Teacher Perceptions of Instructional Leadership Qualities that Impact Classroom Instructional Practices and Teacher Self-Efficacy

by

Heather A. Bianconi

Submitted in Partial Fulfillment of the Requirements

for the Degree of

Doctor of Education

in the

Educational Leadership Program

YOUNGSTOWN STATE UNIVERSITY

December 2024

Teacher Perceptions of Instructional Leadership Qualities that Impact Classroom Instructional Practices and Teacher Self Efficacy

Heather A. Bianconi

I hereby release this dissertation to the public. I understand that this dissertation will be made available from the OhioLINK ETD Center and the Maag Library Circulation Desk for public access. I also authorize the University or other individuals to make copies of this thesis as needed for scholarly research.

Signature:

_____

Heather A. Bianconi Date

Approvals:

_____

Dr. Karen Larwin, *Dissertation Chair* Date

_____

Dr. Michelle Martin, *Committee Member* Date

_____

Dr. Ruth Zitnik, *Committee Member* Date

_____

Dr. Salvatore A. Sanders, *Dean of Graduate Studies* Date

Abstract

This study investigates teachers' perceptions of instructional leadership qualities that influence self-efficacy and classroom practices, using Q-methodology in a snowball sampling study with state-certified teachers from Pennsylvania and Ohio. The research identifies instructional leadership qualities teachers find most impactful, explores differences between elementary and secondary school teachers' perceptions, and examines qualities that significantly affect professional growth.

Findings reveal that positive reinforcement, support, constructive feedback, modeling, trust, autonomy, and collaborative leadership are the most influential instructional leadership qualities enhancing teacher self-efficacy and classroom effectiveness. These qualities align with five themes: *Sculptors of Curiosity and Creativity*, *Orchestrators of Harmony and Growth*, *Champions of Potential and Possibility*, *Architects of Confidence and Curiosity*, and *Masterminds of Adaptability and Structure.*

By leveraging Q-methodology, the study captures diverse perspectives on instructional leadership, offering insights into the leadership qualities that shape teacher efficacy and classroom success.

Keywords: Instructional leadership, teacher self-efficacy, classroom practices, Q-methodology, leadership qualities

Dedication

This dissertation is dedicated to my loving husband, John, whose unwavering support, patience, and encouragement have been my foundation throughout this journey. John, you have been my rock and my greatest champion. You have not only been my partner in life but also my partner in completing this momentous accomplishment, sharing in the sacrifices and achievements along the way. Your belief in me has been a constant source of strength, and I am endlessly grateful for the love, laughter, and encouragement you've given me through this process.

To my three wonderful children, Talia, Johnny, and Palmer, thank you for inspiring me every day with your boundless curiosity, resilience, and joy. You remind me of the importance of learning and growing, and you've given me the motivation to pursue this goal and set an example of perseverance.

I am profoundly grateful to my committee chair, Dr. Karen Larwin, and her teaching assistant, Dr. Colleen Richardson, for their invaluable mentorship, insightful feedback, and steadfast dedication. Their guidance and belief in my work have been instrumental in shaping this dissertation and in my development as a researcher.

To Dr. Michelle Martin and Dr. Ruth Zitnik, thank you for your thoughtful critiques, constructive suggestions, and genuine commitment to helping me succeed. Your attention to detail and deep understanding of the research process have strengthened my work and enhanced my perspective. I am truly grateful for your contributions and your faith in my abilities.

Table of Contents

List of Tables

List of Figures

Chapter I

Introduction

Instructional leadership has become increasingly important in education, as it has a significant impact on classroom practices and teacher self-efficacy. Instructional leadership plays a crucial role in influencing teacher self-efficacy, which pertains to an individual's belief in their competence to effectively facilitate student learning and apply effective teaching practices (Hallinger et al., 2018). As educational systems around the world aim for high standards, it is essential to understand the specific attributes of instructional leaders that have the most significant influence on teaching methods and improve teachers' confidence in their abilities. This study examines teacher perceptions of how instructional leadership qualities impact their classroom practices and teacher self-efficacy.

The effectiveness of classroom instruction is crucial for the quality of education. Instructional leaders, such as principals and other administrative leaders, have a vital role in influencing the educational atmosphere (Liu et al., 2021). This relationship between principal behaviors and teacher self-efficacy impacts student achievement (Bellibas & Liu, 2017; Goddard et al., 2021; Tschannen-Moran & Gareis, 2015).

Successful instructional leaders possess essential skills such as the capacity to establish explicit objectives, offer constructive critique, cultivate a cooperative atmosphere, and facilitate ongoing professional growth (Blase & Blase, 2004; Hallinger et al., 2018; Wahlstrom & Louis, 2008). Nevertheless, there is a significant gap in the existing body of research regarding the distinct viewpoints of educators regarding these attributes and their practical application in the classroom and self-efficacy using a mixed

methods approach. This approach is unique in that the sorting process used in this study will guide teachers to prioritize statements leading to results narrowing in on the most effective instructional leadership practices.

This research is crucial for an educator with extensive teaching experience of over 19 years, currently holding the position of middle school assistant principal. The objective of this research is to provide complete support to teachers to enhance teaching and learning, ultimately leading to improved student achievement. The findings will clearly address how teacher self-efficacy and instructional leadership can create a successful learning environment for all students. Addressing this topic seeks to interpret these processes from teachers' viewpoints, establishing a basis for future research and practical implementations in educational leadership. The knowledge acquired will enhance intellectual discussion and have practical advantages for educational practice and policy.

Statement of the Problem

The efficacy of instructional leadership is crucial in shaping the educational landscape, impacting both student results and teachers' professional development and effectiveness (Day et al., 2016). Although much research has emphasized the significance of instructional leadership in schools, there is still a notable lack of understanding regarding the precise leadership attributes that affect teacher self-efficacy beliefs and, as a result, classroom behaviors. Teacher self-efficacy is a crucial factor in determining the quality of instruction and student accomplishment (Li, 2023). Teacher self-efficacy refers to a teacher's belief in their abilities to effectively promote student learning and manage classroom dynamics (Lazarides & Warner, 2020). Nevertheless, the specific impacts of

various aspects of instructional leadership, such as establishing a vision, providing professional support, allocating resources, and implementing feedback mechanisms, on teachers' confidence and pedagogical techniques are not clearly defined. The absence of clear understanding hinders the progress of specific leadership training programs and policies to enhance teacher effectiveness and instructional methods. Therefore, this investigates the correlation between instructional leadership attributes and teacher self-efficacy beliefs, as well as the impact of these beliefs on classroom practices. The study provides valuable insights that can guide the creation of impactful leadership initiatives, thereby improving the educational experience for teachers and students.

Purpose of the Study

This mixed methods Q-study investigates how instructional leