & Wildemuth, 2016). Such procedures included conducting two cycles of coding, beginning with in vivo coding in the first cycle and then pattern coding to identify and describe themes gleaned from the qualitative data. Furthermore, Creswell's *Case Study Analysis and Representation* was used as a data analysis protocol in the study (Creswell, 2014).

Chapter Summary

An introduction was presented to highlight the background and extent of the problem the study sought to address. Furthermore, the rationale for the study and the theoretical framework which guided the study were established. The study's purpose was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The purpose of the study along with the research questions helped explain why the study is necessary. Leaders' innovative leadership practices become vital to contributing to teachers' growth mindsets around innovative instructional practices (McCarley et al., 2016; Tabassi et al., 2017). Finally, the introduction chapter addressed the assumptions, delimitations, and limitations that needed to be considered in relation to the study.

The literature review synthesizes the literature reviewed to frame the research study. Search strategies for collecting, organizing, and categorizing relevant literature are outlined as well as a description of the theoretical framework which framed the study and a presentation of a

comprehensive review of relevant literature. Additionally, descriptions of what is known, what is unclear, and what gaps exist regarding relevant topics found in the literature review are provided.

Chapter 2: Literature Review

The purpose of this qualitative, exploratory single-case study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. Some classroom teachers are reluctant about or resistant to implementing new or innovative instructional methods (Burnes, 2015; Reinders, 2017; Snyder, 2017). The study was designed to address the problem of classroom teachers possessing a fixed mindset, which could cause resistance to change and could prohibit resistant teachers from adopting innovative instructional practices. The extent of the problem is a majority of teachers have experienced situations where negative teacher attitudes have hindered educational development (Ekecrantz & Schwieler, 2016). School-based administrators could leverage leadership practices to shift teachers' mindsets, reducing the resistance to change, which impedes instructional innovation.

The importance of the problem is when school leaders significantly reduce or eliminate teachers' resistance to change or fixed mindsets, instructional advancement and student performance should improve (Burnes, 2015). Other than students, educational policies, and colleagues, school administrators represent one of the key external factors affecting teacher work motivation (Börü, 2018). As one of these key external factors, school-based administrators might positively influence teachers' intrinsic motivation toward growth and improvement (Yoon, 2016). The administrators, then, actualize leadership practices to inspire teacher growth.

The literature has addressed how the relationship between transformational leadership and employee innovative behavior remains unclear (Pradhan & Jena, 2019). Some literature on the effects of Transformational Leadership Theory has provided evidence of how school leaders

who use transformational leadership practices have been shown to increase teachers' work engagement (Caniëls et al., 2018) and levels of achievement and commitment as well as better support the organization's vision and mission (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., (2016); Tabassi et al., 2017). Change is critical to instruct modern students in ways that are relevant to students' lives and are aligned with modern learning needs and technologies. School-based administrators have a major impact on teachers' change efforts and innovation (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016).

When education institutions and administrators focus efforts on constant improvement, school leaders primarily seek ways to improve teacher practices, which may, in turn, positively impact student performance (Zalaznick, 2018). Inspiring growth in students could be difficult for teachers if the teachers do not value growth and are not rewarded for showing growth (Dweck, 2015). Carol Dweck, who pioneered the research on growth mindset by targeting students, noted the positive effects teachers' growth mindset has on students when the teachers believe instructional skills are developed over time. When teachers believe students develop skills on a continual basis, growth becomes reciprocal (Martin, 2015). Not only should student growth improve, but each student then represents an opportunity for the teacher to develop and refine instructional skills and strategies.

The literature review outlines the search strategies utilized for collecting, organizing, and categorizing relevant literature reviewed for and included in the literature review. Next, the two independent theories which helped shape the study are described in the theoretical framework section. Further, a comprehensive review of relevant literature is presented in a general-to-specific format, whereby major concepts are presented and then further developed to align more

closely with the study in terms of the problem, methodology, and population. Literature related to and derived from key concepts is synthesized to produce a description of what is known, what is unclear, and what gaps exist regarding relevant topics found in the literature review.

Four main themes emerged from the literature, which inspired the organization of the literature review. The first section in the literature review explains the characteristics of Transformational Leadership Theory, including the Four I's of Transformational Leadership. Included in the theme is an explanation of how Transformational Leadership Theory differs from other popular leadership theories. Furthermore, a breakdown of each component of transformational leadership, or the Four I's of Transformational Leadership, describes the variety of ways leaders use transformational leadership to inspire followers toward organizational success. Additionally, under the Transformational Leadership Theory section, a connection between transformational leadership and innovation in education is explained with relevant literature, which points to how transformational leadership improve followers' efforts and motivation.

The second two sections in the research literature review cover topics most closely related to growth mindset theory. First, growth mindset theory is presented, including a brief historical context and unique characteristics of the theory. The subsection includes an explanation of fixed mindset and the relationship between fixed mindset and resistance to change. The section on fixed mindset includes literature to explain how and why some classroom teachers adopt a resistance to change. Finally, the concluding theme in the research literature section is the theme of growth as a journey. The final section outlines how growth mindset for implementing meaningful change, specifically among classroom teachers related to instructional

practices, is a process. As the literature has revealed, growth and adopting a growth mindset do not happen in a single moment. Rather, a mindset shift happens as a process, which is usually supported by mentors or leaders. School leaders might use transformational leadership practices to inspire classroom teachers to innovate instructional practices.

Literature Search Strategy

The literature search involved using online databases to locate previously published, peer-reviewed professional journal articles. The American College of Education's online library was the main search source for such databases and articles. Google Scholar served as another online search resource. Electronic versions of articles were gathered using such online searches. The articles were then organized and categorized in online curation tools such as EndNote and Wakelet, and Google Drive as cloud-based storage. Additionally, other electronic resources included information from the websites of authors and organizations who own the rights to information related to transformational leadership and growth mindset theories. Furthermore, print sources, such as published transformational leadership books, were utilized and were viewed either in print or on a computer-based e-reader.

The following phrases, search terms, and keywords were used for relevant resources during online and other literature searches: *transformational leadership; transformational leadership theory; transformational leaders; idealized influence; inspirational motivation; intellectual stimulation; individual consideration; the 4 I's of transformational leadership; leadership theories; leadership style; James V. Downton; James Downton and Transformational Leadership; James McGregor Burns; James McGregor Burns and Transformational Leadership Theory; Bernard Bass; school leadership; teacher buy-in; teacher innovation; student-centered;*

student-centered classroom; student-centered instruction; growth mindset; growth mindset theory; growth mindset in teachers; teachers' growth mindset; growth mindset and teacher motivation; fixed mindset; fixed mindset and teacher resistance; Carol Dweck, Dweck, Dweck's growth mindset; implicit theories; school change; resistance to change; teacher resistance; teacher motivation; intrinsic motivation; teacher intrinsic motivation; inspirational leadership; teacher inspiration; teacher empowerment; school improvement; multifactor leadership questionnaire; MLQ; and MLQ-5X.

Organizing and categorizing the literature occurred through a systematic process in which articles were sorted by themes. Throughout the literature search process, four main themes emerged: transformational leadership, including the Four I's of Transformational Leadership; a link between transformational leadership and innovation in education; growth mindset, including fixed mindset and the relationship to resistance to change; and growth as an ongoing journey. These four themes framed the sorting system used to curate articles and other resources for the literature review. The four themes guided the organization of the literature review.

Theoretical Framework

Two independent theories shaped the case study. The first, Transformational Leadership Theory (Burns, 1978), framed how school leaders choose whether or not to implement practices to intentionally inspire growth in classroom teachers. Additionally, through four components of transformational leadership, the theory framed which areas leaders concentrate on most to provide a more collaborative approach to school improvement (Campbell, 2018). The second, Growth Mindset Theory (Dweck, 2016b), framed the belief in knowledge and talents being developed over time, rather than simply being innate or inherited. Teachers with a growth

mindset believe students continually grow and improve through more innovative, student-centered instructional strategies (Fitzgerald & Laurian-Fitzgerald, 2016).

Taken together, both transformational leadership and growth mindset theories could explain how school-based administrators use leadership practices to inspire a growth mindset in classroom teachers during times of organizational change. Much of the literature on growth mindset theory has concentrated on how students adopt growth mindsets to acquire new knowledge or skills the students had previously found difficult (Fitzgerald & Laurian-Fitzgerald, 2016; Martin, 2015; Meierdirk, 2016; Ng, 2018; Zalaznick, 2018; Zurawski & Mancini, 2016). Many teachers additionally hold negative attitudes or emotions toward or have a fixed mindset around adopting new knowledge, including innovative instructional practices (Ekecrantz & Schwieler, 2016). Student growth and development are likely to suffer when classroom teachers are not open to new ideas about how to make instruction more innovative and student-centered.

Transformational leadership is characterized by the ability of leaders who practice the theory to empower followers and leverage followers' strengths, weaknesses, and interests to collaborate toward realizing an organization's mission and vision (Eliophotou-Menon & Ioannouz, 2016; Tabassi et al., 2017). Leadership theorist James McGregor Burns (1978) defined transformational leadership as a process where leaders and followers cause one another to achieve greater levels of morality and motivation. The theory supports the study because transformational leaders often find ways to motivate reluctant, resistant, or generally unmotivated employees (Allen et al., 2015).

Conceptually, what guided the analysis of the data collected through the study is the way leaders choose which transformational leadership practices to use to inspire followers through

four components of transformational leadership. Such components have alternatively been referenced several times in literature as the Four I's of Transformational Leadership (idealized influence, inspirational motivation, intellectual stimulation, and individual consideration) (Rana et al., 2016). Transformational leadership theory is thought to be composed of these four components, which describe different ways leaders choose to emphasize collective rather than individual organizational goals (Bottomley et al., 2016).

Growth mindset theory is characterized by the belief individuals continuously learn and grow through practice and over time (Dweck, 2015; Fitzgerald & Laurian-Fitzgerald, 2016; Meierdirk, 2016). The belief in continual development is contrary to what people who have a fixed mindset believe. The literature has reported fixed mindsets lead to beliefs such as individuals are born with innate abilities or natural talents, and others who do not possess those abilities or talents might never be able to acquire such skills. Additionally, the literature has revealed a growth mindset positively affects student motivation, academic achievement, and engagement and provides a willingness to attempt new challenges (Ng, 2018). When school administrators use transformational leadership practices to inspire a growth mindset in classroom teachers, the leaders empower teachers, like teachers empower students, to higher levels of motivation.

Research Literature Review

The literature on transformational leadership and growth mindset had not concluded whether or not leadership practices motivate or inspire teachers to adopt a growth mindset. Similar research studies related to educational and organizational change efforts have claimed transformational leadership has a positive effect on a school's innovative culture (McCarley et

al., 2016). Many educational organizations prefer transformational leadership to other leadership theories when considering school change. The ideals of transformational leadership stand out during school change efforts due to leaders' ability to boost employee performances (Mohiuddin, 2017). Specific to education, transformational leaders influence teachers' perceptions of school culture and climate, and an individual commitment to change (Tabassi et al., 2017).

New technologies, initiatives, and legislation surrounding modern education cause classroom teachers to adapt and align instruction accordingly. Often, teachers resist new instructional methods, strategies, or other innovations which seem to depart from the experiences those teachers had as students (Snyder, 2017). School administrators and other instructional leaders should aim to transform teachers to be intrinsically motivated to exceed beyond the status quo to improve student growth and achievement - to innovate and satisfy the needs of the modern learner (Tabassi et al., 2017). Leaders might apply practices characterized by Transformational Leadership Theory, such as recognizing the potential skills of an employee, focusing on an organizational mission, motivating the collective staff to achieve goals aligned with a shared vision, and finding ways to excite followers (Allen et al., 2015).

School administrators and other instructional leaders are considered innovative when consistently evolving leadership styles to stay current with changes in a chosen field (Metcalf & Morelli, 2015). Leaders' innovative leadership practices become vital to contributing to teachers' growth mindsets around innovative instructional practices (McCarley et al., 2016; Tabassi et al., 2017). In the absence of innovative leadership or the presence of outdated or obsolete instructional methods, school often removes people from real life (Dweck, 2015). The study could contribute ways to conceptualize a top-down leadership and professional development

approach whereby school leaders inspire a growth mindset in both newer and more veteran classroom teachers for the teachers to be more inclined to use innovative teaching practices.

Although most literature about Growth Mindset Theory concentrated on student adoption, some literature has revealed a teacher's growth mindset can have positive effects on student performance and help provide a willingness for students to attempt new challenges (Ng, 2018). Teachers with a growth mindset encourage students to try harder because the teacher believes the students will likely improve over time. Those teachers help boost students' confidence in abilities and motivate the students toward achievement in subtle ways (Zeng et al., 2019). Likewise, for teachers to be encouraged to continue to improve over time, school leaders encourage teachers through effective leadership practices.

Transformational Leadership Theory

Throughout history, several major leadership theories have emerged, each with unique leader styles, rationale, and practices. Some examples of such leadership theories include Great Man Theory, Trait Theory, Situational Theory, Behavioral Theory, Power or Influence Theory, Participative Theory, Contingency Theory, Transactional Theory, and Transformational or Relationship Theory (Amanchukwu, Stanley, & Ololube, 2015; Shafique & Beh, 2017). Furthermore, Amanchukwu et al. noted several factors exist to determine a leader's style. These factors include the size of an institution or organization, the degree of interaction or communication within the institution or organization, the personality of the members, goal alignment among leaders and followers, and the level of decision making.

Transformational leadership is a leadership style whereby a leader inspires followers to identify areas for change and create a vision to guide the change. The leader executes the change

in collaboration with committed members of the organization (Campbell, 2018). Although the theory is often credited to leadership expert James McGregor Burns, the concept of transformational leadership was first introduced by James V. Downton, the first to coin the term transformational leadership, in the 1973 book *Rebel Leadership: Commitment and Charisma in a Revolutionary Process*. Downton studied the concept of charisma and the influence charisma has on religious leadership (Warrick, 2018). Downton's work was popularized with the publication of Burns's book. Figure 1 shows how transformational leaders implement a transformational model to lead change in an organization.

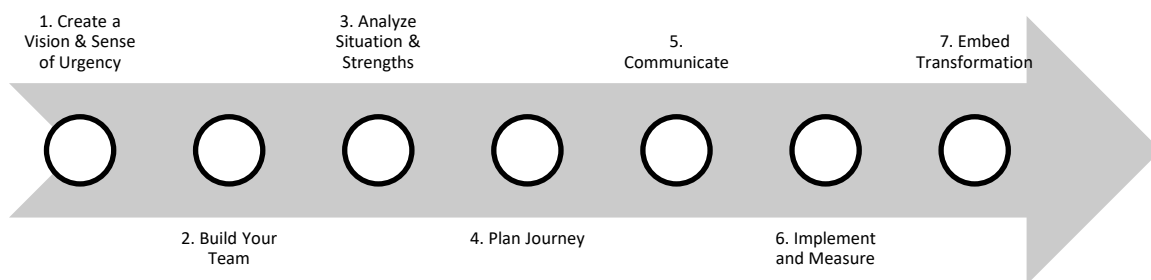


Figure 1. A transformational model, which transformational leaders use to promote change within an organization (Metcalf & Morelli, 2015).

Transformational Leadership Theory was later developed further by Burns in the 1978 book *Leadership*. According to Burns (1978), transformational leadership is a process where both leaders and followers “raise one another to higher levels of morality and motivation” (p.

20). Additionally, Burns contended most people are followers who do not aspire to leadership positions or responsibilities. Alternately, those followers seek good leadership (Stein, 2016). Stein claimed the reason many educational institutions incorporate transformational leadership over other leadership styles is because educators prefer school leaders who are truly leaders rather than managers. While managers choose to use coercive power, transformational leaders leverage relationships with followers to support, encourage, and empower (Yaslioglu & SelenayErden, 2018). Furthermore, school administrators who are transformational leaders get teachers to go beyond routine tasks to extend support to the entire institution to improve organizational achievement (Bottomley et al., 2016).

Bernard M. Bass later expanded Burns's original ideas to create what is known as *Bass's Transformational Leadership Theory*. According to Bass, transformational leadership is defined based on the impact a leader has on followers (Bass, 1985). According to Bass's 1985 book, *Leadership and Performance Beyond Expectations*, transformational leaders are models of integrity and fairness, set clear goals, have high expectations, encourage others, provide support and recognition, stir the emotions of people, get people to look beyond self-interest, and inspire people to reach for the improbable.

The four i's of transformational leadership. Much of the literature on transformational leadership theory referred to four components of transformational leadership. These components are alternatively commonly regarded as the Four I's of Transformational Leadership. The four I's include Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration (Bottomley et al., 2016). Some literature referred to five components instead of four. When there were five components, Idealized Influence was divided into two separate

components known as *Idealized Influence (attributed)* and *Idealized Influence (behavior)* (Rana et al., 2016). Practiced independently or collectively, the four I's identify areas of leadership practices unique to transformational leaders.

A questionnaire created to evaluate leadership styles, the Multifactor Leadership Questionnaire (MLQ), or the Multifactor Leadership Questionnaire, Form 5X-Short (MLQ-5X) (Bass & Avolio, 1995), is used to determine the extent to which a transformational leadership leader uses any or all of the four I's. The MLQ-5X was created in 1995 by Bernard Bass and Bruce J. Avolio as a way to assess the degree to which a person is a transformational, transactional, or laissez-faire leader. The MLQ-5X identifies characteristics of a transformational leader and allows leaders to self-evaluate leadership styles and effectiveness (Mind Garden, 2019a).

There was contradiction in the literature on transformational leadership regarding an additive effect and directly relating to the four I's. Additive effects occur when two or more variables are used together in a model and produce a total effect which equals the sum of the individual effects (Alatawi, 2017). Transformational leaders encourage followers to attain goals by encouraging and supporting followers to perform more than what was thought to be possible (Lee Abdullah & Varatharajoo, 2017). Alatawi explained some literature has recommended for leaders to achieve performance beyond expectations, the leaders combine all of the four I's together into one leadership style. Quantitative research has concluded there is a positive and significant relationship between transformational leadership and transformational leadership components (Karimi & Morshedi, 2015). Figure 2 provides general explanations of each of the four components of transformational leadership.

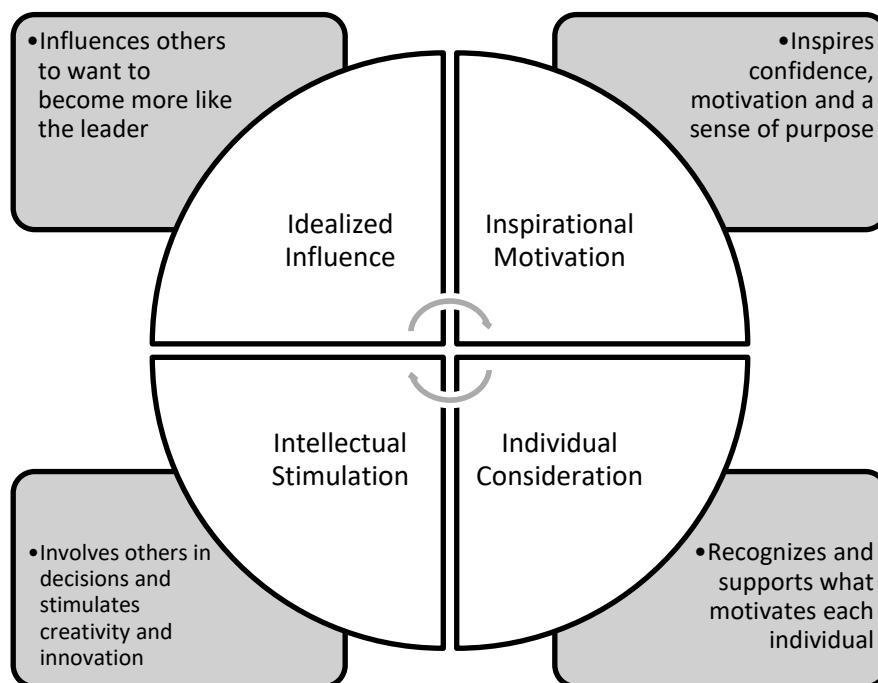


Figure 2. The Four I's of Transformational Leadership (Burns, 1978).

Idealized influence. Idealized influence is a component of transformational leadership which refers to when a transformational leader serves as a role model and affects followers to idolize the leader (Lee Abdullah & Varatharajoo, 2017). Often alluding to a leader's charisma, idealized influence depicts how follower beliefs, values, and norms reflect the charismatic actions of the leader (Malik, Javed, & Hassan, 2017). The leader hopes to inspire and motivate followers to work toward achieving the organizational vision. Furthermore, through idealized influence, transformational leaders gain followers' respect, trust, and admiration through risk-taking, considering the needs of others, and setting high standards of ethics and acting upon those standards.

The MLQ-5X Leader Form includes four assessment items related to idealized influence (attributes). Items 10, 18, 21, and 25 allow the leader to self-assess attributes (Mind Garden,

2019b). According to Mind Garden, Inc., the MLQ-5X includes three assessment items related to Idealized Influence (Behaviors). Items 6, 14, 23, and 34 allow the leader to self-assess behaviors.

Leaders who practice idealized influence are generally seen as being respected and trusted (Allen et al., 2015). Such leaders who possess high moral and spiritual standards, as well as high levels of respect, create loyalty among followers (Karimi & Morshedi, 2015). The loyalty allows a school leader to influence teachers to agree more easily with proposed changes. Furthermore, transformational school leaders who practice idealized influence tend to possess high levels of self-confidence, which the leaders seek to share with others. Together, through idealized influence, both school leaders and teachers might gain a sense of pride in having leadership and school improvement policies and other decisions be made collectively and collaboratively.

Inspirational motivation. Inspirational motivation is a component of transformational leadership which refers to leaders who, based on personal values and aspirations, have a broad vision toward the future (Karimi & Morshedi, 2015). Additionally, leaders who employ inspirational motivation are known to inspire enthusiasm and excitement, and to create confidence in followers. These leaders are generally able to gain buy-in easily from followers when seeking to implement change. In schools, teacher buy-in is crucial to the process of adopting organizational changes to policies or procedures. Either due to negative past experiences or a lack of confidence in expertise or both, some teachers possess a resistance to change, making teacher buy-in hard to obtain (Yoon, 2016). Transformational school leaders motivate teachers to cast away individual biases and to act according to the best interest of the entire organization.

The MLQ-5X Leader Form includes four assessment items related to inspirational motivation. According to Mind Garden (2019b), items 9, 13, 26, and 36 ask leaders to self-assess motivational abilities. These items speak to a transformational leader's ability to inspire followers to achieve full potential and possibly put forth an extra effort. Inspirational motivation includes behaviors such as speaking optimistically about the future and what needs to be accomplished and expressing confidence in goals being achieved (Heller, Notgrass, & Conner, 2017).

For an organization to deal with change effectively requires leaders' behaviors to coincide with the goals of the organization (Alqatawenh, 2018). Transformational leaders use the component of inspirational motivation when the leaders inspire followers to implement change as willingly as possible. In schools, building administrators ask for teacher buy-in for any number of reasons, such as to implement new policies, to adopt new curricula, or even to change instructional practices entirely. The transformational school leader elicits teacher buy-in by increasing teachers' optimism and enthusiasm (Börü, 2018).

Intellectual stimulation. Intellectual stimulation is a component of transformational leadership which refers to leaders who find ways to make followers more aware, innovative, and creative (Alqatawenh, 2018). Since follower empowerment is a major focus of transformational leadership theory, intellectual stimulation speaks to followers being stimulated to think and act independently but for the good of the greater organization. In schools, administrators get teachers to be more innovative and to be risk-takers in classrooms and with students. Furthermore, empowerment becomes relevant since leaders cannot stand alone in organizational improvement

efforts. The leader, through intellectual stimulation, empowers employees to think and act independently (Smothers, Doleh, Celuch, Peluchette, & Valadares, 2016).

The MLQ-5X Leader Form includes four assessment items related to intellectual stimulation. According to Mind Garden (2019b), items 2, 8, 30, and 32 ask leaders to self-assess an ability to stimulate followers' intellect. A leader's ability to perform intellectual stimulation shows how transformational leaders encourage out-of-the-box thinking and innovative strategies as well as possibly challenging organizational norms (Karimi & Morshedi, 2015).

Like other components of transformational leadership, intellectual stimulation has origins in the leader being able to communicate the importance of a goal or organizational vision. Through intellectual stimulation, leaders motivate followers to find innovative ways to realize the vision for the good of the entire organization (Börü, 2018). Some teachers resist change when feeling unprepared to handle new initiatives or become reluctant when faced with implementing new methodologies (Holdsworth & Maynes, 2017). Transformational school leaders who use intellectual stimulation leverage teacher resistance and reluctance as steps toward innovation and realization of instructional goals and student and school improvement.

Individual consideration. Individual consideration is a component of transformational leadership which refers to when a leader shares a collective organizational vision, encourages hard work, and defines goals clearly (Rana et al., 2016). The component shares similarities with other components since the leader finds ways for individual followers to realize organization-wide goals. The difference between individual consideration and the other components of transformational leadership is when leaders practice individual consideration, the leaders recognize individual followers' needs and support those needs through coaching and consulting

(Karimi & Morshedi, 2015). Transformational leaders stay focused on organizational goals while building individual capacity in followers.

The MLQ-5X Leader Form includes four assessment items related to individual consideration. According to Mind Garden (2019b), items 15, 19, 29, and 31 ask leaders to self-assess an ability to consider individuals' strengths, weaknesses, and interests. The skills mentioned in these assessment items portray the leader as one who finds ways to strengthen the individuals within an organization while maintaining a focus on the entire organization. When transformational leaders practice individual consideration, the leader adopts a mindset that considers an entire organization to be greater than the sum of the parts.

Leaders take on a variety of roles through organizational change and improvement processes. In the case of individualized consideration, transformational leaders take on a coaching role as the leaders address the individual needs of followers and guide the followers through support and engagement (Eliophotou-Menon & Ioannouz, 2016). Like intellectual stimulation, individual consideration often inspires followers, like a sports team performing for a coach, to contribute extra effort as leaders provide a sense of direction to team members (Gorgulu, 2019). Through extra effort, the members of an organization take individual knowledge, skills, and talents to contribute to the collective success of the entire organization to perform for and with support from a strong leader.

Transformational leaders focus on relationships. Transformational leaders are known to develop not only supportive relationships with followers but relationships which are collaborative (Sun & Henderson, 2017). Moreover, such relationships are thought to go deeper and are often referred to not as relationships but as connections. When leaders practice

transformational leadership, the leaders focus on connections, which result in increased motivation and morality in both leaders and followers (Amanchukwu et al., 2015). One way a transformational leader focuses on creating and maintaining such productive connections with followers is by understanding the collective efforts of an entire staff are needed to sustain high levels of organizational achievement. Furthermore, successful transformational leaders define reality, clearly articulate the organizational vision, create alignment, become a servant, and show gratitude (Benson, 2015).

The literature has questioned whether school administrators can successfully lead change efforts independently and without support from classroom teachers and other staff (Martin, 2015). Similarly, teachers cannot improve overall school performance and achievement without strong leaders who encourage the teachers to contribute to the overall organization vision (Bottomley et al., 2016). Organizational success significantly depends on interactions among and between teachers, other staff, and school administrators (Pradhan & Jena, 2019). The symbiotic relationship between transformational leaders and followers is what enables innovation in education.

Transformational leaders inspire a shared vision and build trust. The literature has revealed school leaders take a collaborative approach to establishing organizational visions. An important step in the vision process unique to transformational leaders is to include and empower followers to contribute to creating the vision (Metcalf & Morelli, 2015). School leaders use transformational leadership when teachers and other non-administrative staff are recruited to participate in school leadership processes. When leadership processes are shared between leaders and followers, research indicates higher levels of organizational trust. In turn, teacher

perceptions of a school administrator's leadership style is likely to have a profound influence on school climate (Allen et al., 2015).

Regardless of which leadership style or leadership theory a school leader chooses to portray, leadership practices influence followers either positively or negatively. In educational settings, teacher perceptions of a principal's leadership style influence the overall school climate (Allen et al., 2015). Furthermore, quantitative findings have indicated a statistically significant positive relationship between transformational leadership and the following seven dimensions of school climate: order, leadership, environment, involvement, instruction, expectation, and collaboration (Eliophotou-Menon & Ioannouz, 2016). When school leaders implement transformational leadership practices, not only could instructional practices improve over time, but the building's culture and climate among teachers might improve.

The Link between Transformational Leadership and Innovation in Education

Leadership theorists have identified several leadership styles school leaders choose to use to support school improvement and impact schools, staff, and students. Transformational leadership theory is one of the most popular and effective contemporary approaches to leadership concerning innovation (McCarley et al., 2016). A significant difference between more traditional and more innovative leaders is innovative leaders focus on motivating and empowering followers rather than being controlling or leading in a way which focuses more on compliance (Benson, 2015). Additionally, more innovative leaders drive organizational innovation through feedback from others and by acting as a scientist through experimenting, measuring, and testing for improvement and exploring new avenues for improvement (Alqatawenh, 2018). Figure 3 shows

a comparison between leaders who use more traditional leadership styles and leaders who use more innovative leadership styles.

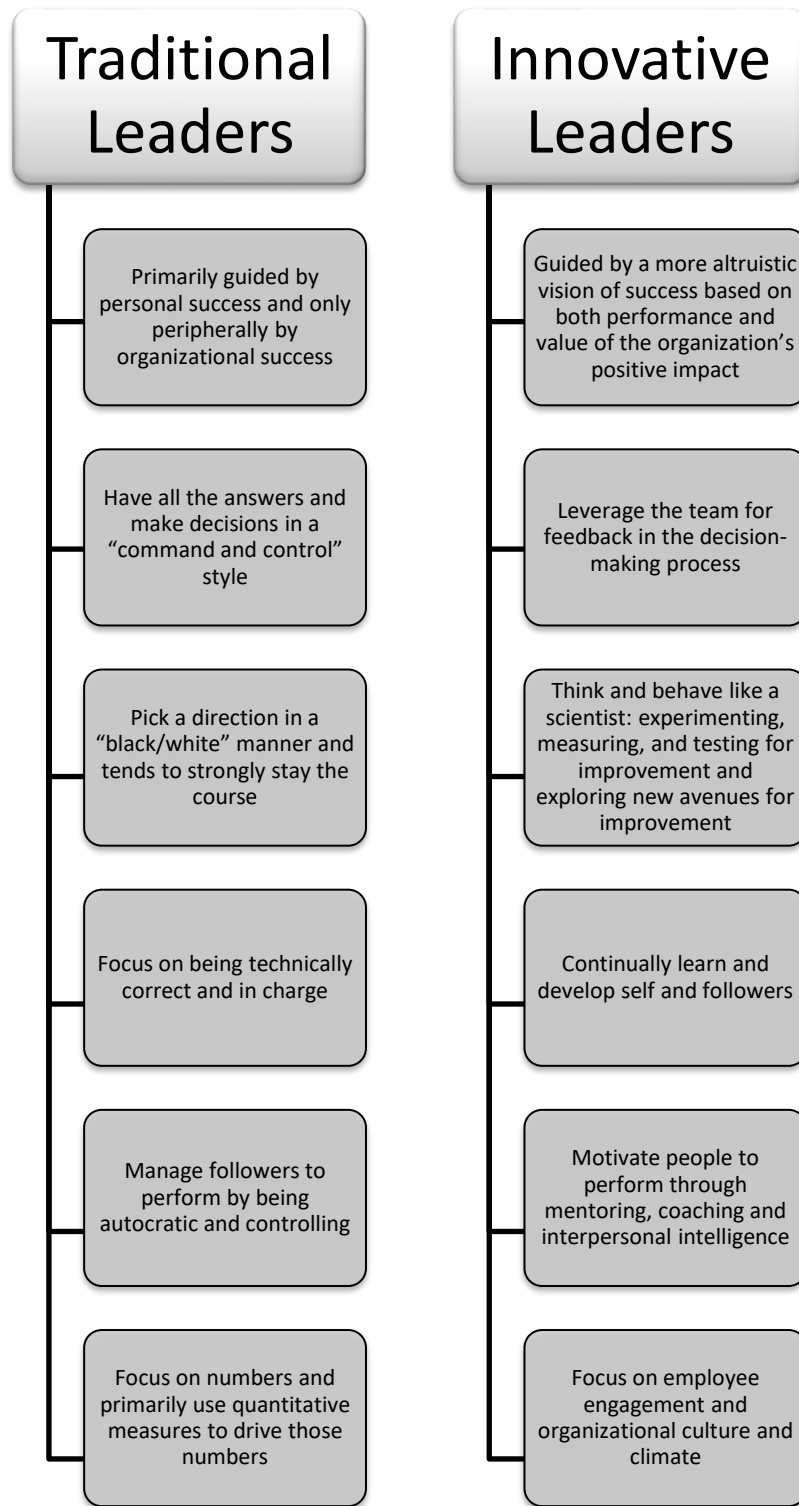


Figure 3. Leadership qualities of traditional leaders compared to innovative leaders (Metcalf & Morelli, 2015).

Critics have questioned the definition of transformational leadership and overall effectiveness, noting a redundancy, which makes efficacy difficult to explain (Berkovich, 2016). McCarley et al. (2016) noted transformational leaders seek to empower staff members to move beyond self-interest by providing idealized influence or charisma, individualized consideration, intellectual stimulation, and inspirational motivation. Strong transformational school leaders inspire a pursuit of building and maintaining a strong school climate. Teacher motivation and innovation represent important aspects of a strong instructional climate focused on academic growth. The literature addressed situations when teachers who perform tasks in support of school leaders, in addition to required instructional tasks, perceive the school climate as less innovative than teachers who are not assigned additional administrative tasks (Allen et al., 2015).

School leaders, through policies and practices, contribute positively or negatively to classroom teachers' intrinsic motivation, creativity, and desire for new learning. In such positive cultures, individual staff members experience heightened senses of pride, responsibility, and empowerment to support a collective mission to contribute to a school's growth and achievement (Rana et al., 2016). Leaders strongly influence employees' work behaviors, particularly innovative behaviors and job performance (Pradhan & Jena, 2019). The leaders could retain teachers longer. The literature on why veteran teachers remain in the profession has addressed situations when long-serving teachers, those with between 20 and 29 years of experience, care less about extrinsic motivators such as pay or holidays than about the quality of leadership and management (Chiong, Menzies, & Parameshwaran, 2017).

Growth Mindset Theory

Stanford University Researcher Carol Dweck has been credited with developing Growth Mindset Theory (Dweck, 2016b). Dweck's research was based on prior studies on implicit theories due to the potential positive effects implicit theories have on academic functioning. Developed further by Growth Mindset Theory, implicit theories explained how some people tend to perceive intelligence as more of a fixed or unchangeable characteristic while others consider intelligence as something which can be developed (Costa & Faria, 2018). Dweck continued researching the contributing factors to individuals' achievement and success, turning research findings into the successful book *Mindset: The New Psychology of Success*. Educators have popularized the book since growth mindset has been linked to student achievement. Figure 4 shows differences in the way people who possess either mindset differ in views on topics such as skills and intelligence, the main concern, effort, challenges, feedback, and mistakes.

Skills and Intelligence	<ul style="list-style-type: none"> •Growth Mindset: Can be grown and developed over time •Fixed Mindset: Are set and cannot be developed
Main Concern	<ul style="list-style-type: none"> •Growth Mindset: Process focus - Learning and improving •Fixed Mindset: Performance focus - Concerned with appearance
Effort	<ul style="list-style-type: none"> •Growth Mindset: Effort is an important part of learning •Fixed Mindset: Effort is something you do when you are not good
Challenges	<ul style="list-style-type: none"> •Growth Mindset: Work through challenges with grit and perseverance •Fixed Mindset: Give up or check out
Feedback	<ul style="list-style-type: none"> •Growth Mindset: Use feedback as a tool for learning •Fixed Mindset: Take feedback personally and may get defensive
Mistakes	<ul style="list-style-type: none"> •Growth Mindset: Treat as learning opportunities •Fixed Mindset: Try to avoid making them

Figure 4. Differences in mindset characteristics between growth and fixed mindsets (Zurawski, & Mancini, 2016).

Growth mindset principles and practices are used among schools and teachers to increase student motivation, achievement, and test scores and to possibly predict academic success in young students (Zurawski & Mancini, 2016). Targeting only students, Dweck's research generalized people primarily possess one of two mindsets, either a growth mindset or a fixed mindset. Studies showed statistically 40% of students have a mainly growth mindset, 40% have a

mainly fixed mindset, and the remaining 20% have a mixed mindset (Dweck, 2016b). Having a mixed mindset refers to individuals who switch back and forth between the two mindsets according to which allows the individual to be most successful given the task or the situation.

As a motivational approach to learning, classroom teachers and schools have incorporated growth mindset practices into instruction and other aspects of school culture (Fitzgerald & Laurian-Fitzgerald, 2016). Implicit theories and the resulting Growth Mindset Theory contend people who possess growth mindsets tend to focus more on learning goals and intellectual development, and value effort (Costa & Faria, 2018). Teachers inspire students to have a growth mindset by persevering through difficult tasks, having a positive outlook, having confidence learning comes eventually if not at first, and the idea about how powerful learning emerges from mistakes and failures.

Fixed mindset. The fixed mindset term and philosophy have spawned from Dweck's Growth Mindset Theory. A fixed mindset is both the opposite of and the absence of a growth mindset. Individuals who possess a fixed mindset believe intelligence is fixed; a person either can do something or cannot (Meierdirk, 2016). Unlike people who possess a growth mindset, people who have a fixed mindset believe talents and abilities are innate and predetermined and cannot be developed over time. Furthermore, people with fixed mindsets believe if learning does not come naturally, new knowledge likely never will (Zurawski & Mancini, 2016).

Although most literature has analyzed growth and fixed mindsets in students, some literature has found similar significance in adults. Work environments and other situations unique to adults are likely to be full of fixed-mindset triggers (Dweck, 2016a). Much of the reviewed literature, including Dweck's, refers only to growth and fixed mindsets in students. To

explore growth mindset in adults and teachers, researchers have had to describe the phenomenon in other terms. The concept of growth mindset in adults and teachers often emerges in studies on motivation, job engagement, and job performance (Holdsworth & Maynes, 2017).

If teachers maintain a growth mindset around instruction, students are likely to benefit directly or indirectly. Teachers' growth mindset likely impacts the teachers' behaviors in the classroom, including instructional approaches, a sense of self-efficacy, and views of performance over time (Zeng et al., 2019). When teachers hold those positive views, teachers are likely to transfer such beliefs to student performance expectations. Simply adjusting the language teachers use with students is likely to change how students perceive learning and ability (Zalaznick, 2018). When teachers acknowledge and support students' growth mindset and incorporate growth mindset principles into instruction, students are much more likely to attain higher achievement levels (Fitzgerald & Laurian-Fitzgerald, 2016).

Fixed mindset may lead to resistance to change. Acquiring new skills, talents, and abilities could seem impossible to people who hold fixed mindsets. When school leaders ask teachers to implement new practices or initiatives during times of change, the leaders hope the teachers embrace the proposed change. Teachers often resist when change is seen as a disruption, when the change has not been well considered, or when the change occurs reactively, rather than proactively (Reinders, 2017). Additionally, some teachers resist change when new learning and adopting new instructional methods seem impossible. As much as school leaders ask teachers to implement change, teachers who possess fixed mindsets might not be able to until the resistant teachers adopt a growth mindset, slowing down the intended timeline for the change to occur (Snyder, 2017).

The literature has addressed when resistance to change appears to be directly influenced by the degree to which the resistance challenges an individual's psychological makeup (Burnes, 2015). Since growth and fixed mindsets are grounded in a person's psychological makeup, having a fixed mindset might enable a person to develop a resistance to change. Additionally, Burnes stated resistance to change is moderated through proper management. School leaders may be able to manage teachers' resistance. The leaders likely benefit from learning teachers' reasons for resistance and understanding the roles of change agents and change recipients and the interactions between the two roles (Snyder, 2017). Once clear about being change agents, the leaders can begin the work toward transforming teachers' fixed mindsets before developing into a resistance to change.

Growth as a Journey

The reviewed literature describes the change process as ongoing and possibly collaborative. Both students and teachers are virtually all born with the ability to learn and grow. Over time, the ability for a person to shift mindsets could be fostered and supported by others. According to Dweck (2015), "Growth, in fact, is built into us. Infants begin to learn in utero and, after birth, they put on display their endless quest for growth" (p. 242). Growing one's mindset is a journey that cannot happen overnight or perhaps even by oneself (Dweck, 2015; Fitzgerald, & Laurian-Fitzgerald, 2016).

School leaders are likely to witness teachers' growth journeys. During times of change, the leaders likely need to support growth for teachers to adopt growth mindsets and not resist change efforts. A growing number of transformational leadership-related studies provided evidence of when climates which encourage creativity and growth are either influenced or

constrained by leadership behavior (McCarley et al., 2016). School leadership is a vital component in enhancing teachers' efforts by eliminating barriers to implementing new curriculum and instruction (Yoon, 2016). During times of change in schools, leaders often seek strategies for the successful and timely implementation of new initiatives.

Zurawski and Mancini (2016) described how leaders support teachers' growth journeys and make change last longer by changing leadership behaviors first before helping change the behaviors of others. Transformational leaders encourage growth and empower teachers to realize the potential the teachers possess to enact change. On the contrary, the literature has revealed some leaders are quick to blame teachers for an unwillingness to try something new when the teachers are still on a growth journey (Holdsworth & Maynes, 2017). Holdsworth and Maynes (2017) noted leaders best support teachers by supporting change efforts and not being too quick to throw away new initiatives before teachers have had enough time for implementation.

Chapter Summary

The literature presented a comprehensive review of the literature which provides a framework for the proposed study. The purpose of this qualitative, exploratory single-case study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. A majority of the reviewed research referenced transformational leadership and growth mindset theories. A theoretical framework presented transformational leadership as a leader's ability to empower followers and leverage strengths, weaknesses, and interests to collaborate toward realizing an organization's mission and vision (Eliophotou-Menon & Ioannouz, 2016; Tabassi et al., 2017). Growth Mindset Theory was presented as the belief some people possess which claims

individuals continuously learn and grow through practice and over time (Dweck, 2015; Fitzgerald & Laurian-Fitzgerald, 2016; Meierdirk, 2016).

The literature search was conducted by utilizing the American College of Education's online library and Google Scholar to access online databases. Such databases produce previously published, peer-reviewed professional journal articles as well as non-peer reviewed periodical articles. Other electronic resources included information from the websites of authors and organizations who own the rights to information related to transformational leadership and growth mindset theories. Additionally, print sources such as published transformational leadership books yielded valuable information. The literature searches helped shape the problem the study sought to address. The problem is classroom teachers who possess a fixed mindset are likely to additionally be resistant to change. The resistance to change could be a contributing factor prohibiting the teachers from wanting to adopt innovative instructional practices (Reinders, 2017).

The literature presented the Four I's of Transformational Leadership Theory. These components of transformational leadership established the foundation for studying the methods school leaders choose to use to inspire a growth mindset in classroom teachers around innovative instruction. Each component – idealized influence, inspirational motivation, intellectual stimulation, and individual consideration – practiced individually or collectively, could be vital to the process of leading change. The literature review confirmed a gap in the literature regarding how school leaders inspire a growth mindset in teachers around innovative instruction when leading change efforts. The literature has provided evidence of how strong leadership structures in place in schools, such as mentorship, leadership, and supportive peer interactions affect

teacher motivation (Chiong et al., 2017). The closest the literature came to explain the phenomenon was to describe a link between transformational leadership and innovation in education.

The concept of Transformational Leadership Theory was first established by researcher James V. Downton, who studied the concept of charisma and the influence charisma has on religious leadership and published in the 1973 book *Rebel Leadership: Commitment and Charisma in a Revolutionary Process*. The theory was later developed in the 1978 book *Leadership* by leadership expert James McGregor Burns, who often gets credited for creating the theory. In the 1985 book *Leadership and Performance Beyond Expectations*, the theory was expanded even further through the work of Bernard M. Bass to develop what is referred to as Bass's Transformational Leadership Theory. According to Bass, transformational leadership is defined based on the impact a leader has on followers (Bass, 1985).

Growth Mindset Theory was popularized by researcher Carol Dweck while studying factors contributing to individuals' achievement and success. Dweck later turned the research into the successful book *Mindset: The New Psychology of Success*. The theory established the terms growth mindset and fixed mindset. The idea of the fixed mindset was created to explain the opposite of and the absence of a growth mindset. People who have a fixed mindset do not believe intelligence is developed over time (Meierdirk, 2016). In the absence of a growth mindset, people, even teachers, would believe a person either can do something or cannot. Much like transformational leadership theory, literature search terms related to growth mindset theory did not turn up research on how adults shift from a fixed to a growth mindset. A gap in the

literature exists insofar as the literature does not explain how school leaders' leadership practices inspire a growth mindset in teachers.

The study could fill the identified gap in the literature and extend knowledge by presenting qualitative data on transformational leadership practices school-based administrators use to inspire a growth mindset in classroom teachers around innovative instructional practices. The literature confirmed leaders possess the capacity to influence employees' work behaviors, particularly innovative behaviors, and job performance (Pradhan & Jena, 2019; Rana et al., 2016). The study sought to determine what school leaders do as a precursor to such innovation; how leaders help shift teachers' mindsets to perpetuate instructional change. Research has shown the growth process to be a journey, not a single event (Dweck, 2015; Fitzgerald, & Laurian-Fitzgerald, 2016). A transformational school leader could be a catalyst in the change process to develop a teacher's mindset.

The methodology chapter contains the rationale for the study along with the research questions which guided the research process in the single-case study. The qualitative methods in the study were suitable to explore the phenomenon from the views of participants (Creswell, 2014). Both the research design and specific methodology are explained further. Additionally, the research methodology is further developed along with specific research procedures, including procedures for selecting participants, conducting the research, and collecting, preparing, and analyzing data. Furthermore, the methodology chapter includes the presentation, explanation, and defense of the use of each data collection instrument. The methodology chapter addresses the measures taken to ensure reliability and validity in the data collection instruments as well as

the data collected during the study. Finally, the methodology chapter concludes by explaining the ethical procedures undertaken to protect the participants.

Chapter 3: Methodology

Some classroom teachers are reluctant or resistant to implementing new or innovative instructional methods (Ekecrantz & Schwieler, 2016; Snyder, 2017). The background of the problem is teachers who have a fixed mindset may possess a resistance to change which prohibits the teachers from wanting to adopt innovative instructional practices. Conversely, teachers who have a growth mindset remain optimistic and are willing to take on new challenges (Dweck, 2015; Meierdirk, 2016). School-based administrators could use sound leadership practices to shift teachers' mindsets, reducing the resistance which impedes instructional innovation in a school. The importance of the problem is when school leaders significantly reduce or eliminate teachers' resistance to change or fixed mindsets, instructional advancement and student performance should improve.

The extent of the problem is a majority of teachers have experienced situations where teachers have held negative attitudes toward educational development (Ekecrantz & Schwieler, 2016). Those impacted most by the problem are classroom teachers, and consequently, the students taught by those teachers. The literature on the effects of Transformational Leadership Theory has provided evidence of how school leaders who use transformational leadership practices have been shown to increase teachers' levels of achievement and commitment and better support the organization's vision and mission (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016); Tabassi et al., 2017). Change is critical to instruct modern students in ways which are relevant to students' lives and are aligned with modern learning needs and technologies. School-based administrators have a major impact on teachers' change efforts and innovation (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016).

The purpose of this qualitative, exploratory single-case study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The study is necessary to address fixed mindsets in classroom teachers' which might cause the teachers to resist school or district change efforts. The exploratory single-case study sought to help understand the connection between the use of transformational leadership practices by school-based administrators and classroom teachers' adoption of a growth mindset around student-centered instructional practices. Furthermore, the study's findings revealed how school-based administrators choose which transformational leadership practices to use in different situations.

The methodology chapter outlines the research methodology used for the qualitative study. The extent of the problem supported by relevant literature and an identified gap in the literature are presented to establish the need for the study. Throughout the methodology chapter, the selected research design is previewed, with a rationale provided, and an explanation of the advantages and benefits of the design is given. Sections such as research design and rationale, the role of the researcher, research procedures, data analysis, reliability and validity, and ethical procedures further explain and support the design of the study.

Research Questions

The problem is teachers who possess a fixed mindset are likely to possess a resistance to change, which prohibits the teachers from wanting to adopt innovative instructional practices. The purpose of this study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The following research questions guided the study:

Research Question 1: How are school-based administrators using transformational leadership practices to inspire a growth mindset in classroom teachers?

Research Question 2: How are school-based administrators' transformational leadership practices affecting classroom teachers' growth mindset focused on increasing student-centered instruction?

Research Question 3: How do school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction?

Research Design and Rationale

The purpose of this qualitative, exploratory single-case study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. According to Pearson et al. (2015), researchers ensure the methodology used is appropriate to the context as well as the research goal. Ensuring an appropriate methodology involves answering a question, understanding an issue, or developing a theory to transform educational practice. For the study, qualitative methods were chosen to conduct an exploratory single-case study. An advantage of using qualitative methods in the study was the ability to explore the phenomenon from the views of participants (Creswell, 2014).

The exploratory case study design was appropriate for its ability to obtain an in-depth, multifaceted understanding of a phenomenon at a particular research site (Crowe et al., 2011). The major benefit of the study's exploratory case study design was answering *how* and *why* research questions regarding educational issues when many variables of interest exist (Pearson et

al., 2015). Additionally, the choice of a single-case study design was based on the criteria of using the study as a *critical case*. Yin (2018) explained a critical case as one which is critical to theoretical propositions. The single-case study is appropriate to use to determine whether the theoretical propositions are correct or whether alternate explanations are more relevant.

The study involved the use of questionnaires, semi-structured interviews, and direct observations for data collection. The Multifactor Leadership Questionnaire, Form 5X-Short (MLQ-5X) (Bass & Avolio, 1995) (Appendix E) was used as the questionnaire. Additionally, the MLQ-5X provided a basis for semi-structured interview questions. The exploratory single-case study provided a foundational understanding of a link between transformational leadership practices used by school-based administrators and classroom teachers' growth mindsets around student-centered learning.

Others had not studied the link between transformational leadership and growth mindset theories. A gap in the literature exists since there is no explanation of the extent to which transformational leadership practices by school administrators and school-based administrators inspire classroom teachers to adopt a growth mindset. As an exploratory single-case study, the study could provide greater insight into such a connection and indicate a need for further research into the phenomenon.

Role of the Researcher

The researcher in the study assumed an emic research approach from within the social group and from the perspective of the participants. The emic approach is likely to lead to a deeper understanding of a particular culture (van Oudenhoven, 2017). Since the researcher kept from being directly involved in the study, similarities or differences between participants'

perspectives could more easily be discovered. The study's data collection included instruments such as questionnaires along with semi-structured interviews with and observations of school-based administrators. The researcher acted as the sole interviewer and data collector.

Furthermore, the researcher acted as a complete observer in all observations (Creswell, 2014).

The research site was the public-school district which employs the researcher. The participants were school-based administrators from the district. Collegial relationships existed with two of the participants. Due to the nature of such relationships with participants, ethical issues such as coercion, undue influence, protecting the anonymity of the participants, and protecting all data collected were considered during the study. The researcher, playing an emic role from within the same social group as the participants, controlled biases to not interfere with the integrity of the participants or data. The researcher remained impartial and unbiased by refraining from engaging in social conversation with participants during the interviews and observations. Additionally, no personal opinions or experiences were shared with participants during any part of the study. The use of two coding cycles further assisted with omitting subjectivity from the data.

Additionally, to manage such variables which might have undermined the reliability of the data and the validity of the interpretations and conclusions, practices were employed to ensure trustworthiness was considered throughout the study. Credibility and dependability in the study were managed by applying methodological triangulation, including questionnaire, interview, and observation data. The study's transferability was additionally considered by applying purposive sampling. Participants were chosen based on status as a school-based administrator in the same public-school district and on meeting selection criteria. Confirmability

was achieved through reflexivity. Confirmability refers to how the characteristics of research data are confirmed by others who read or review the research results (Zhang & Wildemuth, 2016). Reflexivity refers to the ongoing self-reflection process a researcher undertakes to generate awareness about actions, feelings, and perceptions (Darawsheh, 2014). In the study, reflexivity was achieved by analyzing the data between each round of data collection instead of waiting until the end of all three rounds.

Research Procedures

Population and Sample Selection

The target population and sample size for the qualitative, exploratory single-case study aligned with the study's purpose of exploring how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The study's target population included school-based administrators in a K–12 urban public-school district. School-based administrators in the district include principals, assistant principals, and site directors. The district employs 21 such administrators across eight secondary schools: four middle schools and four high schools. There are eight building principals and site directors in total. There are eight assistant principals at the high school level. At the middle school level, there are five assistant principals.

Data from a small sample were used to make analytic generalizations to the larger population (Yin, 2018). The sample size after attrition was eight total participants. By using purposive sampling and targeting a small sample, challenges such as spending too much time and/or money are more likely to be avoided (Creswell, 2014). The MLQ-5X (Bass & Avolio, 1995) was used to elicit questionnaire data to define the study's sample. The MLQ-5X has

become a standard research instrument to assess a range of transformational and transactional leadership factors (Rowold, 2005). The questionnaire data were measured against established sample selection criteria. Purposive sampling was then implemented to establish the sample. Questionnaire administration and purposive sampling took place over three weeks.

Selection criteria. The researcher is a school leader in the district where the research occurred. Hence, single-stage sampling was implemented. Single-stage sampling occurs when a researcher has access to names in the population and samples directly from the population (Creswell, 2014). The following criteria were applied to define the sample:

Criterion 1. Potential participants were deemed eligible to be included in the study if the participant had been employed in the district for at least 365 days. Additionally, participants were required to have been serving in a school-based administrative role in any of the district's eight secondary schools. School-based administrative positions include principal, assistant principal, and site director. Purposive sampling involves choosing a sample size based on selecting a fraction of the population (Creswell, 2014). Additionally, all participants needed to sign and return an informed consent letter (Appendix B) to confirm participation.

Criterion 2. All participants were included in the first round of data collection in the study if, in addition to serving in a school-based administrative role, the potential participant uses transformational leadership practices. During the first round of data collection, every participating member of the population self-assessed transformational leadership practices through the administration of the MLQ-5X as a questionnaire instrument. The MLQ-5X is composed of 45 descriptive statements (Bass & Avolio, 1995). Each statement is accompanied by a Likert scale rating from zero to four. Choices on the Likert scale ratings include: 0 = Not at

all; 1 = Once in a while; 2 = Sometimes; 3 = Fairly often; and 4 = Frequently, if not always. The highest total score a participant can receive on the questionnaire is 180. The highest score among the four factors related to transformational leadership on the MLQ-5X is 80. Potential participants were only deemed eligible to participate in the second and third rounds of data collection, interviews and observations respectively, if the participant's total score on the four factors related to transformational leadership on the MLQ-5X equaled 60 or higher. Based on a score of 3 = *Fairly often* on each of the MLQ-5X statements in factors one through four, a total score of 60 or higher means a potential participant uses transformational leadership practices at least *fairly often*.

Access to and contact with participants and records. Regular contact was maintained with two participants who worked in the same school, one middle school principal and one middle school assistant principal. The rest of the six participants were able to be accessed via email or site visits which required driving up to 15 minutes by car. Regarding accessing participants, limitations due to schedule conflicts were anticipated. In such cases, to access participants for questionnaires, interviews, or direct observations, Google Calendar was implemented as a scheduling system to reduce schedule conflicts. The advantages of using such methods to access participants helped significantly minimize time constraints and costs involved in the study.

Informing participants and obtaining consent. Permission to conduct the study in the district was obtained by sending an email to the district's superintendent and other necessary central office staff. Before permission was granted, an in-person meeting with the district's director of testing and accountability was necessary to address concerns over the use of district

administrators as participants. The district granted permission on August 21, 2019 (Appendix A). Participants were notified of the study through two initial emails sent in September 2019. An informed consent letter (Appendix B) was attached to one of the initial emails, which participants were required to sign and return before completing the questionnaire to be considered to participate. Based on the aforementioned selection criteria, seven participants were chosen to advance to the study's second and third rounds of data collection, interviews and observations respectively. Once the advancement determination was made, the participants received another email that communicated each participant's raw score from factors one through four on the MLQ-5X and the decision to request continuation in the study.

Instrumentation

Questionnaires. The first round of data collection in the study involved the use of a questionnaire. The MLQ-5X served as the questionnaire tool. The questionnaire was used to determine participant eligibility in the remainder of the study based on Criterion 2. Permission to access the MLQ-5X administration manual was obtained by first purchasing the license for the MLQ-5X manual (Appendix C) from Mind Garden, Inc., the company which owns the rights to the MLQ-5X. An online form via the Mind Garden, Inc. web site was submitted to receive a discount offered to unfunded student thesis or dissertation research. Additional purchases were made to obtain the necessary licenses to administer the *Transform Survey Hosting: Self Form (Data)* and to alter the questionnaire items to be used for semi-structured interview questions (Appendix D). The license allowed for the MLQ-5X Self Form to be administered as an online questionnaire using Mind Garden's Transform™ system.

The advantage of using Mind Garden's Transform™ system was, unlike a third-party

questionnaire tool, the platform included data collection with participants' raw data and raw scale scores (Mind Garden, 2019b), which increased both time effectiveness and credibility since the questionnaires did not have to be scored manually. Since the MLQ-5X Self Form is only a self-assessment of participants' perceptions of personal leadership practices, using the questionnaire as an isolated instrument might not have revealed a reliable and valid measure of a participants' leadership. The addition of two other instruments – participant interviews and direct observations – provided further methodological triangulation for reliability and validity.

The MLQ-5X was created in 1995 by Bernard Bass and Bruce J. Avolio to assess the degree to which a person is a transformational, transactional, or laissez-faire leader. The MLQ-5X identifies characteristics of a transformational leader and allows leaders to self-evaluate leadership styles and effectiveness (Mind Garden, 2019b). According to Mind Garden, Inc. (2019a), the MLQ-5X form 5X-Short is composed of 45 descriptive statements to measure leadership on seven factors related to transformational leadership. Mind Garden, Inc. noted the MLQ-5X has been tested for reliability and construct validity with further reliability proven many times. Most recently, in the MLQ-5X manual, Mind Garden, Inc. confirmed the reliability and construct validity of the MLQ-5X by using a large number of raters ($N = 7,324$) and leaders ($N = 1,018$). Muenjohn and Armstrong (2008) further confirmed the questionnaire's reliability and construct validity. These authors attested the MLQ-5X can successfully capture the full leadership factor constructs of Transformational Leadership Theory. Additionally, the authors suggested the MLQ-5X should provide researchers with confidence to measure leadership factors representing transformational, transactional, and non-leadership behaviors.

Factors one through four on the MLQ-5X measure components of transformational

leadership often referred to as the Four I's. Factor one relates to the first component, *idealized influence* (items 6, 10, 14, 18, 21, 23, 25, and 34 on the MLQ-5X). Factor two relates to the second component, *inspirational motivation* (items 9, 13, 26, and 36 on the MLQ-5X). Factor three relates to the third component, *intellectual stimulation* (items 2, 8, 30, 32 on the MLQ-5X). Factor four relates to the fourth component, *individual consideration* (items 15, 19, 29, 31 on the MLQ-5X). For the study, the MLQ-5X aligned with the study's purpose and research questions. The questionnaire helped establish the extent to which school-based administrators self-assess as transformational leaders. Questionnaire administration and purposive sampling took place over three weeks.

Interviews. The second round of data collection in the study involved the use of interviews. Yin (2018) noted interviews are one of the most important sources of evidence in case study research. Semi-structured interviews were conducted with participants deemed eligible to be members of the study's sample based on the first-round questionnaire data. Although semi-structured interviews seem to produce concrete rather than abstract and theoretical descriptions, such research results are crucial to the advancement of knowledge (McIntosh & Morse, 2015). Such semi-structured interviews provided further evidence to address RQ1 about how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers. The interviews revealed examples of how school-based administrators' transformational leadership practices affect classroom teachers' growth mindset around student-centered instruction and how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction. These findings aligned with Research Question 2

and Research Question 3, respectively.

The interview protocol refinement (IPR), a framework suitable for refining such semi-structured interviews, was applied. The IPR is a four-phase process to develop and fine-tune interview protocols (Castillo-Montoya, 2016). The four phases of the framework include the following: Phase 1: Ensuring interview questions align with research questions; Phase 2: Constructing an inquiry-based conversation; Phase 3: Receiving feedback on interview protocols; and Phase 4: Piloting the interview protocol.

To determine reliability and validity for the semi-structured interview questions and interview protocol, experts from Mind Garden, Inc. reviewed the adapted interview questions and granted an alteration agreement (Appendix D), which allowed items from the MLQ-5X to be adapted as interview questions. Castillo-Montoya (2016) acknowledged in some research studies “while all four phases together comprise the IPR framework, some researchers may only be able to carry out phases 1-3” (p. 827) as long as important steps have been taken to increase the reliability of the interview protocol as a research instrument. Since experts from Mind Garden, Inc. reviewed the interview questions, no additional pilot study was conducted.

All interviews were conducted face-to-face. The interviews took place in participants’ offices in the participants’ school buildings. Face-to-face interviews have multiple advantages. First, the interviewer’s physical presence gives structure to the interview situation (McIntosh & Morse, 2015). McIntosh and Morse note communication during face-to-face interviews is optimized because such interviews allow for both verbal and non-verbal communication, and a researcher could clarify questions if the participant appears confused. According to the authors, another advantage of conducting face-to-face interviews was the interviewer’s physical presence

might have allowed the interviewer to notice any discomfort or unease in the participant and offer a break or emotional support. Furthermore, the choice to conduct face-to-face interviews was based on the synchronous aspect of the interactions. Since no time delay existed between interview questions and a participant's answer, the participants and the interviewer could react directly to what the other was saying or doing, allowing the interviewees' answers to be more spontaneous and authentic. For these reasons, face-to-face interviews were chosen to provide a more responsible way to conduct the research.

Since semi-structured interviews were used in the study, some questions were pre-prepared and asked of participants during each interview. The semi-structured nature of the interviews allowed for some formal interviewing to take place while leaving opportunities for conversational discussion between the participant and the interviewer. Semi-structured interviews are characterized by the use of a list of predetermined, open-ended questions or question stems (McIntosh & Morse, 2015). McIntosh and Morse recommend the use of open-ended questions to elicit unstructured responses from and generate discussion with participants. The predetermined questions can be followed by clarifying questions or probes. The predetermined questions (Appendix F) were posed to each participant in the same way and the same order. The semi-structured nature of interviews allowed for the freedom to move slightly away from the script and to ask follow up questions when appropriate.

The MLQ-5X provided a basis for the interview questions. To maintain reliability and validity for interview questions and protocol, an alteration agreement was granted with permission from experts at Mind Garden, the company which owns the rights to the MLQ-5X (Appendix D). MLQ-5X statements were converted into open-ended questions to ask participants

about the nature of transformational leadership practices and the effect those practices may or may not have on classroom teachers' growth mindsets (See Table 1). For example, to gather data about a participant's inspirational motivation, MLQ-5X item 13 was converted to the question *Explain how you talk enthusiastically about what needs to be accomplished.*

Table 1

Semi-structured Interview Questions

Related Research Question	Semi-structured Interview Questions	Rationale for Interview Questions
RQ1: How are school-based administrators using transformational leadership practices to inspire a growth mindset in classroom teachers?	<ol style="list-style-type: none"> 1. Explain how you emphasize the importance of having a collective sense of mission 2. Explain how you talk enthusiastically about what needs to be accomplished 	Establishes the school-based administrator's experience(s) using transformational leadership to influence teachers' growth mindset
RQ2: How are school-based administrators' transformational leadership practices affecting classroom teachers' growth mindset focused on increasing student-centered instruction?	<ol style="list-style-type: none"> 3. Explain how you get teachers to go beyond their own self-interest for the good of the group 4. Explain how you help teachers develop their strengths 	Identifies an area of classroom instruction which can be influenced by school-based administrators' efforts to inspire a change to classroom teacher practices
RQ3: How do school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction?	<ol style="list-style-type: none"> 5. Explain how you suggest new ways of looking at how to implement instructional best practices 6. Explain how you seek differing perspectives when solving problems or get others to look at problems from many different angles 	Establishes a potential choice school-based administrators may make regarding which component of transformational leadership to use to inspire a growth mindset

All interview audio was recorded using a Chromebook, microphones, and Zencast as audio recording software. Upon the conclusion of the second round of data collection, interview audio was transcribed using Otter.ai. To maintain the reliability and validity of the interview data, transcriptions were member-checked by each interviewed participant for accuracy. One interview transcription was revised to change a speaker label and to correct one grammatical error. Data collection involving face-to-face interviews took place over three weeks.

Observations. The third round of data collection in the study involved the use of direct observations. Direct observations provided a real-world context to the study and its purpose (Yin, 2018). Research Question 2 and Research Question 3 guided the direct observations of participants. Direct observations provided further evidence of how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction. Observations included a full staff meeting, an individual teacher goal-setting conference, an individual teacher pre-observation conference, a teacher team meeting facilitated by an administrator, and an administrator-facilitated professional development session.

An observation form using Google Forms (Appendix G) was created to take descriptive field notes to gather evidence during the direct observations. To maintain the reliability and validity of the observation form, an observation protocol (Creswell, 2014) was applied, and results were member-checked for accuracy. No corrections were suggested, and no revisions were required for field notes. The data were collected in a spreadsheet via Google Sheets to be analyzed. The direct observations during data collection were conducted over three weeks.

Data Collection

Data collection and management procedures. All participant questionnaire data were collected and stored in Mind Garden's Transform™ system. Additionally, all participant data from the interviews and observations were stored in cloud-based storage such as Google Drive. All data will be destroyed after a period of three years from the final approval of the dissertation by the American College of Education faculty. Participants' safety, security, confidentiality, and anonymity were considered throughout the data collection process. During the first round of data collection, online questionnaire data were collected using the MLQ-5X from all consenting school-based administrators. During the second and third rounds of data collection, only participants who met the selection criteria previously outlined in the methodology chapter were deemed eligible to participate. During the second round of data collection, data from face-to-face questionnaires were gathered from eligible participants. The MLQ-5X items provided a basis for semi-structured interview questions. All interview audio was recorded and recordings were transcribed verbatim. During the third round of data collection, direct observations of participants were conducted, including a full staff meeting, an individual teacher goal-setting conference, an individual teacher pre-observation conference, a teacher team meeting facilitated by an administrator, and an administrator-facilitated professional development session.

Questionnaire data. The first round of data collection included the administration of the MLQ-5X as a questionnaire to school-based administrators. The MLQ-5X served as a method of assessing the selection criteria for eligible participants to take part in rounds two and three of the study's data collection. The MLQ-5X was administered online through Transform Survey Hosting: Self Form. The process allowed participants to take the MLQ-5X Self Form as an

online questionnaire using Mind Garden's Transform™ system. The advantage of using Mind Garden's Transform™ system was, unlike a third-party questionnaire tool, the system included data collection with participants' raw data and raw scale scores (Mind Garden, 2019b). All questionnaire data were collected and managed through Mind Garden's Transform™ system.

Interview data. The study's second round of data collection included semi-structured interviews. Each semi-structured interview was conducted face-to-face at the participant's office. The interviews lasted between 20 and 30 minutes. Interview data were collected by recording audio from all participant interviews. The audio recording hardware included a Chromebook, audio interface, and microphones. Zencast recording software was implemented to record the interview audio. The web-based Otter.ai software was utilized to transcribe interview audio. Once the completed transcriptions were member-checked and finalized, all transcriptions were maintained and managed by the cloud-based storage service Google Drive.

Observation data. The study's third round of data collection included direct observations of participants. Types of observations included a full staff meeting, an individual teacher goal-setting conference, an individual teacher pre-observation conference, a teacher team meeting facilitated by an administrator, and an administrator-facilitated professional development session. Observation data were collected with a researcher-created observation field notes form. The researcher-created observation field notes form was developed using Google Forms. The same form was utilized for all direct observations. A spreadsheet was created in Google Sheets to maintain the data collected from the observation field notes form in Google Forms. Observation field notes were housed and managed in the cloud-based storage software Google Sheets and Google Drive.

Data Preparation

The study required three levels of data preparation. First, data collected from the MLQ-5X administration was qualitatively represented in table form (Tables 3 and 4). Questionnaire data were collected and managed in Mind Garden's Transform™ system to include participants' raw data and raw scale scores (Mind Garden, 2019b). To prepare the data further for analysis and to help determine participant eligibility to participate in data collection rounds two and three, Google Sheets spreadsheet software was used to create relevant data tables. Tables 3 and 4 in research findings and data analysis results report the findings from each of the four transformational leadership factors found in the MLQ-5X. These tables represent key findings of the extent to which each participant uses transformational leadership practices as determined by factors one through four on the MLQ-5X. The tables were used to assist in making decisions about which participants met the study's criteria to be used as interview and observation participants.

The second level of data preparation was implemented during face-to-face interviews. Interview audio was recorded, then transcribed verbatim. The online transcription service Otter.ai was utilized to conduct the transcribing. The third level of data preparation was to generate response data from the researcher-created observation field notes form. The Google form was programmed for responses to automatically populate a Google Sheets spreadsheet. Manual coding was conducted for both interview transcriptions and observation field notes.

Data Analysis

Data analysis in qualitative research is generally inductive, using the data to examine topics and themes as well as draw inferences from those areas (Zhang & Wildemuth, 2016). The

theoretical framework which guided the study's data analysis was the four categories of transformational leadership, alternatively known as the Four I's of Transformational Leadership (idealized influence, inspirational motivation, intellectual stimulation, and individual consideration) which transformational leadership is thought to be composed of (Bottomley et al., 2016). The theoretical framework guided the data to be used to identify and describe themes used to answer the three research questions. Such themes allowed inferences to be made about which of the Four I's of Transformational Leadership participants tend to use to inspire a growth mindset in classroom teachers around student-centered instruction.

To analyze questionnaire data and draw inferences related to Research Question 1, participants' scores from factors one through four on the MLQ-5X were displayed in Tables 3 and 4. Each participant's questionnaire results were stored in Mind Garden's Transform™ system. Results were accessed through the *Group Report*, which interprets all participants' scale scores on the MLQ-5X (Mind Garden, 2019b). Since MLQ-5X factors one through four directly correlate to transformational leadership practices, those scores for each participant were isolated. Each participant's scores for factors one through four were displayed (Tables 3 and 4) with the process being repeated for the total sample. Google Sheets spreadsheet software was implemented for gathering questionnaire results. The key findings from the data tables are presented in research findings and data analysis to discuss patterns found in the questionnaire.

For inferences about qualitative data to be valid and reliable, a content analysis should involve systematic and transparent procedures for processing the data (Zhang & Wildemuth, 2016). To analyze the data from rounds two and three of data collection, interview audio transcriptions and observation field notes were coded manually. The first coding cycle included

In Vivo coding. In vivo, or *in it which is alive*, coding refers to words or short phrases taken verbatim from actual language found in qualitative data (Saldaña, 2015). The first coding cycle allowed for linking participants' words and phrases to specific terms associated with Transformational Leadership Theory.

The second coding cycle involved pattern coding. When pattern coding is used as a second cycle method, researchers group summaries into a smaller number of categories, themes, or concepts (Saldaña, 2015). The second coding cycle allowed for identifying and describing themes from data collection rounds two and three, which sought to answer the three research questions. Such themes led to inferences being made regarding which of the Four I's of Transformational Leadership (idealized influence, inspirational motivation, intellectual stimulation, and individual consideration) participants tend to use to inspire a growth mindset in classroom teachers around student-centered instruction. A coding scheme for thematic pattern analysis was designed to categorize major themes by each of the four components of transformational leadership (Appendix K).

Reliability and Validity

Trustworthiness

Validity, reliability, and objectivity are used as criteria to evaluate the quality of research. Additionally, Zhang and Wildemuth (2016) include trustworthiness as additional criteria. Trustworthiness includes a study's credibility, transferability, dependability, and conformability. Several policies and practices were implemented to ensure proper research trustworthiness was considered throughout the study.

Credibility and dependability. Credibility speaks to a study's internal validity.

Dependability refers to the need for the research process to be open to scrutiny. One way credibility and dependability were maintained in the study was by applying methodological triangulation. Methodological triangulation involved using more than one instrument to collect data (Yin, 2018). The study included three rounds of data collection including instruments such as questionnaires, semi-structured interviews, and direct observations. Furthermore, clear procedures for coding and drawing conclusions from the qualitative data (Zhang & Wildemuth, 2016) were established. Such procedures included conducting two cycles of coding, beginning with in vivo coding in the first cycle and then pattern coding to identify and describe themes gleaned from the qualitative data.

Transferability. Transferability corresponds to a study's external validity, or how applicable a study's findings are to similar settings. Transferability refers to the extent to which research questions or hypotheses are applied to another context (Zhang & Wildemuth, 2016). In the study, transferability was addressed by applying purposive sampling. Participants were chosen based on status as a school-based administrator in the same public-school district. Additionally, participation in data collection rounds two and three was based on questionnaire responses collected during round one. Based on the results from the MLQ-5X, participants were only deemed eligible to advance to the interviews and observations if the participant self-assessed through the MLQ-5X to use transformational leadership practices at least *fairly often*.

Confirmability. Concerned with a study's objectivity, confirmability ensures research data needs reflect actual outcomes. Confirmability refers to how the characteristics of research data are confirmed by others who read or review the research results (Zhang & Wildemuth,

2016). Conformability in the study was achieved through reflexivity. Reflexivity refers to the ongoing self-reflection process a researcher undertakes to generate awareness about actions, feelings, and perceptions (Darawsheh, 2014). The self-reflection process was utilized when analyzing data between each round of data instead of waiting until the end of all three rounds. Furthermore, biases were carefully controlled as to not interfere with the integrity of the participants or data. Finally, the use of two coding cycles further assisted in omitting subjectivity from the data.

Ethical Procedures

American College of Education's Institutional Review Board (IRB) approved this study in mid-September 2019 before data collection began in late-September, 2019. Ethical procedures were followed throughout the study to safeguard the rights, dignity, safety, and welfare of the human research participants (Singh, 2018). Permission to conduct research at the public-school district was first obtained through the receipt of a signed letter by the district's director of testing and accountability (Appendix A). To protect the study's participants, an informed consent letter (Appendix B) was disseminated to all participants. The informed consent letter explaining the costs and benefits of the study required the signatures of consenting adult subjects.

Ethical procedures were utilized to protect the participants and data throughout the study by ensuring the data were kept anonymous. Participants have been identified using numbers to remove any identifying information. The data have been kept confidential by utilizing cloud storage systems and the Mind Garden Transform™ system to store the data. Access to the data has been restricted by passwords protecting all accounts which allow access to the data. The dissemination of data was controlled when using Otter.ai as a transcription service and Zencast

as audio recording software. The records relating to research will be retained for at least three years after completion of the research and accessible for inspection and copying (U.S. Department of Education, 2006). All data will be destroyed after the three years by permanently deleting the data from the cloud-based storage programs.

Using adult participants in the study was reasonable since all participants are school-based administrators in the same public-school district. Collegial relationships existed with two of the participants who are employed in the same school. Since all participants are school leaders in the same district, the ethical strategy was to provide optimal benefit with minimal risk (Singh, 2018). Ethical issues such as coercion and undue influence were considered. Additionally, bias was controlled by remaining impartial and unbiased by refraining from engaging in social conversation with participants during the interviews and observations. Additionally, personal opinions and experiences were not shared with participants during any part of the study.

Chapter Summary

Using data collection methods such as questionnaires, interviews, and direct observations, the qualitative single-case study explored how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. As outlined in the methodology chapter, the study and its research methods were designed to address the problem of teachers who possess a fixed mindset as well as resistance to change, which could prohibit the teachers from adopting more innovative instructional practices. Teachers who have a growth mindset remain optimistic and are willing to take on new challenges (Dweck, 2015; Meierdirk, 2016). School-based administrators might

choose to use sound leadership practices to shift teachers' mindsets, reducing teachers' resistance.

This exploratory single-case study looked more deeply into transformational leadership practices. The literature on the effects of transformational leadership theories has provided evidence of how school leaders who use transformational leadership practices have been shown to inspire teachers to achieve more, become more committed to work, and better support the organization's vision and mission (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016); Tabassi et al., 2017). School-based administrators have a major impact on teachers' change efforts and innovation (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016). The study produced research which provides further evidence about the connection between transformational leadership theory and growth mindset theory. In research findings and data analysis results, the study's findings are presented, including data analysis procedures and all qualitative data collected.

Chapter 4: Research Findings and Data Analysis Results

The research findings and data analysis results chapter contains the findings from the study, including data analysis procedures and all qualitative data collected from questionnaires, semi-structured interviews, and direct observations, and conceptualizes the results relative to the research questions which shaped the study. The introduction provides a review of the study's purpose and rationale along with the research questions which guided the study. The second section provides an explanation of the data collection process, including participant demographics. The third section outlines the study's data analysis, including the data preparation process and the coding and identifying of themes. The fourth section includes the study's results organized by theme and corresponding research question. The final section discusses the study's reliability and validity.

Change is critical to instruct modern students in ways which are relevant and aligned with modern learning needs and technologies (Dweck, 2015). Some classroom teachers are resistant to implementing new instructional methods (Ekecrantz & Schwieler, 2016; Snyder, 2017). School-based administrators have a major impact on teachers' change efforts and growth mindset (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016). The purpose of this qualitative, exploratory single-case study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction.

The study sought to explore the connection between the use of transformational leadership practices by school-based administrators and classroom teachers' adoption of a growth mindset around student-centered instructional practices. The study sought to reveal how

school-based administrators choose which transformational leadership practices to use in different situations. The following research questions guided the study:

Research Question 1: How are school-based administrators using transformational leadership practices to inspire a growth mindset in classroom teachers?

Research Question 2: How are school-based administrators' transformational leadership practices affecting classroom teachers' growth mindset focused on increasing student-centered instruction?

Research Question 3: How do school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction?

Data Collection

Data collection for the study took place over nine weeks from September through November 2019 in a large urban school district. Twenty-one participants who met participation criteria were solicited to participate in the study. In the methodology section of the proposal submitted to the American College of Education Institutional Review Board, the ideal sample size from which to collect questionnaire data to narrow down to a smaller sample for interviews and observations was approximately 15 participants. Eight participants completed the initial questionnaire.

Despite a lower-than-anticipated participation rate in the questionnaire, seven participants met the criteria to advance, slightly higher than the ideal sample size of five for the study group which was approved by the review board. One deviation of the study from the methodology section of the initial proposal included using Otter.ai as a transcription service instead of

rev.com. Another deviation was manually coding the interview and observation data, rather than using qualitative coding software. Significant or unusual circumstances encountered during data collection included two participants withdrawing from the study after advancing past the initial questionnaire. One participant withdrew before an interview could be conducted. The other participant withdrew before an observation could be conducted.

Demographics

Data were collected from eight participants using three instruments, the MLQ-5X as a questionnaire, semi-structured interviews, and direct observations. All participants were school-based administrators in a large K–12 urban public-school district. School-based administrators in the district include principals, assistant principals, and site directors. Additional demographic information, including total years of experience in education and years of experience in the current administrative position, is presented in Table 2.

Table 2

Demographical Information of Research Participants

Participant	Title	Total experience in education (Years)	Experience in current administrative position (Years)	Questionnaire (Q), Interview (I), Observation (O)
Participant 1	Site Director	16	5	Q
Participant 2	Principal	15+	5	Q, I, O
Participant 3	Assistant Principal	8	1	Q, I, O
Participant 4	Assistant Principal	20	12	Q, I, O
Participant 5	Assistant Principal	25	1	Q, I, O
Participant 6	Site Director	24	6	Q, I, O
Participant 7	Assistant Principal	36	10	Q, I
Participant 8	Assistant Principal	10	4	Q

Data Collection Process

Upon the recommendation of the district administrator who granted permission for the study's research to be conducted in the district, a middle school principal was selected to send an initial email to potential participants. One purpose of the initial email, sent to 21 middle and high school administrators, was to introduce the research. Another purpose of the initial email was to help recruit participants. The district administrator held concerns about how many building-level administrators would voluntarily participate due to busy schedules and workload constraints. Two administrators responded to the principal's introductory email to express interest in participating.

Another email was sent to all 21 building-level administrators in the district to explain the study, participation criteria and requirements, and anticipated time commitment as well as to recruit participants to complete the questionnaire (Appendix H). The informed consent letter was attached to the email to explain the research study further, including benefits and risks. In total, eight administrators participated in the questionnaire, resulting in a 38% participation rate. Six participants completed the MLQ-5X after the initial email. Two more participants completed the MLQ-5X after two more emails were sent to improve participation (Appendix I). The questionnaires took three weeks to complete, consistent with the two- to three-week timeline anticipated in the methodology section of the research proposal.

For the next round of data collection, semi-structured interviews were scheduled using the web-based scheduling system, Calendly. Individual emails were sent to participants who completed the MLQ-5X and met the criteria to advance to the interviews and observations. In the email, participants received a total raw score from the MLQ-5X items related to factors one

through four. The emails contained a link to Calendly, which was associated with Google Calendar. As participants scheduled interview times, calendar events were automatically generated on all parties' Google Calendars.

Based on the results from the MLQ-5X, seven participants met the criteria to advance to the interviews and observations after completing the MLQ-5X. Participant 8 withdrew from the study before interviewing, citing a busy schedule and limited time as reasons. The remaining six interviews were conducted over three weeks, consistent with the two- to three-week timeline anticipated in the methodology section of the research proposal. Interviews were conducted in each participant's office at the participants' respective school buildings. Semi-structured interviews were recorded using hardware including a Chromebook, two microphones, and an audio interface. Zencast was implemented as audio recording software.

During the interview process, appointments were established for direct observations to be conducted on each remaining participant. Participant 7 withdrew from the study before being observed, citing scheduling conflicts as a reason. Observations of the five remaining participants were conducted over three weeks, consistent with the two- to three-week timeline anticipated in the methodology section of the research proposal. Observations were conducted at each participant's respective school building.

Data Analysis

Creswell's *Case Study Analysis and Representation* was used as the predominant data analysis protocol in the study. Categorical aggregation was implemented to note instances from the data which were analyzed for issue-relevant meanings (Creswell, 2014). Figure 5 depicts how the framework was implemented for data preparation and the coding and identification of

themes process.

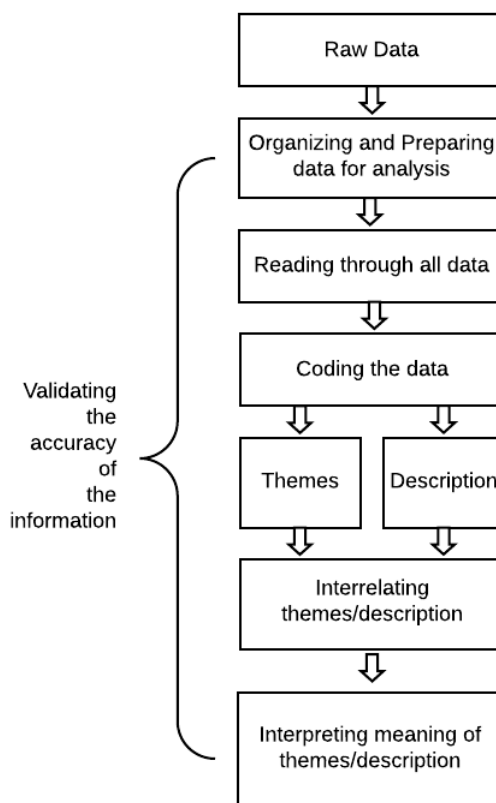


Figure 5. Creswell’s data analysis approach for qualitative research (Creswell, 2014).

Data Preparation Process

The study required three levels of data preparation for the three types of instruments used in data collection. First, data collected from the MLQ-5X administration were collected, managed, and prepared in Mind Garden’s Transform™ system to include participants’ raw data and raw scale scores. To prepare the data further for analysis and to help determine participant eligibility to participate in the interviews and observations, Google Sheets was used to create relevant data tables. To analyze the questionnaire data and draw conclusions about participants’ use of transformational leadership, both total and average scores from factors one through four

on the MLQ-5X were calculated using Google Sheets (Tables 3 and 4). Since MLQ-5X factors one through four directly correlate to transformational leadership practices, each participant's average scores in those factors were isolated (Table 4).

The second level of data preparation was used to prepare the data collected from the semi-structured interviews. Interview audio files were initially recorded and stored in Zencast software. Raw interview audio files were transferred to a Google Drive folder to prepare for transcription. The semi-structured interviews were transcribed using Otter.ai software. The software transcribed the audio automatically with a high accuracy rate. Transcription document files were stored in a Google Drive folder. Each transcription document was checked for errors, revised for spelling and grammar, and labeled to identify each speaker. Transcription documents were emailed to each participant to be member-checked for accuracy. Edited and finalized transcription documents were stored in a Google Drive folder.

The third level of data preparation involved collecting direct observation field notes using a researcher-created Google Form. The following fields were used to gather observation data: Date; Participant; Type of activity; What is the administrator doing; What is the administrator saying; and How does what the leader is doing/saying relate to growth mindset in classroom teachers. The results from the field notes form automatically populated a Google Sheets spreadsheet, which stored the observation data. The data from the spreadsheet were copied into a document attached to an email and sent to each participant to check for accuracy.

Participants' safety, security, confidentiality, and anonymity were considered throughout the data preparation process, and ethical procedures were utilized to protect the participants and data. To ensure anonymity, participants have been identified using numbers to remove any

identifying information. Data were kept confidential by utilizing cloud storage systems and the Mind Garden Transform™ system to store the data. Access to the data has been restricted by passwords protecting all accounts which allow access to the data. The dissemination of the data was controlled when using Otter.ai as a transcription service and Zencast as audio recording software. Records relating to the research will be retained for three years after completion of the research and accessible for inspection and copying. All data will be destroyed after the three years period by permanently deleting the data from the cloud-based storage programs.

Coding and Identification of Themes Process

Manual coding was conducted for both interview transcriptions and observation field notes. Two cycles of coding were implemented. The first coding cycle involved in vivo coding. In vivo coding was used to link participants' words and phrases to specific terms associated with Transformational Leadership Theory. The second coding cycle involved pattern coding. Pattern coding was implemented to identify and describe themes that emerged from the codes generated during the in vivo coding.

Coding the data collected from interviews and observations helped to answer the three research questions. No pre-set codes were established ahead of time. Themes derived from the coding were designed to lead to inferences to be made regarding which of the Four I's of Transformational Leadership participants tend to use to inspire a growth mindset in classroom teachers around student-centered instruction. A coding scheme for thematic pattern analysis was designed to categorize in vivo codes by each of the four aspects of transformational leadership.

Semi-structured interviews. Out of the eight participants who completed the MLQ-5X, seven met both criteria to advance to the interviews and observations. Participant 1 failed to meet

the criteria to advance beyond the questionnaire, and Participant 8 withdrew from the study after the questionnaire, leaving six participants to interview. The sample size was slightly higher than the ideal sample size of five which was presented in the methodology section of the research proposal. Appendix J contains the coded data and themes which emerged from the semi-structured interviews. These themes have been categorized and discussed under each research question.

Direct observations. Out of the six participants who completed interviews, five advanced to direct observations. Participant 7 withdrew from the study after the interview, leaving five participants to observe. The sample size was consistent with the ideal sample size of approximately five which was presented in the methodology section of the research proposal. Appendix J contains coded data and themes which emerged from direct observations. These themes have been organized and discussed under each research question.

Results

Questionnaire Results

Eight participants completed the MLQ-5X. Based on the total raw score from factors one through four on the MLQ-5X (Table 3), seven participants met both criteria to advance to interviews and observations. The sample size was slightly lower than the ideal sample size of 15, which was presented in the research proposal. Participant 1 did not meet both criteria since the participant failed to achieve a total score of 60 or higher on the MLQ-5X. The rest of the seven participants' scores, ranging from 63 to 80, all met the criteria (Table 3).

Table 3

MLQ-5X Response Totals

Participant	Four I's of Transformational Leadership (Factors 1-4) Average (μ)	Total Score from Factors One Through Four
Participant 1	3.4	58
Participant 2	3.6	71
Participant 3	3.3	65
Participant 4	4	80
Participant 5	3.2	63
Participant 6	3.3	66
Participant 7	3.5	70
Participant 8	3.2	63

The average of Participant 1's scores ($\mu = 3.4$) in the items related to the four I's of transformational leadership revealed using transformational leadership *fairly often* (Table 4). Participant 1 left questionnaire items blank, indicating a response of *not sure*, which caused the total raw score from factors one through four to drop below the criterion of 60. Participants 2, 3, 5, 6, 7, and 8 had average scores between 3.0 and 3.9 and total scores between 60 and 79 from factors one through four, which revealed the participants use transformational leadership *fairly often*. Participant 4's average raw score of 4 from factors one through four and a total score of 80 revealed the participant acknowledged using transformational leadership *frequently, if not always*.

Table 4

MLQ-5X Responses – The Four I's of Transformational Leadership

Participant	Builds Trust (Idealized Influence [Attributed])	Acts with Integrity (Idealized Influence [Behavior])	Encourages Others (Inspirational Motivation)	Encourages Innovative Thinking (Intellectual Stimulation)	Coaches & Develops People (Individual Consideration)
Participant 1	3.5	3.3	4	3.7	2.8
Participant 2	3.8	3.5	3.5	3.5	3.5
Participant 3	2.8	3.8	3.5	3.3	3
Participant 4	4	4	4	4	4
Participant 5	3.3	3.3	3.3	2.8	3.3
Participant 6	3.5	3.8	3.3	3	3
Participant 7	3	3.8	3.8	3.5	3.5
Participant 8	3.3	3.3	3.5	2.8	3
Average (μ)	3.4	3.6	3.6	3.3	3.3

Themes

Semi-structured interviews and direct observations produced codes which were analyzed for common themes. Themes were developed based on the frequency of codes which came from participants' responses to the questionnaire questions and observation field notes. The major themes were categorized by alignment to each research question. Overall, 12 major themes emerged. Four major themes are associated with each research question. Figure 6 shows the organization of the major themes.

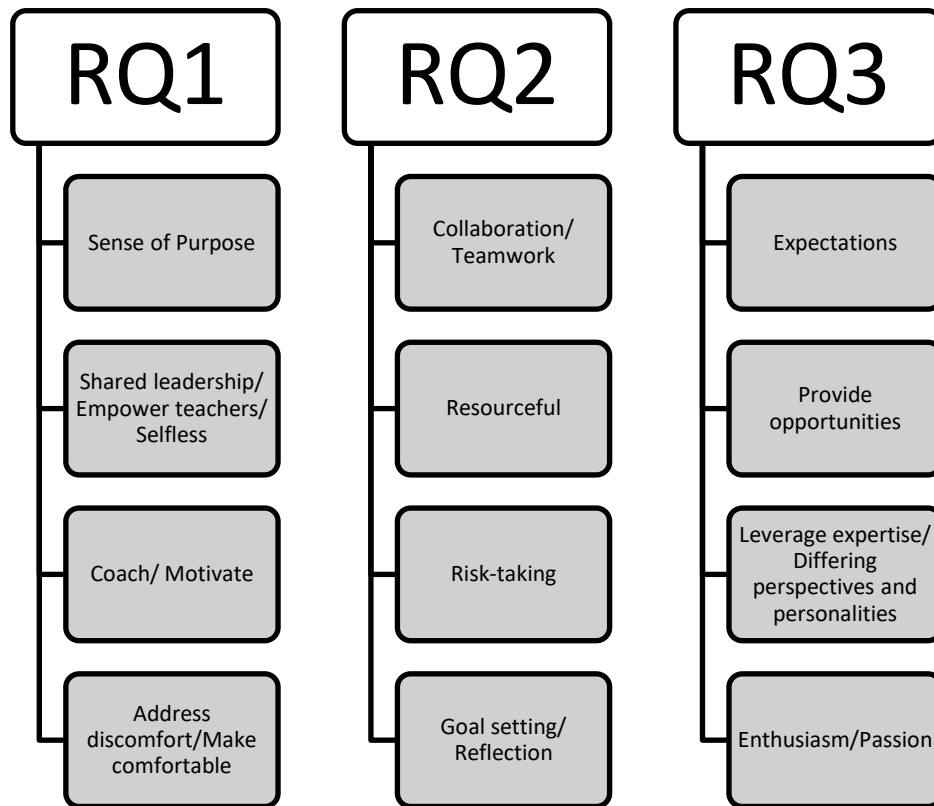


Figure 6. Association of major themes

Results in Exploring Research Question One

The first research question explores how school-based administrators are using transformational leadership practices to inspire a growth mindset in classroom teachers. Interview questions one and two were implemented to explore research question one. Additionally, field notes about what the administrator was saying and what the administrator was doing during direct observation provided further exploratory evidence related to the research question. Major themes that emerged through exploring the first research question were sense of purpose, shared leadership/empower teachers/selfless, coach/motivate, and address discomfort/make comfortable. These themes with corresponding subthemes and codes which emerged as a result of the exploration are presented in Table 5.

Table 5

Themes and Codes Found in Exploring Research Question One

Research Question	Interview Question	Codes	Themes
RQ1	Explain how you emphasize the importance of having a collective sense of mission	<ul style="list-style-type: none"> • Culture/Happy environment • Positive climate/Enhance climate • Sense of belonging • Collective mission/sense of mission • Sense of purpose/Provide rationale/reason • Guide understanding • Core values and beliefs/Expectations/Common expectations • Let the teachers lead/Shared leadership/Distributed leadership/Grow leaders • Encourage teacher ownership/Empower teachers • Consider individual ideas • Create buy-in • Hold each other accountable • Further thinking • Consider feelings/Social and emotional/Empathize • Model leadership • Collective environment • Listen to suggestions and ideas • Be transparent 	<ul style="list-style-type: none"> • Sense of purpose • Shared Leadership/Empower teachers/Selfless • Coach/Motivate • Address discomfort/Make comfortable

Table 5 (continued)

RQ1	<ul style="list-style-type: none"> • Coaching/Helps learning • Provide motivation • Reenergize/Reinvigorate • Make comfortable • Address emotions and discomfort • Focus on strengths • Be optimistic, positive/Positive culture • Core values and beliefs • Collective sense of mission • Show enthusiasm, energy/Happy tone/Be passionate • Sense of purpose • Sense of urgency • Strong relationships/People-centric • Passion for working with kids • Support and acknowledge • Honest feedback/Be transparent • Set up for success
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Sense of purpose. One theme that emerged about how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers is how administrators establish and emphasize a sense of purpose. The theme relates to school leaders' ability to inspire staff to work individually toward realizing the school's collective mission.

Participants shared the following responses as evidence of this theme during the interviews:

That mission has to be sprinkled down from top to bottom or bottom to top so everyone has this sense of purpose and this sense of reasoning and rationale. (P-2)

The mission is key because it gives people kind of a sense of the “real, tangible, what they can hold on to” aspect of it, which a lot of adult learners need. (P-3)

The other capital, too, that makes up professional capital is social capital, which the book talks about interacting and sharing of your ideas, right? Always focusing on student achievement. (P-8)

Evidence of administrators establishing a sense of purpose for teachers was noticeable during the direct observations. One participant facilitated a discussion around teachers’ potential use of a new initiative. Another participant provided a rationale for instructional rounds and the need for more support.

Shared leadership/empower teachers/selfless. A second theme that emerged about how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers is how administrators share leadership, empower teachers, and act selflessly. The theme describes how school leaders distribute leadership throughout the staff.

Participants shared the following responses as evidence of this theme during the interviews:

I like to empower people and to put people in positions where they can be successful. (P-2)

What I’ve found to be successful is identifying teacher leaders, and that’s really important to do. So, building capacity within and really already identifying those that are in leadership roles and those that you see have strong leadership characteristics and providing them with opportunities to grow. (P-5)

Demonstrating to teachers that I value their opinion; that I give them leadership opportunities to grow certain aspects of our school program; that they are not just teaching content but they are contributing to building school culture and climate. (P-6)

One of the most inspiring ways is to have them show off those talents. (P-7)

Evidence of administrators sharing leadership, empowering teachers, and acting selflessly was noticeable during the direct observations. One participant spoke to teachers about

opportunities for the teachers to lead programs to encourage and support student leadership. Additionally, the participant mentioned a couple of teachers who had attended training on the topic of the meeting and encouraged others to seek out those experienced teachers as experts.

Coach/motivate. A third theme that emerged about how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers is how administrators coach and motivate teachers. The theme establishes how school leaders seek to inspire their staff to grow professionally. Participants shared the following responses as evidence of this theme during the interviews:

From a coaching standpoint and as a leader, you have to look at that strength and say, “You know, how can we make that strength even stronger? What are some things that we can tap into?” (P-2)

Just because you’re focusing on an area of growth doesn’t mean that you reduce or ignore areas of strength that exist. (P-3)

Every Monday I send out a, it’s called Monday Motivation, just to help us reintegrate ourselves. (P-4)

Evidence of administrators coaching and motivating teachers was noticeable during the direct observations. A participant coached a teacher by asking probing questions and providing suggestions for the teacher’s concerns over classroom management issues. Another participant began a meeting by sharing how much teachers are valued and appreciated. A third participant said, “I think often about how much you give to your students and how little is given to you.”

Address discomfort/make comfortable. A fourth theme that emerged about how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers is how administrators address discomfort in teachers and help teachers become more comfortable. The theme pertains how school leaders create a relaxed culture.

Participants shared the following responses as evidence of this theme during the interviews:

People need to feel very comfortable enough to come here, discuss their concerns, or be able to ask for advice without turning it into something formal. (P-4)

Modeling has allowed folks to feel that it's okay to be vulnerable, and it's okay not to know. (P-6)

I think it's really important to address individual emotions around change... If we fundamentally drill down to what happens is that people are uncomfortable and they're fearful that they're going to be uncovered as a bad teacher or they're going to have to change. Their practices are going to be discovered as not so worthy. So, I think that calling it what it is is important, and recognizing that some people are uncomfortable and really talking about it and not being afraid to call it fear. (P-5)

Evidence of administrators addressing teachers' discomfort and making teachers comfortable was noticeable during the direct observations. One participant said, "This might be uncomfortable. I'm asking you to share your performance and practice goal" and "I would like to address any concerns you have or if there are any changes that might be necessary." Another participant began a professional development session by facilitating an open discussion with teachers around teachers' potential implementation and utilization of a new initiative. A third participant said, "I'm getting the feeling that there's been too much too fast and people are getting overwhelmed."

Results in Exploring Research Question Two

The second research question explores how school-based administrators' transformational leadership practices affect classroom teachers' growth mindset focused on increasing student-centered instruction. Interview questions three and four were implemented to explore research question two. Additionally, field notes about what the administrator was saying and what the administrator was doing during direct observation provided further exploratory evidence related to the research question. Major themes that emerged through exploring the

second research question were collaboration/teamwork, resourceful, risk-taking, and goal-setting/reflection. These themes with corresponding subthemes and codes which emerged as a result of the exploration are presented in Table 6.

Table 6

Themes and Codes Found in Exploring Research Question Two

Research Question	Interview Question	Codes	Themes
RQ2	Explain how you get teachers to go beyond their own self-interest for the good of the group	<ul style="list-style-type: none"> • Act as a collective/Teamwork/Team effort/Rely on your team • Seek resources/Resourceful • School culture • Consider individual interests • Encourage teacher ownership/Teacher leadership • Provide autonomy • Encourage risk-taking/Challenge themselves and peers • Support collaboration • Hold each other accountable • Seek feedback • Create buy-in • Motivate to change • Act selflessly • Praise/Encourage • Show enthusiasm/Be happy • Shift the paradigm 	<ul style="list-style-type: none"> • Collaboration/Teamwork • Resourceful • Risk-taking • Goal-setting/Reflection

Table 6 (continued)

RQ2	<ul style="list-style-type: none"> • Sense of mission and vision • Identify/Isolate/Support weaknesses • Focus on growth • Encourage/Focus on strengths/Positive feedback/Positive praise • Provide motivation/Push teachers/Stretch thinking/Push the envelope • Emotionally involved • Address discomfort/Listen to concerns • Take things slowly • Guide reflection • Goal-setting • Constant communication • Create buy-in • Encourage risk-taking • Use data/Provide/Seek resources/Resourceful • Individual conferencing • Coaching • Strong relationships/Partner together • Non-judgmental • Grow as a leader • Evolve expectations/Adjust practices • Sense of urgency • Consider individuals/Personal interests
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Collaboration/teamwork. The first theme that emerged about how school-based administrators' transformational leadership practices affect classroom teachers' growth mindset is how administrators promote collaboration and teamwork among teachers. The theme represents school leaders attempts to solicit group efforts among staff. Participants shared the following responses as evidence of this theme during the interviews:

Why don't we allow people to sit together and have that social experience? (P-2)

I think the more transparent we are with what we are doing and why we're doing it, then you're more likely to get your team, your collective piece, together so that we're all moving in the same direction. (P-5)

One way I emphasize the importance of having a collective sense of mission is by engaging all of my certified teachers and staff members in developing that mission. (P-6)

In working with teachers, obviously, over the years, I emphasize that we're all in this together. (P-7)

Evidence of administrators inspiring collaboration and teamwork was noticeable during the direct observations. A participant told a teacher, "Being a team player is about having a particular mindset. You've brought in that we have to be part of a team. This takes a certain mindset." Another participant advised a teacher to "leverage and talk to some of your colleagues."

Resourceful. The second theme that emerged about how school-based administrators' transformational leadership practices affect classroom teachers' growth mindset is how administrators support teachers' resourcefulness. The theme relates to school leaders inspiring teachers to seek necessary resources which help the teachers to grow professionally. Participants shared the following responses as evidence of this theme during the interviews:

What are some things that we can tap into, either internally or externally with resources or different ideas and strategies to make that strength a superpower? (P-2)

It's to me as the educator and as the adult to be sophisticated and educated enough to find who are the resources in my building? (P-4)

Evidence of administrators encouraging teachers to be resourceful was noticeable during the direct observations. A participant complimented a teacher's resourcefulness by saying, "See, there's always a solution!" Another participant told the staff, "My responsibility to you all is to make sure you get what you need."

Risk-taking. A third theme that emerged about how school-based administrators' transformational leadership practices affect classroom teachers' growth mindset is how administrators encourage risk-taking in teachers. The theme depicts how school leaders encourage teachers to try new things regardless of consequence. Participants shared the following responses as evidence of this theme during the interviews:

Whether it's an administrator or a colleague that isn't afraid to take risks in the classroom, I think that helps teachers go past their self-interest. (P-2)

When you feel like that your leader can relate to your experience, I think they're more willing to be risk-takers for you because they see you as someone who's on their side. (P-5)

Evidence of administrators supporting teachers' risk-taking was noticeable during the direct observations. One participant supported a teacher by saying, "You're taking a risk. Tell me about that." and "You don't get penalized for the try." Another participant supported a teacher by saying, "What you did is you said, 'I'm going to go for broke' in a sense. That's great!"

Goal-setting/reflection. A fourth theme that emerged about how school-based administrators' transformational leadership practices affect classroom teachers' growth mindset is how administrators inspire goal setting and reflection in teachers. The theme pertains to how school leaders use teachers' goals as part of the teachers' professional growth process.

Participants shared the following responses as evidence of this theme during the interviews:

It really is about having conversations and, I think, leading by example as well around thinking outside the box and... allowing teachers opportunities to reflect on their practice. (P-6)

Students, when they reflect on the things that mean the most to them and what they learned the most from, it's something they feel is applicable and that they own and they did a lot of the work in the learning. The same is true of teachers. (P-3)

We cannot skip out on the goal-setting process because that 30 minutes, even if it's 30 minutes, is so critical and valuable to an entire year of growth in a relationship setting and where things really go forward. And if you can do that for multiple years in a row, it's a game-changer. It really is. (P-3)

Evidence of administrators encouraging teacher goal-setting and reflection was noticeable during the direct observations. One participant asked a teacher to reflect on the practice of grouping students. Another participant asked the staff, "What practices can you change in your classroom?" Another participant asked teachers, "This is your opportunity to be selfish in your practice. What do you want to get better at in your practice?"

Results in Exploring Research Question Three

The third research question explores how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction. Interview questions five and six were implemented to explore research question three. Additionally, field notes about what the administrator was saying and what the administrator was doing during direct observation provided further exploratory evidence related to the research question. Major themes that emerged through exploring the third research question were as follows: Expectations; Provide opportunities; Leverage expertise, differing perspectives, and personalities; and Enthusiasm/Passion. Table 7

shows these themes with corresponding subthemes and codes which emerged as a result of the exploration.

Table 7

Themes and Codes Found in Exploring Research Question Three

Research Question	Interview Question	Codes	Themes
RQ3	Explain how you suggest new ways of looking at how to implement instructional best practices	<ul style="list-style-type: none"> • Expectations • Encourage planning • Listen to concerns/Address excuses/Identify naysayers • Encourage to ask for advice • Shared leadership/Grow leaders/Grow as a leader • Coaching • Make comfortable • Focus on strengths • School culture/Shift culture • Support collaboration • Seek resources/Resourceful • Strong relationships • Good communication • Create/provide opportunities • Be intentional • Leverage expertise • Provide motivation/Intrinsic motivation • Encourage risk-taking 	<ul style="list-style-type: none"> • Expectations • Provide Opportunities • Leverage expertise, differing perspectives and personalities • Enthusiasm/Passion

Table 7 (continued)

RQ3	<ul style="list-style-type: none"> • Expectations • Sense of purpose/Provide rationale and reason • Include different backgrounds, life experiences, perspectives • Consider personalities, personality types • Shared leadership/Grow leaders • Use personality as strength • Recruit early adopters • Consider feelings • Let go of ego • Seek alternate opinions/Value different perspectives • Good communication • Provide honest feedback/Difficult conversations • Sense of community/Bring everyone together • Group identity • Create safe space • Use needs as strengths • Provide encouragement/Thought partners • Leverage passion • Provide resources/Resourceful • Encourage teacher ownership/Empower • Have a presence/Be present • Listen to and invite concerns
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Expectations. The first theme that emerged about how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers is how administrators strive to establish clear expectations. The theme represents using expectations to have teachers work toward achieving the school's mission. Participants shared the following responses as evidence of this theme during the interviews:

We have expectations that are posted in our building and teacher classrooms about behavioral and academic expectations. (P-2)

I think a lot of it is the culture of expectations and the culture of the teams you put together and the norms that teams set for itself. Those are things you have to start with. (P-3)

If I'm asking someone to execute on something, I need to make sure that they're set up for success. That doesn't mean that we reduce the rigor of the goal. That doesn't mean that we hold back a little bit and make it easy to achieve but it does mean that I'm holding you to a particular standard. (P-6)

Evidence of administrators choosing practices to set and maintain expectations was noticeable during the direct observations. One participant asked a teacher to explain what the participant should expect to see when observing the teacher's classroom. Another participant began a professional development session by establishing group norms and explaining the activity and the relevance of the activity to the school's goals. Another participant reminded the staff, "Everything you do contributes to the success of our school."

Provide opportunities. The second theme that emerged about how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers is how administrators provide meaningful opportunities for teacher growth. The theme relates to how school leaders seek ways to assist teachers with professional development. Participants shared the following responses as evidence of this theme

during the interviews:

Providing people with the opportunity to see these different things within the scope of the operations of a school is important because I believe we're all leaders. (P-2)

It really speaks to allowing teachers opportunities to grow both within the school community and seek out professional development opportunities or professional learning opportunities to get better at what they are most interested in getting better at. (P-6)

When we have professional development time... we make sure that we can get together, we can collaborate. We need to make time for that collaborating and the sharing of ideas. (P-7)

Evidence of administrators seeking ways to provide opportunities was noticeable during the direct observations. A participant allowed the staff to learn about and experience a new initiative before expecting the teachers to implement the initiative independently. Another participant had teachers watch a video of a classroom lesson to evaluate it for a particular instructional strategy. Another participant facilitated an activity which provided teachers the opportunity to reflect on professional goals and seek feedback from and provide feedback to colleagues.

Leverage expertise, differing perspectives, and personalities. A third theme that emerged about how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers is how administrators seek to leverage teachers' expertise and gain insight from differing perspectives and personalities. The theme depicts school leaders' ability to listen to and consider a variety of input and insights.

Participants shared the following responses as evidence of this theme during the interviews:

When you bring in different perspectives and allow people to voice their concerns or suggestions or provide input or feedback on something, I think it helps everyone grow. (P-2)

So why not provide a safe space to allow people to have those conversations? A lot of

the capacity and a lot of the expertise is sitting right in front of you a lot of the times. (P-3)

I like to talk to people from different backgrounds and life experiences... and then sometimes I go to people who are naysayers because I want their opinion too. Not because I want to hear the negative because it's the truth. (P-4)

It's actually been really a great dynamic because each of our house leaders has a very different perspective based on his or her house and the staff that they're working with. (P-5)

Evidence of administrators finding ways to leverage expertise and consider different perspectives and personalities was noticeable during the direct observations. One participant facilitated a discussion about teacher observations of a video. During the facilitated discussion, teachers agreed and disagreed about the use of an instructional strategy. Another participant emphasized how teachers could have different opinions but sought suggestions for feedback and revisions to a survey to create a parent feedback goal for the school.

Enthusiasm/passion. A fourth theme that emerged about how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers is how administrators look to model and inspire enthusiasm and passion. The theme pertains to school leaders leading by example when encouraging teacher excitement. Participants shared the following responses as evidence of this theme during the interviews:

I always tell adults who are working with the young people, 'You have to have more energy than the kids'" and seeing the happy smile, seeing the enthusiasm; that can maybe influence your behavior. (P-2)

If we're, at the end of the day, trying to accomplish learning for kids and experiences for kids that are worthwhile and help them move forward in some capacity, then how can you not be enthusiastic about that, right? (P-3)

I pride myself on being very passionate about what it is I do. (P-6)

Evidence of administrators choosing to elicit enthusiasm and passion from teachers was noticeable during the direct observations. A participant told a teacher, “You just described the gradual release model and that’s a mindset.” Another participant acknowledged a teacher’s enthusiasm by saying, “That looks great. It all makes sense. We’ve talked a lot about grade norming but this will help with that as well. This is a great tool to do that.” Another participant highlighted teacher passion by reminding staff, “I don’t want you to feel like it’s one more thing. It’s something you’re already doing.”

Reliability and Validity

Threats to the study’s credibility and dependability were successfully eliminated or controlled by applying methodological triangulation. The study involved triangulation by including three rounds of data collection including instruments such as questionnaires, interviews, and observations. Furthermore, clear procedures for coding and drawing conclusions from the qualitative data were established. Such procedures included conducting two cycles of coding, beginning with in vivo coding in the first cycle and then pattern coding to identify and describe themes gleaned from the qualitative data.

In the study, threats to transferability were considered by applying purposive sampling. Participants were chosen based on status and experience as a school-based administrator in the same public-school district. Additionally, participation in data collection rounds two and three was determined based on participants meeting the criteria with responses collected during questionnaires. Based on the results from the MLQ-5X, participants were only deemed eligible to continue to the interviews and observations if the participant self-assessed using transformational leadership practices at least *fairly often*.

Threats to the study's confirmability were controlled using reflexivity. Reflexivity was utilized when analyzing data between each round of data collection, instead of waiting until the end of all three rounds. Furthermore, biases were carefully controlled to not interfere with the integrity of the participants or data. Controlling biases was attained by remaining impartial and unbiased by refraining from engaging in social conversation with participants during the interviews and observations. Additionally, personal opinions and experiences were not shared with participants during any part of the study. Finally, using multiple coding cycles further assisted in omitting subjectivity from the data.

Chapter Summary

The study sought to produce research to provide further evidence about the connection between transformational leadership theory and growth mindset theory. Research findings and data analysis results presented the findings from the study including data analysis procedures and all qualitative data collected and conceptualized results relative to the research questions which shaped the study. Data were collected from eight participants using three instruments, the MLQ-5X as a questionnaire, semi-structured interviews, and direct observations. All participants were school-based administrators in a large K–12 urban public-school district.

The first research question explored how school-based administrators are using transformational leadership practices to inspire a growth mindset in classroom teachers. Major themes that emerged through exploring the first research question included sense of purpose, shared leadership/empower teachers/selfless, coach/motivate, and address discomfort/make comfortable. In answer to the first research question, administrators explained the importance of establishing and emphasizing a sense of purpose, sharing leadership, empowering teachers, and

acting selflessly. Furthermore, administrators noted the significance of coaching and motivating teachers and addressing discomfort in teachers and helping teachers become more comfortable.

The second research question explored how school-based administrators' transformational leadership practices affect classroom teachers' growth mindset focused on increasing student-centered instruction. Major themes that emerged through exploring the second research question included collaboration/teamwork, resourceful, risk-taking, and goal-setting/reflection. In answer to the second research question, administrators addressed the importance of promoting collaboration and teamwork among teachers and support teachers' resourcefulness. Furthermore, the administrators acknowledged the importance of encouraging risk-taking in teachers and inspiring goal setting and reflection in teachers.

The third research question explored how school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction. Major themes that emerged through exploring the third research question included expectations, provide opportunities, leverage expertise, differing perspectives, and personalities, and enthusiasm/passion. In answer to the third research question, administrators noted the priority of establishing clear expectations and providing meaningful opportunities for teacher growth and development. Additionally, administrators seek to leverage teachers' expertise and gain insight from differing perspectives and personalities as well as to model and inspire enthusiasm and passion.

The discussion and conclusion chapter contains a discussion of the findings from the study along with conclusions drawn from the research. The discussion and conclusion includes a discussion of conclusions drawn from the coding scheme for thematic pattern analysis, which

categorized themes by each of the Four I's of Transformational Leadership. Additionally, the discussion and conclusion chapter contains limitations of the study with particular attention to transferability, credibility, dependability, and confirmability. Finally, the discussion and conclusion chapter provides a discussion of recommendations for changes in policies and practices supported by the study's results and implications for leadership, including the potential impact for positive social change.

Chapter 5: Discussion and Conclusion

The significance of this study was to provide greater insight into the connection between transformational leadership in school leaders and growth mindset in teachers and indicate a need for further research into the phenomenon. The conceptual framework which guided the analysis of the data collected through the study is the way leaders choose which transformational practices to use to inspire followers through the Four I's of Transformational Leadership (Rana et al., 2016). The four I's include Idealized Influence, Inspirational Motivation, Intellectual Stimulation, and Individual Consideration.

For the study, qualitative methods were chosen to conduct an exploratory single-case study. The methodology utilized was the exploratory case study design for its ability to obtain an in-depth, multifaceted understanding of a phenomenon at a particular research site (Crowe et al., 2011). The study involved the use of questionnaires, semi-structured interviews, and observations for data collection. The Multifactor Leadership Questionnaire, Form 5X-Short (MLQ-5X) (Bass & Avolio, 1995) (Appendix E) was used as the questionnaire tool to isolate school leaders using transformational leadership for the study's sample. Additionally, the MLQ-5X provided a basis for semi-structured interview questions.

When comparing the study's findings to the peer-reviewed articles discussed in the literature review, the findings have confirmed and, in some cases, extended knowledge of Transformational Leadership Theory and Growth Mindset Theory and the connection between the two theories. The literature confirmed leaders possess the capacity to influence employees' work behaviors, particularly innovative behaviors and job performance (Pradhan & Jena, 2019; Rana et al., 2016). The study sought to determine what school leaders do as a precursor to the

innovation; how leaders help shift teachers' mindsets to perpetuate instructional change.

Three research questions guided the study to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. Major themes that emerged through exploring the first research question included sense of purpose, shared leadership/empower teachers/selfless, coach/motivate, and address discomfort/make comfortable. Major themes that emerged through exploring the second research question included collaboration/teamwork, resourceful, risk-taking, and goal-setting/reflection. Major themes that emerged through exploring the third research question included expectations, provide opportunities, leverage expertise, differing perspectives, and personalities, and enthusiasm/passion.

The discussion and conclusion chapter includes interpretations and conclusions relative to the study's findings as described in the research findings and data analysis results chapter. Interpretations are discussed in two sections, one in comparison to the literature and the other in comparison to the conceptual framework. The limitations of the study concerning validity and reliability are described, followed by recommendations for further research and changes in policy and practice. Next, a section on the implications for leadership discusses methodological, theoretical, and empirical implications for educational leadership as a result of the findings from the study. Lastly, a conclusion section reviews the study and the significance of the results.

Interpretations and Conclusions

Acquiring new skills, talents, and abilities likely seems impossible to people who hold fixed mindsets. Teachers often resist when change is seen as a disruption, when the change has not been well considered, or when the change occurs reactively, rather than proactively

(Reinders, 2017). The problem is teachers who have a fixed mindset could possess a resistance to change which prohibits the teachers from wanting to adopt innovative instructional practices. In an ideal school setting, both school leaders and classroom teachers embrace constant change and are ready to adapt to new instructional practices.

Unfortunately, some classroom teachers are resistant to implementing new or innovative instructional methods (Ekecrantz & Schwieler, 2016; Snyder, 2017). Conversely, teachers who have a growth mindset remain optimistic and are willing to take on new challenges (Dweck, 2015; Meierdirk, 2016). As much as school leaders ask teachers to implement change, teachers who possess fixed mindsets will likely not be able to until adopting a growth mindset, slowing down the intended timeline for the change to occur (Snyder, 2017).

The importance of the problem is if school leaders significantly reduce or eliminate teachers' resistance to change or fixed mindsets, instructional advancement and student performance could improve. The extent of the problem is a majority of teachers have experienced situations where the teachers held negative attitudes toward educational development (Ekecrantz & Schwieler, 2016). Those impacted most by the problem are classroom teachers, and consequently, the students taught by those teachers. Change is critical to instruct modern students in ways that are relevant to students' lives and are aligned with modern learning needs and technologies (Dweck, 2015). School-based administrators have a major impact on teachers' change efforts and innovation (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016).

The literature addressed a relationship whereby resistance to change appears to be directly influenced by the degree to which the resistance challenges an individual's

psychological makeup (Burnes, 2015). Since growth and fixed mindsets are grounded in a person's psychological makeup, having a fixed mindset might enable a person to develop a resistance to change as well. Furthermore, Burnes suggested resistance to change is moderated by the way the resistance is managed. School leaders are likely able to manage teachers' resistance.

There is minimal research on the link between transformational leadership in school leaders and growth mindset in teachers. The literature addressed how the relationship between transformational leadership and employee innovative behavior remains unclear (Pradhan & Jena, 2019). Some literature on the effects of Transformational Leadership Theory provides evidence of how school leaders who use transformational leadership practices have been shown to increase teachers' levels of achievement and commitment, and better support the organization's vision and mission (Eliophotou-Menon & Ioannouz, 2016; McCarley et al., 2016; Tabassi, et al., 2017).

Findings in Comparison to the Literature

A gap in the literature existed since there was no explanation of the extent to which transformational leadership practices by school-based administrators inspire classroom teachers to adopt a growth mindset. The literature confirmed a research gap regarding how school leaders inspire a growth mindset in teachers around innovative instruction when leading change efforts. The literature addressed the importance of how strong leadership structures in place in schools, such as mentorship, leadership, and supportive peer interactions affect teacher motivation (Chiong et al., 2017). The closest the literature came to explain the phenomenon was to describe a link between transformational leadership and innovation in education.

Focus on relationships. The study's findings confirmed school leaders who use transformational leadership practices emphasize the value of building and maintaining relationships. The literature addressed how school administrators cannot successfully lead change efforts independently, without support from classroom teachers and other staff (Martin, 2015). Transformational leaders are known to develop not only supportive relationships with followers but relationships which are collaborative (Sun & Henderson, 2017). Multiple participants in the study were shown to emphasize such relationships through the school leaders' implementation of individual goal-setting and pre-observation conferences along with other conferences designed to support teachers' growth and development.

Moreover, such relationships are thought to go even deeper and are often referred to not as relationships but as *connections*. When leaders practice transformational leadership, the leaders focus on connections, which results in increased motivation and morality in both leaders and followers (Amanchukwu et al., 2015). Participants in the study were shown to foster such connections when finding ways to make teachers comfortable when implementing change efforts. Furthermore, the school leaders noted the importance of these connections when intentionally taking care to get to know each teacher on an individual basis to leverage the expertise, differing perspectives, and unique personalities of every staff member.

Inspire a shared vision. The study's findings confirmed school leaders who use transformational leadership practices share a collective sense of mission and empower staff members to contribute to organizational change efforts. An important step in the vision process unique to transformational leaders is to include and empower followers to contribute to creating the vision (Metcalf & Morelli, 2015). School leaders use transformational leadership when

teachers and other non-administrative staff are recruited to participate in school leadership processes.

The school leaders who participated in the study use a variety of transformational leadership practices to include staff members in establishing, realizing, and evaluating the school's vision. Furthermore, as evidenced by the emergence of shared and distributed leadership as one of the study's major themes, participants noted placing value on teachers' participation in leadership processes related to the concept of organizational vision. Valuing teacher participation was evidenced throughout the study when leaders held meetings to involve staff in instructional leadership decisions and prepare for a full-staff rollout of a new initiative.

Build trust. The study's findings confirmed school leaders who use transformational leadership practices seek opportunities to build and maintain staff members' trust. When leadership processes are shared between leaders and followers, the literature indicates higher levels of organizational trust. In turn, teacher perceptions of a school administrator's leadership style might have a profound influence on school climate (Allen et al., 2015). As a result of the school leaders in the study showing value placed on shared leadership, unintentional outcomes include building trust among the staff and positively affecting the school's culture and climate.

The component of transformational leadership which most closely aligns with building trust among followers is idealized influence. Among the key findings and themes which emerged from the research collected in the study, no theme directly correlated to idealized influence (Appendix K). Participants showed trust to be an underlying theme as school leaders were observed spending a significant amount of time collaborating with teachers. Such collaboration was noted when leaders mentioned individually involving teachers in organizational leadership

and was evidenced through observations when leaders held staff meetings and trainings to solicit input from teachers and other staff.

Linking transformational leadership and growth mindset. The study's key findings extended the knowledge about school leaders who use transformational leadership practices to inspire a growth mindset in classroom teachers. The literature addressed how school leaders can, through policies and practices, positively or negatively contribute to classroom teachers' intrinsic motivation, creativity, and desire for new learning (Yoon, 2016). In such positive cultures, individual staff members experience heightened senses of pride, responsibility, and empowerment to support a collective mission to contribute to a school's growth and achievement (Rana et al., 2016). Furthermore, leaders strongly influence employees' work behaviors, particularly innovative behaviors and job performance (Pradhan & Jena, 2019).

The data collected through the study led to an understanding of how school leaders use transformational leadership to inspire a growth mindset in classroom teachers. The data revealed school leaders act selflessly by using a system of shared or distributed leadership to empower teachers. Additionally, school leaders noted the importance of instilling a collective sense of purpose and addressing discomfort and making teachers comfortable to establish a culture of risk-taking through goal-setting and reflection processes. Finally, both the interviews and the observations revealed school leaders use coaching and mentoring to motivate teachers to seek opportunities for collaboration and teamwork and to be resourceful when looking to provide innovative classroom instruction.

Findings in the Context of the Conceptual Framework

Conceptually, what guided the analysis of the data collected through the study was the way leaders choose which transformational leadership practices to use to inspire followers through the Four I's of Transformational Leadership (Rana et al., 2016). Transformational Leadership Theory is composed of these four components which describe different ways leaders choose to emphasize collective rather than individual organizational goals (Bottomley et al., 2016). Appendix K shows the coding scheme for the thematic pattern analysis which categorized the study's themes by each of the Four I's of Transformational Leadership.

Idealized influence. Idealized influence is a component of transformational leadership which refers to when a transformational leader serves as a role model and affects followers to idolize the leader (Lee Abdullah & Varatharajoo, 2017). The leaders hope to inspire and motivate followers to work toward achieving the organizational vision (Malik et al., 2017). Furthermore, through idealized influence, transformational leaders gain followers' respect, trust, and admiration through risk-taking, considering others' needs, and setting high standards of ethics and acting upon those standards.

As a standalone transformational leadership practice, idealized influence did not emerge out of the themes derived from the key findings during data analysis (Appendix K). Idealized influence can be considered a part of themes such as leveraging the expertise, differing perspectives, and unique personalities of teachers and inspiring a culture of risk-taking. Furthermore, school leaders use idealized influence when setting high expectations for teachers and encouraging the teachers to do the same in classrooms and for students.

Inspirational motivation. Inspirational motivation is a component of transformational leadership which refers to leaders who, based on personal values and aspirations, have a broad vision toward the future (Karimi & Morshedi, 2015). Additionally, leaders who employ inspirational motivation are known to inspire enthusiasm and excitement, and to create confidence in followers. These leaders are generally easily able to gain buy-in from followers when seeking to implement change.

In schools, teacher buy-in is crucial to the process of adopting organizational changes to policies or procedures. Either due to negative past experiences or a lack of confidence in expertise or both, some teachers possess a resistance to change, making teacher buy-in hard to obtain (Yoon, 2016). Transformational school leaders motivate teachers to cast away individual biases and to act according to the best interest of the entire organization.

Inspirational motivation emerged in four cases out of the themes derived from the key findings during data analysis (Appendix K). One theme embodying such motivation, which speaks to a school leader's ability to inspire enthusiasm and excitement and create confidence in followers, is providing a sense of purpose to solicit buy-in from teachers. Additionally, leaders seek opportunities to coach teachers through the evaluation process and other instructional leadership endeavors to motivate teachers and instill enthusiasm and passion in teachers. Finally, school leaders display inspirational motivation when establishing high expectations for both the leader and the teachers.

Intellectual stimulation. Intellectual stimulation is a component of transformational leadership which refers to leaders who find ways to make followers more aware, innovative, and creative (Alqatawenh, 2018). As follower empowerment is a major focus of Transformational Leadership Theory, intellectual stimulation speaks to followers being stimulated to think and act independently but for the good of the greater organization. Empowerment becomes relevant since leaders cannot be alone in organizational improvement efforts. The leader, through intellectual stimulation, could additionally empower employees to think and act independently (Smothers et al., 2016).

Intellectual stimulation emerged in five cases out of the themes derived from the key findings during data analysis (Appendix K). First, school leaders were shown to create opportunities for shared leadership by acting selflessly and empowering teachers to take active roles in the school's leadership. Next, the leaders noted providing opportunities for teachers, which inspired a culture of collaboration and encouraged teamwork. Furthermore, leaders inspire teachers to be more resourceful when looking to innovate more during classroom instruction. Finally, school leaders use intellectual stimulation when encouraging risk-taking.

Individual consideration. Individual consideration is a component of transformational leadership which refers to when a leader shares a collective organizational vision, encourages hard work, and defines goals clearly (Rana et al., 2016). The component shares similarities with other components since the leader finds ways for individual followers to realize organization-wide goals. The difference between individual consideration and other components of transformational leadership is when leaders practice individual consideration, the leaders

recognize individual followers' needs and support those needs through coaching and consulting (Karimi & Morshedi, 2015).

Individual consideration emerged in three cases out of the themes derived from the key findings during data analysis (Appendix K). First, school leaders address teachers' discomfort and make the teachers comfortable while encouraging and supporting risk-taking. Additionally, the leaders value and inspire teachers' goal-setting and subsequent reflection practices. The leaders use such practices to empower individual teachers to take charge of the teachers' own growth and development. Lastly, school leaders use individual consideration when leveraging teachers' individual expertise and seek and value differing perspectives and unique personalities.

Limitations

After completing the data collection and analysis, the study's limitations remained the same as stated in the methodology chapter, which are as follows: purposive sampling, time constraints, and threats to credibility and dependability. In this study, one limitation was the purposive sampling used to glean participants. As opposed to random sampling, this exploratory study's results cannot as easily be generally applied to a larger population, only implied. Another limitation of the study was time. Since the data collection in the study was carried out over nine weeks, the data are a snapshot dependent upon the conditions occurring only during such time.

Threats to the study's credibility and dependability were controlled by applying methodological triangulation through using multiple data collection instruments such as questionnaires, interviews, and observations. Furthermore, clear procedures for coding and drawing conclusions from the qualitative data were established (Zhang & Wildemuth, 2016). Such procedures included conducting two cycles of coding, beginning with in vivo coding in the

first cycle and then pattern coding to identify and describe themes gleaned from the qualitative data. Creswell's *Case Study Analysis and Representation* was used as the predominant data analysis protocol in the study (Creswell, 2014). An additional control was maintained by using member checking for accuracy of interview and observation data. One participant recommended revisions during member checking. One interview transcription was revised to change a speaker label and correct one grammatical error. No revisions were required for observation field notes.

Recommendations

The study explored the transformational leadership practices school leaders use to inspire a growth mindset in classroom teachers. Recommendations for future research and changes in policies and practices are grounded in the themes which naturally emerged from the study through the data analysis and subsequent findings. The results of the study identified a need to conduct further research in at least four areas. In the first part of this section, recommendations for future research based on the study and its limitations are presented. The second part of this section outlines recommendations for potential changes in policy and practice supported by the results of the study.

Recommendations for Future Research

One recommendation for future research into topics related to the study is to correlate teachers' levels of growth mindset with levels of transformational leadership used by school leaders. To further study the relationship between transformational leadership practices and teachers' growth mindset, a quantitative study should be conducted. This type of study with a quantitative design could offer insights into whether or not teachers' self-reported growth mindset levels are directly related to higher levels of transformational leadership practices used

by school leaders. The school leaders' level of transformational leadership can be measured when the leaders self-assess using the MLQ-5X. A study of such a nature might lead to the conclusion which states when a leader uses transformational leadership more, teachers are more likely to adopt a growth mindset or display a minimal level of resistance.

A second recommendation for future research into topics related to the study is to study teachers' perceptions of preferred transformational leadership practices to inspire a growth mindset. The study focused on school leaders' use of transformational leadership. The MLQ-5X allowed school leaders to self-assess which transformational leadership practices are used most and how often. Further research should go into which transformational leadership practices by school leaders are preferred by teachers. A study of such a nature might lead to conclusions about how leaders adapt leadership practices to meet teachers' needs and perceptions of how best to adopt a growth mindset.

A third recommendation for future research into topics related to the study is to conduct a quantitative study which seeks to determine the extent to which teachers' mindsets shift from a fixed mindset to a growth mindset when certain transformational leadership practices are implemented by school leaders. A study should be set up to test isolated leadership practices for the degree to which the leadership practice inspires a teacher to shift to a growth mindset. For example, a school leader who only sees teachers in meetings during the evaluation process is likely to have a lesser impact on a teacher's mindset than a school leader who regularly visits a teacher's classroom.

A fourth recommendation for future research into topics related to the study is to conduct a quantitative study which correlates levels of teacher's growth mindset with student growth and

achievement. Since the end goal of many educational initiatives is high levels of student performance, such a study should prove important. A quantitative study should provide statistical evidence which explains whether or not the level of growth mindset in teachers positively impacts student achievement. Such a study might lead to conclusions about how leaders address teachers' mindsets to inspire positive change in student growth and achievement.

Recommendations for Changes in Policy and Practice

Recommendations for changes in policies and practices are grounded in the themes which naturally emerged from the study through the data analysis and subsequent findings. The results of the study identified a need to explore at least three areas of policy and practice. First, districts should ask school leaders to identify a preferred leadership style or at least a leadership style the school leaders use most often. Second, districts should help leaders understand the level of preparedness for carrying out organizational initiatives by administering the MLQ-5X. Third, school leaders should establish systems, if not in place already, which support teachers' growth mindsets when faced with new initiatives or other organizational change efforts.

One recommendation for changes in policy and practice is for school districts to ask school leaders to identify a preferred leadership style or at least a leadership style the school leaders use most often. The study's findings confirmed school leaders intentionally use transformational leadership practices when attempting to shift teachers' mindsets toward a growth mindset. If the school or district wishes to implement new initiatives or other organizational change efforts, information about school leaders' leadership styles could be beneficial.

School districts should provide school leaders with the opportunity to take the MLQ-5X before, during, or after the hiring process and during times when launching organizational initiatives. The information gleaned from the questionnaire about the leader's use of transformational leadership could help the leader understand the level of preparedness for carrying out such initiatives. If a leader is found to be using many transformational leadership practices already, preparedness is likely higher than a leader who is not. Furthermore, a leader who is already using many transformational leadership practices should have an easier time recruiting teachers to help lead the organization through times of change.

A second recommendation for changes in policy and practice is for school districts to provide or purchase professional development for school leaders to identify teachers' fixed mindsets and resistance to change, potential causes, and leadership practices to inspire a growth mindset. Whether or not a school leader is already using many transformational leadership practices, the district should invest in professional development for the leader. Participants in the study revealed multiple times during the data collection process inspiring teachers to change is difficult and should be taken slowly. Districts should be in a better position to drive change when school leaders are well trained and understand the role leaders play in inspiring a growth mindset in teachers.

A third recommendation for changes in policy and practice is for school leaders to establish systems, if not in place already, which support teachers' growth mindset when faced with new initiatives or other organizational change efforts. A key finding from the study was the importance for school leaders to address discomfort in teachers and make teachers more comfortable. Another finding was how school leaders inspire change by encouraging risk-taking

in teachers. To these ends, school and district leaders should be mindful of how to balance the two practices.

Teachers are likely to get overwhelmed or frustrated when taking new risks in the classroom. Establishing systems to address teacher overwhelm and frustration should allow school leaders to comfort teachers before, during, and after implementing a new instructional practice or initiative. Allowing ample time for training, collaborative planning, and reflection are a few practices which should help make teachers more comfortable when implementing change. Another practice which came out of the study's data analysis is for school leaders to provide coaching and mentoring to teachers. Support from coaching and mentoring should help provide a level of comfort, which could make risk-taking easier for teachers.

Implications for Leadership

The themes which emerged through the data analysis in the study indicated the importance of school leaders to use transformational leadership to inspire a growth mindset in teachers. The study's findings confirmed school leaders use transformational leadership practices to drive change at the organizational level. Additionally, the results extended knowledge about how change and teachers' resistance to change are impacted by leaders' transformational leadership practices. The potential impact of these findings could be important for schools or districts looking to improve student growth and achievement. This section discusses methodological, theoretical, and empirical implications for educational leadership.

Implications for School Leaders

The findings and conclusions drawn from the research in the study could have implications for school leaders such as principals, assistant and vice principals, or other

instructional leaders. The study could benefit such leaders by encouraging the leaders to consider teachers' mindsets and how the mindsets affect the teachers' level of resistance, or lack thereof, to change. Understanding the teachers' mindsets should allow the leader to choose to implement any or all of the transformational leadership practices which emerged as themes in the study to help shift a teacher's mindset toward change.

The study could benefit school leaders by examining how to address teacher resistance to change when launching and implementing change efforts. As previously stated, participants in the study revealed multiple times during the data collection process inspiring teachers to change is difficult and should be taken slowly. The study could provide school leaders with tools to combat teacher resistance, which should make change efforts and other improvement efforts easier to launch and implement. The transformational leadership practices which emerged throughout the study should allow school leaders to solicit teacher buy-in by empowering teachers.

The study might benefit school leaders by providing ways for leaders to share and distribute leadership with teacher leaders. One of the key themes which emerged from the findings in the study was how leaders who use transformational leadership practices share and distribute leadership with teachers and other staff. This style of leadership could not only empower teachers, inspire growth mindsets, and help lead change efforts, but could additionally lessen the stresses and burdens placed on school leaders. When leadership is a shared process, teachers and leaders alike might become more connected to the organization and experience more job satisfaction.

Implications for Classroom Teachers

The findings and conclusions drawn from the research in the study could have implications for classroom teachers. Like the recommendation for school leaders to self-assess leadership styles, teachers could benefit from understanding why teachers are resistant to change. When teachers realize the times or circumstances which bring out the most resistance toward change, the knowledge might inspire reflection. Such reflection could cause the teacher to avoid those times or seek help to navigate challenging circumstances.

The study could help teachers understand which leadership practices are preferred for school leaders to use to inspire the teachers to implement new initiatives. The results showed key goals for leaders using transformational leadership are to empower teachers and make the teachers more comfortable when implementing change efforts. Teachers might prefer certain leadership practices over others to inspire a growth mindset when asked to change. Understanding these preferences may allow teachers to be less fearful of change and not as resistant to implementing new initiatives.

Implications for School Governance

The findings and conclusions drawn from the research in the study could have implications for school governance including school boards of education, superintendents, and other district-level administrators. For one, these policymakers should consider teachers' resistance to change when suggesting new initiatives. Additionally, district leaders should be prepared to face resistance and deal with such resistance professionally. Instead of a my-way-or-the-highway approach to change, arrangements should be made to listen to teachers' concerns

and consider how to address concerns before, during, and after launching new instructional initiatives.

Furthermore, school governance should provide appropriate professional development for both district and school leaders. The training should address leadership practices such as the themes which emerged out of the data analysis in the study. By addressing such themes, school leaders might better understand how to use transformational leadership practices to combat resistance and inspire a growth mindset in teachers. Moving toward more of a growth mindset in teachers could lead to heightened levels of job satisfaction and more positive school cultures and climates.

Conclusion

The purpose of this qualitative, exploratory single-case study was to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. The study examined how school leaders address fixed mindsets in classroom teachers' which might cause the teachers to resist school or district change efforts. The exploratory single-case study sought to help understand the connection between the use of transformational leadership practices by school-based administrators and classroom teachers' adoption of a growth mindset around student-centered instructional practices. The study's findings revealed how school-based administrators choose which transformational leadership practices to use in different situations.

The results of the study revealed 12 major themes, four for each of the three research questions which guided the study. Major themes that emerged through exploring the first research question included sense of purpose, shared leadership/empower teachers/selfless,

coach/motivate, and address discomfort/make comfortable. Major themes that emerged through exploring the second research question included collaboration/teamwork, resourceful, risk-taking, and goal-setting/reflection. Major themes that emerged through exploring the second research question included expectations, provide opportunities, leverage expertise, differing perspectives, and personalities, and enthusiasm/passion.

The study's limitations included purposive sampling, time constraints, and threats to credibility and dependability. Despite these limitations, the study's findings have confirmed and, in some cases, extended knowledge of the connection between Transformational Leadership Theory and Growth Mindset Theory. The literature confirmed leaders possess the capacity to influence employees' work behaviors, particularly innovative behaviors, and job performance (Pradhan & Jena, 2019; Rana et al., 2016). The study's key findings extended knowledge about school leaders who use transformational leadership practices to inspire a growth mindset in classroom teachers.

The literature addressed how leaders strongly influence employees' work behaviors, particularly innovative behaviors, and job performance (Pradhan & Jena, 2019). Data collected through the study led to an understanding of how school leaders use transformational leadership to inspire a growth mindset in classroom teachers. School leaders act selflessly by using a system of shared or distributed leadership to empower teachers. Additionally, school leaders instill a collective sense of purpose, address discomfort, and make teachers comfortable to establish a culture of risk-taking through goal-setting and reflection processes. Finally, school leaders use coaching and mentoring to motivate teachers to seek opportunities for collaboration and teamwork, and to be resourceful when looking to provide innovative classroom instruction.

The themes which emerged from the data in the study might serve as a reference for schools and districts in any phase of implementing new initiatives which face resistance from teachers. Participants in the study confirmed the efficacy of using transformational leadership practices intentionally to inspire a growth mindset in classroom teachers to minimize resistance and maximize growth. These leadership practices may ultimately benefit all school stakeholders by improving levels of job satisfaction and making a positive impact on school cultures and climates.

References

- Alatawi, M. A. (2017). The myth of the additive effect of the transformational leadership model. *Contemporary Management Research*, 13(1), 19–29. doi:10.7903/cmr.16269
- Allen, N., Grigsby, B., & Peters, M. L. (2015). Does leadership matter? Examining the relationship among transformational leadership, school climate, and student achievement. *International Journal of Educational Leadership Preparation*, 10(2), 1–22. Retrieved from <http://www.ncpeapublications.org>
- Alqatawenh, A. S. (2018). Transformational leadership style and its relationship with change management. *Business: Theory and Practice*, 19, 17–24. doi:10.3846/btp.2018.03
- Amanchukwu, R. N., Stanley, G. J., & Ololube, N. P. (2015). A review of leadership theories, principles and styles and their relevance to educational management. *Management*, 5(1), 6–14. doi:10.5923/j.mm.20150501.02
- Bass, B., & Avolio, B. (1995). *Multifactor Leadership Questionnaire*. Retrieved from http://alrestivo.com/Downloads_files/Multifactor%20Leadership%20Questionnaire.pdf
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.
- Benson, D. (2015). The five fundamental tasks of a transformational leader. *Physician Leadership Journal*, 2(5), 58–62. Retrieved from <https://www.physicianleaders.org/>
- Berkovich, I. (2016). School leaders and transformational leadership theory: Time to part ways? *Journal of Educational Administration*, 54(5), 609–622. doi:10.1108/JEA-11-2015-0100

- Börü, N. (2018). The factors affecting teacher-motivation. *International Journal of Instruction*, 11(4), 761–776. doi:10.12973/iji.2018.11448a
- Bottomley, P., Mostafa, A. M. S., Gould, W. J. S., & León, C. F. (2016). The impact of transformational leadership on organizational citizenship behaviours: The contingent role of public service motivation. *British Journal of Management*, 27(2), 390–405. doi:10.1111/1467-8551.12108
- Burnes, B. (2015). Understanding resistance to change – Building on Coch and French. *Journal of Change Management*, 15(2), 92–116. doi:10.1080/14697017.2014.969755
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Campbell, J. W. (2018). Efficiency, incentives, and transformational leadership: Understanding collaboration preferences in the public sector. *Public Performance & Management Review*, 41(2), 277–299. doi:10.1080/15309576.2017.1403332
- Caniëls, M. C., Semeijn, J. H., & Renders, I. H. (2018). Mind the mindset! The interaction of proactive personality, transformational leadership and growth mindset for engagement at work. *Career Development International*, 23(1), 48–66. doi:10.1108/CDI-11-2016-0194
- Castillo-Montoya, M. (2016). Preparing for interview research: The interview protocol refinement framework. *The Qualitative Report*, 21(5), 811–831. Retrieved from <https://nsuworks.nova.edu/tqr/vol21/iss5/2>
- Chiong, C., Menzies, L., & Parameshwaran, M. (2017). Why do long-serving teachers stay in the teaching profession? Analysing the motivations of teachers with 10 or more years' experience in England. *British Educational Research Journal*, 43(6), 1083–1110. doi:10.1002/berj.3302

- Costa, A., & Faria, L. (2018). Implicit theories of intelligence and academic achievement: A meta-analytic review. *Frontiers in Psychology*, 9(829), 1–16.
doi:10.3389/fpsyg.2018.00829
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC medical research methodology*, 11, 100–109. doi:10.1186/1471-2288-11-100
- Darawsheh, W. (2014). Reflexivity in research: Promoting rigour, reliability and validity in qualitative research. *International Journal of Therapy & Rehabilitation*, 21(12), 560–568.
doi:10.12968/ijtr.2014.21.12.560
- Dweck, C. (2016a). What having a “growth mindset” actually means. *Harvard Business Review Digital Articles*. Retrieved from <https://hbr.org/2016/01/what-having-a-growth-mindset-actually-means>
- Dweck, C. S. (2015). Growth. *British Journal of Educational Psychology*, 85(2), 242–245.
doi:10.1111/bjep.12072
- Dweck, C. S. (2016b). *Mindset: The new psychology of success (Updated Edition)*. New York: Ballentine Books.
- Ekecrantz, S., & Schwieler, E. (2016). Educational developers' experiences of negative faculty attitudes towards teaching and development – An international survey. *Journal of Faculty Development*, 30(3), 21–29. Retrieved from <http://www.ingentaconnect.com/>

- Eliophotou-Menon, M., & Ioannouz, A. (2016). The link between transformational leadership and teachers' job satisfaction, commitment, motivation to learn, and trust in the leader. *Academy of Educational Leadership Journal*, 20(3), 12. doi:10.1108/jea-01-2013-0014
- Fitzgerald, C. J., & Laurian-Fitzgerald, S. M. (2016). Helping students enhance their grit and growth mindsets. *Journal Plus Education/Educatia Plus*, 14(2), 52–67. Retrieved from <http://www.uav.ro/jour/index.php/jpe/index>
- Gorgulu, R. (2019). Transformational leadership inspired extra effort: The mediating role of individual consideration of the coach-athlete relationship in college basketball players. *Universal Journal of Educational Research*, 7(1), 157–163. doi:10.13189/ujer.2019.070120
- Heller, J., Notgrass, D., & Conner, C. (2017). Moderators to the relationship between leaders' inspirational behaviors and followers' extra effort. *International Journal of Business & Public Administration*, 14(1), 36–55. Retrieved from <http://www.iabpad.com/>
- Holdsworth, S., & Maynes, N. (2017). “But what if I fail?” A meta-synthetic study of the conditions supporting teacher innovation. *Canadian Journal of Education*, 40(4), 665–703. Retrieved from <https://csse-scee.ca/>
- Karimi, F., & Morshedi, Z. (2015). The relationship between transformational leadership with organizational innovation. *International Journal of Educational and Psychological Researches*, 1(3), 226–233. doi:10.4103/2395-2296.158343
- Lee Abdullah, Q. D., & Varatharajoo, K. D. R. (2017). Transformational leadership and its functionality in arts organization. *International Journal of Business & Society*, 18, 710–717. Retrieved from <http://www.ijbs.unimas.my/>

- Malik, W. U., Javed, M., & Hassan, S. T. (2017). Influence of transformational leadership components on job satisfaction and organizational commitment. *Pakistan Journal of Commerce & Social Sciences*, 11(1), 146–165. Retrieved from <http://www.jespk.net>
- Martin, A. J. (2015). Implicit theories about intelligence and growth (personal best) goals: Exploring reciprocal relationships. *British Journal of Educational Psychology*, 85(2), 207–223. doi:10.1111/bjep.12038
- McCarley, T. A., Peters, M. L., & Decman, J. M. (2016). Transformational leadership related to school climate: A multi-level analysis. *Educational Management Administration & Leadership*, 44(2), 322–342. doi:10.1177/1741143214549966
- McIntosh, M. J., & Morse, J. M. (2015). Situating and constructing diversity in semi-structured interviews. *Global Qualitative Nursing Research*, 2, 1–12. doi:10.1177/2333393615597674
- Meierdirk, C. (2016). Developing a growth mindset. *Teaching Business & Economics*, 20(1), 25–26. Retrieved from <http://www.ebea.org.uk>
- Metcalf, M., & Morelli, C. (2015). The art of leading change: Innovative leaders transformation model. *Integral Leadership Review*, 15(3), 83–92. Retrieved from <http://integralleadershipreview.com/>
- Mind Garden. (2019a). Multifactor leadership questionnaire. Mind Garden. Retrieved from <https://www.mindgarden.com/16-multifactor-leadership-questionnaire>
- Mind Garden. (2019b). Multifactor leadership questionnaire third edition manual and sample set. Mind Garden. Retrieved from <https://www.transform.mindgarden.com/>

- Mohiuddin, Z. A. (2017). Influence of leadership style on employees performance: Evidence from literatures. *Journal of Marketing & Management*, 8(1), 18–30. Retrieved from <http://www.gsmi-ijgb.com>
- Muenjohn, N., & Armstrong, A. (2008). Evaluating the structural validity of the Multifactor Leadership Questionnaire (MLQ-5X), capturing the leadership factors of transformational-transactional leadership. *Contemporary Management Research*, 4(1), 3–14. doi:10.7903/cmr.704
- Ng, B. (2018). The neuroscience of growth mindset and intrinsic motivation. *Brain Sciences* (2076-3425), 8(2), 20–30. doi:10.3390/brainsci8020020
- Pearson, M. L., Albon, S. P., & Hubball, H. (2015). Case study methodology: Flexibility, rigour, and ethical considerations for the scholarship of teaching and learning. *The Canadian Journal for the Scholarship of Teaching and Learning*, 6(3), 6–10. Retrieved from <http://ir.lib.uwo.ca/>
- Pradhan, S., & Jena, L. K. (2019). Does meaningful work explains the relationship between transformational leadership and innovative work behaviour? *Vikalpa: The Journal for Decision Makers*, 44(1), 30–40. doi:10.1177/0256090919832434
- Rana, S. S., Malik, N. I., & Hussain, R. Y. (2016). Leadership styles as predictors of job involvement in teachers. *Pakistan Journal of Psychological Research*, 31(1), 161–182. Retrieved from <http://www.pjprnip.edu.pk/pjpr/>
- Reinders, H. (2017). Moving from teacher resistance to teacher leadership. *Modern English Teacher*, 26(3), 20–22. Retrieved from <http://www.onlinemet.com/>

- Rowold, J. (2005). *Multifactor leadership questionnaire. Psychometric properties of the German translation by Jens Rowold*. Redwood City, CA: Mind Garden.
- Saldaña, J. (2015). *The coding manual for qualitative researchers (3rd ed.)*. Thousand Oaks, CA: Sage.
- Shafique, I., & Beh, L. (2017). Shifting organizational leadership perspectives: An overview of leadership theories. *International Journal of Economic Perspectives*, 11(4), 134–143.
Retrieved from <http://www.econ-society.org/>
- Singh, A. N. (2018). Current status of research ethics and projecting future initiatives. *International Medical Journal*, 25(6), 350–352. Retrieved from <http://www.seronjihou.co.jp/imj/index.html>
- Smothers, J., Doleh, R., Celuch, K., Peluchette, J., & Valadares, K. (2016). Talk nerdy to me: The role of intellectual stimulation in the supervisor-employee relationship. *Journal of Health & Human Services Administration*, 38(4), 478–508.
Retrieved from http://www.spaef.com/JHHSA_PUB/index.html
- Snyder, R. R. (2017). Resistance to change among veteran teachers: Providing voice for more effective engagement. *International Journal of Educational Leadership Preparation*, 12(1), 1–14. Retrieved from <http://www.ncpeapublications.org>
- Stein, L. (2016). Schools need leaders – not managers: It’s time for a paradigm shift. *Journal of Leadership Education*, 15(2), 21–30. doi:1012806/V15/I2/I3
- Sun, R., & Henderson, A. C. (2017). Transformational leadership and organizational processes: Influencing public performance. *Public Administration Review*, 77(4), 554–565.
doi:10.1111/puar.12654

- Tabassi, A. A., Roufechaei, K. M., Abu Bakar, A. H., & Yusof, N. (2017). Linking team condition and team performance: A transformational leadership approach. *Project Management Journal*, 48(2), 22–38. Retrieved from <https://www.pmi.org/>
- U.S. Department of Education. (2006). Code of federal regulations title 34 Department of Education part 97 – Protection of human subjects. § 97.115 IRB records. Retrieved from <https://www2.ed.gov/policy/fund/reg/humansub/part97-2.html>
- van Oudenhoven, J. P. (2017). Emic and etic research. *The International Encyclopedia of Intercultural Communication*, 1–7. doi:10.1002/9781118783665.ieicc0103
- Warrick, D. D. (2018). The need for transformational leaders that understand organization development fundamentals. *OD Practitioner*, 50(4), 33–40. Retrieved from <https://www.odnetwork.org/>
- Yaslioglu, M. M., & SelenayErden, N. (2018). Transformational leaders in action: Theory has been there, but what about practice? *IUP Journal of Business Strategy*, 15(1), 42–53. Retrieved from <https://www.iupindia.in>
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Thousand Oaks, CA: Sage Publications.
- Yoon, S. Y. (2016). Principals’ data-driven practice and its influences on teacher buy-in and student achievement in comprehensive school reform models. *Leadership & Policy in Schools*, 15(4), 500–523. doi:10.1080/15700763.2016.1181187
- Zalaznick, M. (2018). Growth projections: Educators adopt growth mindset to tap into students’ capacity to boost intelligence. *District Administration*, 54(6), 52–55. Retrieved from <https://districtadministration.com/>

- Zeng, G., Chen, X., Cheung, H. Y., & Peng, K. (2019). Teachers' growth mindset and work engagement in the Chinese educational context: Well-being and perseverance of effort as mediators. *Frontiers in Psychology, 10*, 1–10.
doi:10.3389/fpsyg.2019.00839
- Zhang, Y., & Wildemuth, B. (2016). Qualitative analysis of content. In B. Wildemuth (Ed.), *Applications of Social Research Methods to Questions in Information and Library Science* (2nd ed.) (pp. 318–329). Oxford: Pearson Education.
- Zurawski, L., & Mancini, N. (2016). Engaging your growth mindset for a successful school year. *Perspectives of the ASHA Special Interest Groups, 1*(16), 91–98.
doi:10.1044/persp1.SIG16.91

Appendix A: Permission to conduct research



Diane Filardo
Director of Testing and Accountability
filardod@norwalkps.org
P: 203-854-4031
125 East Avenue, PO BOX 6001
Norwalk, CT 06852-6001

August 21, 2019

Dear American College of Education IRB,

I have reviewed the proposed study, "Leadership Practices to Inspire Growth Mindsets in Classroom Teachers", presented by Daniel Kreiness, a doctoral student at American College of Education. I understand that the purpose of this study is to explore how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. Targeted participants will include secondary school-based administrators who volunteer to be part of the study.

After administrators sign a consent form, agreeing to participate in the study, permission is granted to survey, interview, and observe the participants. I confirm that I have authority to grant such permission on behalf of Norwalk Public Schools.

I understand that this project will begin once the student has obtained American College of Education's Institutional Review Board (IRB) approval. Daniel Kreiness has agreed to provide to my office a copy of the American College of Education IRB approval or exemption letter before beginning any research activities.

I am aware that all data collected will be kept confidential. In accordance with American College of Education's policy and best practices for ethical research, I understand that neither participants nor sites will be identified in any report of findings or in the published dissertation. Daniel Kreiness has agreed to provide to my office a copy of the aggregate results from the study.

If the IRB has any concerns about the permission being granted by this letter, please contact me at the phone number listed above.

Sincerely,

Diane Filardo

Appendix B: Informed Consent Form

Informed Consent Form

Prospective Research Participant: Read this consent form carefully and ask as many questions as you like before you decide whether you want to participate in this research study. You are free to ask questions at any time before, during, or after your participation in this research.

Project Information

Project Title: Transformational Leadership Practices to Inspire Growth Mindsets in Classroom Teachers

Researcher: Daniel Kreiness

Organization: American College of Education

Email: dankreiness@gmail.com

Telephone: (845) 661-0377

Researcher's Faculty Member: Dr. Sandra Johnson

Organization and Position: ACE Faculty, Dissertation Chair

Email: sandra.johnson@ace.edu

Introduction

I am Daniel Kreiness, and I am a doctoral candidate student at American College of Education. I am doing research under the guidance and supervision of my Dissertation Chair, Dr. Sandra Johnson. I will give you some information about the project and invite you to be part of this research. Before you decide, you can talk to anyone you feel comfortable with about the research. This consent form may contain words you do not understand. Please ask me to clarify anything and I will explain. If you have questions later, you can ask them then.

Purpose of the Research

You are being asked to participate in a research study which will assist with understanding how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. This qualitative study will help to understand the connection between the use of transformational leadership practices by school-based administrators and classroom teachers' adoption of a growth mindset around student-centered instructional practices. The study should also reveal how school-based administrators choose which practices to use in different situations.

Research Design and Procedures

The study will use a qualitative methodology and an exploratory case study research design. A survey will be disseminated to specific participants who are secondary school-based administrators within the Norwalk Public Schools. The study will comprise approximately 15 participants who will participate in an initial survey to self-assess transformational leadership practices. The study will also involve interviewing some participants, which will be conducted at

a site most convenient for participants. After the interview round, observations of participants such as full faculty meetings, administrator planning meetings, and individual or small group meetings with staff members, will occur. Observations will take place at the participants' school site(s).

Participant selection

You are being invited to take part in this research because of your experience as a secondary school-based administrator who can contribute much about how to work with teachers who may be resistant to change, which meets the criteria for this study. Participant selection criteria: All participants will be included in the first round of data collection in the study (surveys) if they have served in a school-based administrative role in Norwalk Public Schools for a period of at least one year and use transformational leadership practices. Potential participants will only be deemed eligible to participate in the second and third rounds of data collection, interviews and observations respectively, if the participant's total score on four factors on the survey equals 60 or higher or averages 3 or higher.

Voluntary Participation

Your participation in this research is entirely voluntary. It is your choice whether or not to participate. If you choose not to participate, there will be no punitive repercussions and you do not have to participate. If you select to participate in this study, you may change your mind later and stop participating even if you agreed earlier.

Procedures

If you agree to participate in this study, you will be asked to complete the Multifactor Leadership Questionnaire (MLQ-5X). The MLQ-5X asks leaders to self-assess transformational leadership practices through a series of forty-five descriptive statements. Each statement is accompanied by a Likert scale rating from zero to four. Choices on the Likert scale ratings include: 0 = Not at all; 1 = Once in a while; 2 = Sometimes; 3 = Fairly often; and 4 = Frequently, if not always. The statements will all refer to participants' use of certain leadership practices. After the surveys, you may be asked to continue in the study to participate in interviews and observations. Interviews will be conducted at a site most convenient for participants. Observations will take place at the participants' school site. Observations of participants may include full faculty meetings, administrator planning meetings, and individual or small group meetings with staff members.

Duration

The survey portion of the research study will require approximately 15 minutes to complete. If you are selected to participate in an interview, the time expected will be a maximum of 30 minutes. If you are chosen to be observed, the time allotted will be between 30 and 60 minutes, depending on which type of meeting, at a location and time convenient for the participant. You will also be emailed the researcher's notes from the observation to check for accuracy, which may take up to 5 minutes.

Risks

The researcher will ask you to share personal and confidential information, and you may feel uncomfortable talking about some of the topics. You do not have to answer any question or take

part in the discussion if you don't wish to do so. You do not have to give any reason for not responding to any question.

Benefits

While there will be no direct financial benefit to you, your participation is likely to help us find out more about the connection between leadership practices by school administrators and growth mindset in classroom teachers. The potential benefits of this study may contribute ways to conceptualize a top-down leadership and professional development approach whereby school leaders can inspire a growth mindset in both newer and more veteran classroom teachers so the teachers may be inclined to use more innovative teaching practices.

Confidentiality

The researcher will not share information about you or anything you say and will remove any identifying information. Any reference to you as a participant, your school, or district in the study will use a pseudonym so you may remain anonymous. During the defense of the doctoral dissertation, data collected will be presented to the dissertation committee. The data collected will be kept in a password-protected computer file. Any information about you will be coded and will not directly identify you as the participant. Only the researcher will know what your number is, and will secure your information. Any records relating to research must be retained for at least three years after completion of the research and accessible for inspection and copying. The researcher will destroy all data after the three-year period by permanently deleting data from cloud-based storage programs.

Sharing the Results

At the end of the research study, the results will be available for each participant. It is anticipated to publish the results so other interested people may learn from the research.

Right to Refuse or Withdraw

Participation is voluntary. At any time, you wish to end your participation in the research study, you may do so without repercussions.

Questions About the Study

If you have any questions, you can ask them now or later. If you wish to ask questions later, you may contact Daniel Kreiness at (845) 661-0377 or dankreiness@gmail.com. This research plan has been reviewed and approved by the Institutional Review Board of American College of Education. This is a committee whose role is to make sure research participants are protected from harm. If you wish to ask questions of this group, email IRB@ace.edu.

Certificate of Consent

I have read the information about this study, or it has been read to me. I acknowledge why I have been asked to be a participant in the research study. I have been provided the opportunity to ask questions about the study, and any questions have been answered to my satisfaction. I certify I am at least 18 years of age. I consent voluntarily to be a participant in this study.

Print or Type Name of Participant: _____

Signature of Participant: _____

Date: _____

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily. A copy of this Consent Form has been provided to the participant.

Print or type name of lead researcher: _____

Signature of lead researcher: _____

I have accurately read or witnessed the accurate reading of the assent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm the individual has freely given consent.

Print or type name of lead researcher: _____

Signature of lead researcher: _____

Date: _____

Signature of faculty member: _____

Date: _____

PLEASE KEEP THIS INFORMED CONSENT FORM FOR YOUR RECORDS.

Appendix C: Questionnaire Permission

For use by Daniel Kreiness only. Received from Mind Garden, Inc. on July 26, 2019

**Permission for Daniel Kreiness to reproduce 1 copy
within one year of July 26, 2019**

For Publications:

We understand situations exist where you may want sample test questions for various fair use situations such as academic, scientific, or commentary purposes. No items from this instrument may be included in any publication without the prior express written permission from Mind Garden, Inc. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

For Dissertation and Thesis Appendices:

You may not include an entire instrument in your thesis or dissertation, however you may use the three sample items specified by Mind Garden. Academic committees understand the requirements of copyright and are satisfied with sample items for appendices and tables. For customers needing permission to reproduce the three sample items in a thesis or dissertation, the following page includes the permission letter and reference information needed to satisfy the requirements of an academic committee.

Online Use of Mind Garden Instruments:

Online administration and scoring of the Multifactor Leadership Questionnaire is available from Mind Garden, (<https://www.mindgarden.com/16-multifactor-leadership-questionnaire>). Mind Garden provides services to add items and demographics to the Multifactor Leadership Questionnaire. Reports are available for the Multifactor Leadership Questionnaire.

If your research uses an online survey platform other than the Mind Garden Transform survey system, you will need to meet Mind Garden's requirements by following the procedure described at [mindgarden.com/mind-garden-forms/58-remote-online-use-application.html](https://www.mindgarden.com/mind-garden-forms/58-remote-online-use-application.html).

All Other Special Reproductions:

For any other special purposes requiring permissions for reproduction of this instrument, please contact info@mindgarden.com.

For use by Daniel Kreiness only. Received from Mind Garden, Inc. on July 26, 2019



www.mindgarden.com

To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Multifactor Leadership Questionnaire

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.

Sample Items:

As a leader

- I talk optimistically about the future.
- I spend time teaching and coaching.
- I avoid making decisions.

The person I am rating....

- Talks optimistically about the future.
- Spends time teaching and coaching.
- Avoids making decisions

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Published by Mind Garden, Inc. www.mindgarden.com

Sincerely,

Robert Most
Mind Garden, Inc.
www.mindgarden.com

Appendix D: Alteration Agreement

Conditions of Use

Effective date is July 29, 2019 for:

Daniel Kreiness

You submitted your statement for altering a Mind Garden instrument at 8:48 pm EDT on July 24, 2019.



Daniel Kreiness

Conditions of Use for Altering a Mind Garden Instrument

Before conducting your research:

1) You will register your intent to make an alteration of a Mind Garden instrument by describing the type of alteration(s), the details of the alteration(s), and the rationale behind the alteration(s). (You have fulfilled this condition. The information you provided is included below).

Instrument Name:

Multifactor Leadership Questionnaire

Specific Alterations:

Other alterations

Alteration Details:

Some items from the MLQ will be changed to become open-ended questions. The open-ended questions will be: 1. Explain how you emphasize the importance of having a collective sense of mission 2. Explain how you talk enthusiastically about what needs to be accomplished 3. Explain how you get teachers to go beyond their own self-interest for the good of the group 4. Explain how you help teachers develop their strengths 5. Explain how you suggest new ways of looking at how to implement instructional best practices 6. Explain how you seek differing perspectives when solving problems or get others to look at problems from many different angles

Reason for Alterations:

The items are to be adapted as open-ended questions to ask during semi-structured interviews for dissertation research.

2) You will assign all rights to the altered instrument to the copyright holder. (You agreed to this condition by electronically signing and submitting the form).

3) You will put the instrument copyright, including the notification that the instrument was altered, on every page containing question items from this instrument. Add the following text to the end of the copyright:

"Altered with permission of the publisher."

An example, using the Multifactor Leadership Questionnaire, is shown below.

MLQ Copyright © 1995 Bruce Avolio and Bernard Bass. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com Altered with permission of the publisher.

Appendix E: Multifactor Leadership Questionnaire: Self Form Sample Items

As per the copyright agreement between the researcher and Mind Garden, Inc.:

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Sample Items:

As a leader

I talk optimistically about the future.

I spend time teaching and coaching.

I avoid making decisions.

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Appendix F: Semi-Structured Interview Questions

1. Explain how you emphasize the importance of having a collective sense of mission
2. Explain how you talk enthusiastically about what needs to be accomplished
3. Explain how you get teachers to go beyond their own self-interest for the good of the group
4. Explain how you help teachers develop their strengths
5. Explain how you suggest new ways of looking at how to implement instructional best practices
6. Explain how you seek differing perspectives when solving problems or get others to look at problems from many different angles

Appendix G: Observation Field Notes Form

Observation Field Notes Form

*** Required**

Date *

Date

mm/dd/yyyy

Type of Activity *

Your answer

What is the administrator doing?

Your answer

What is the administrator saying?

Your answer

How does what the leader is doing/saying relate to growth mindset in classroom teachers?

Your answer

SUBMIT

Never submit passwords through Google Forms.

Appendix H: Initial Participation Email

Daniel Kreiness

From: Daniel Kreiness
Sent: Tuesday, October 01, 2019 3:05 PM
To: JHSPrincipals; JMSPrincipals
Cc: sandra.johnson@ace.edu; Daniel Kreiness; Dan Kreiness
Subject: Research Participation and Informed Consent Form
Attachments: Informed Consent Form.pdf

██████████ Secondary Administrators:

Earlier today, you should have received an introductory email from ██████████ which provided some information about me and my dissertation research study. I have designed the study to assist in understanding how school-based administrators use transformational leadership practices to inspire a growth mindset in classroom teachers around student-centered instruction. I believe each one of you is uniquely qualified to participate in at least the first phase of research in this study due to ██████████ innovative culture and its desire to embrace change and strive for growth.

The first phase of research includes a leadership survey which will require approximately 10-15 minutes to complete. Not only will the survey be useful for my research, it may also provide you with valuable insights into your personal leadership style. Therefore, I hope you will all consider participating. Since I have already purchased enough licenses for all of you to take the survey, called the Multifactor Leadership Questionnaire, all you have left to do to complete the survey is to visit this link <https://transform.mindgarden.com/rsvp/29729>. Please make sure to sign in using your @██████████ email.

You may login and take the survey whenever it is convenient for you. However, attached to this email you will also find an informed consent form which provides detailed information about the research study and your participation as well as my contact information should you require assistance. Once you agree to participate in the survey, please read and sign the informed consent form and return it to me as soon as you can.

Thank you so much for your participation!

Dan Kreiness
 ELA Instructional Coach
 ██████████
dankreiness.com

Schedule Time With Me!

Change will not come if we wait for some other person or some other time. We are the ones we've been waiting for. We are the change that we seek. — Barack Obama

P.S. Depending on your survey results, you may be selected to participate in an interview. The expected duration of this interview will be approximately 30 minutes. You will also be sent the transcription from the interview to check for accuracy, which may take between 5 and 10 minutes.

Appendix I: Follow-up Participation Emails

Will you participate???

3 v



Daniel Kreiness
Fri 10/11/2019 11:13 AM

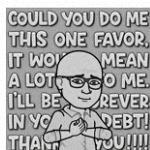
👍 ↻ ⏮ → ...

Informed Consent Form.pdf
255 KB

Secondary Administrators,

Thanks to the first several administrators who took the leadership survey, I already have some great data to inform my dissertation research. However, so far there has only been a 28.5% participation rate. Less than one-third of our Norwalk middle and high school principals and assistant principals have completed the survey. I was really hoping to do better than that. It is hard for me to tell whether some haven't taken it because they have had trouble finding the time or because they simply do not want to participate. Please select one of the three voting options at the top of this email to let me know of your intent to participate: I will do it soon, Not interested, or Already participated.

If you are still interested in completing the survey, there is still time left. Remember to visit <https://transform.mindgarden.com/rsvp/29729> and log in using your [redacted] org email address. If you have already completed the survey, please sign and return the informed consent form. I have attached it again to this email.



Thanks so much!

Dan Kreiness
ELA Instructional Coach
[redacted]
dankreiness.com

LAST CHANCE to participate!!!

📧

🕒 This message was sent with High importance.



Daniel Kreiness
Tue 10/15/2019 2:55 PM

👍 ↻ ⏮ → ...

Secondary Principals and Assistant Principals,

If you are seeing this, it means I have not heard from you about participating in my dissertation research. I would like to finish gathering data from the initial survey soon and I am missing your results.



If you are still interested in completing the survey, there is still time left. Remember to visit <https://transform.mindgarden.com/rsvp/29729> and log in using your [redacted] email address.

Thanks so much,

Dan Kreiness
ELA Instructional Coach
[redacted]
[redacted]
dankreiness.com

Appendix J: Interview and Observation Data Codes and Themes

Research Question	Interview Question	Codes	Themes
RQ1	Explain how you emphasize the importance of having a collective sense of mission	Culture/Happy environment; Positive climate/enhance climate; Sense of belonging; Collective mission/sense of mission; Sense of purpose/Provide rationale/reason; Guide understanding; Core values and beliefs/Expectations/Common expectations; Let the teachers lead/shared leadership/distributed leadership/grow leaders; Encourage teacher ownership/Empower teachers; Consider individual ideas; Create buy-in; Hold each other accountable; Further thinking; Consider feelings/Social and emotional/empathize; Model leadership; Collective environment; Listen to suggestions/ideas; Be transparent	<ul style="list-style-type: none"> • Sense of purpose • Shared Leadership/Empower teachers/Selfless • Coach/Motivate • Address discomfort/Make comfortable
	Explain how you talk enthusiastically about what needs to be accomplished	Coaching/helps learning; Provide motivation; Reenergize/reinvigorate; Make comfortable; Address emotions/discomfort; Focus on strengths; Be optimistic/positive/positive culture; Core values and beliefs; Collective sense of mission; Show enthusiasm/energy/happy	

		tone/Be passionate; Sense of purpose; Sense of urgency; Strong relationships/people-centric; Passion for working with kids; Support and acknowledge; Honest feedback/Be transparent; Set up for success	
RQ2	Explain how you get teachers to go beyond their own self-interest for the good of the group	Act as a collective/teamwork/team effort/Rely on your team; Seek resources/resourceful; School culture; Consider individual interests; Encourage teacher ownership/teacher leadership; Provide autonomy; Encourage risk taking/Challenge themselves/peers; Support collaboration; Hold each other accountable; Seek feedback; Create buy-in; Motivate to change; Act selflessly; Praise/encourage; Show enthusiasm/be happy; Shift the paradigm	<ul style="list-style-type: none"> • Collaboration/Teamwork • Resourceful • Risk-Taking • Goal Setting/Reflection
	Explain how you help teachers develop their strengths	Sense of mission/vision; Identify/Isolate/Support weaknesses; Focus on growth; Encourage/Focus on strengths/Positive feedback/Positive Praise; Provide motivation/push teachers/stretch thinking/push the envelope; Emotionally involved; Address discomfort/Listen to concerns; Take things slowly; Guide reflection; Goal setting; Constant	

		<p>communication; Create buy-in; Encourage risk taking; Use data; Provide/Seek resources/resourceful; Individual conferencing; Coaching; Strong relationships/partner together; Non-judgmental; Grow as a leader; Evolve expectations/adjust practices; Sense of urgency; Consider individuals/personal interests</p>	
RQ3	<p>Explain how you suggest new ways of looking at how to implement instructional best practices</p>	<p>Expectations; Encourage planning; Listen to concerns/Address excuses/Identify naysayers; Encourage to ask for advice; Shared leadership/grow leaders/grow as a leader; Coaching; Make comfortable; Focus on strengths; School culture/Shift culture; Support collaboration; Seek resources/resourceful; Strong relationships; Good communication; Create/provide opportunities; Be intentional; Leverage expertise; Encourage teacher ownership; Difficult to change/influence people; Open your mind; Provide motivation/intrinsic motivation; Encourage risk taking</p>	<ul style="list-style-type: none"> • Expectations • Provide Opportunities • Leverage Expertise/Differing Perspectives/Personalities • Enthusiasm/Passion
	<p>Explain how you seek differing perspectives when solving problems or get</p>	<p>Expectations; Sense of purpose/Provide rationale/reason; Include different backgrounds/life experiences/perspectives;</p>	

others to look at problems from many different angles	Consider personalities/personality types; Shared leadership/grow leaders; Use personality as strength; Recruit early adopters; Consider feelings; Let go of ego; Decision making protocols/structures/processes; Seek alternate opinions/Value different perspectives; Good communication; Individual conferencing; Provide honest feedback/Difficult conversations; Sense of community/bring everyone together; Group identity; Create safe space; Use needs as strengths; Provide encouragement/Thought partners; Leverage passion; Provide resources/resourceful; Encourage teacher ownership/empower; Be transparent; Have a presence/Be present; Listen to/invite concerns
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Appendix K: Coding Scheme for Thematic Pattern Analysis

Related Research Question	Theme	Correlation to The Four I's of Transformational Leadership
RQ1: How are school-based administrators using transformational leadership practices to inspire a growth mindset in classroom teachers?	Sense of purpose	Inspirational Motivation
	Shared Leadership/Empower teachers/Selfless	Intellectual Stimulation
	Coach/Motivate	Inspirational Motivation
	Address discomfort/Make comfortable	Individual Consideration
RQ2: How are school-based administrators' transformational leadership practices affecting classroom teachers' growth mindset focused on increasing student-centered instruction?	Collaboration/Teamwork	Intellectual Stimulation
	Resourceful	Intellectual Stimulation
	Risk-taking	Intellectual Stimulation
	Goal-setting/Reflection	Individual Consideration
RQ3: How do school-based administrators choose which transformational leadership practices to use to inspire a growth mindset in classroom teachers around student-centered instruction?	Expectations	Inspirational Motivation
	Provide opportunities	Intellectual Stimulation
	Leverage expertise, differing perspectives and personalities	Individual Consideration
	Enthusiasm/Passion	Inspirational Motivation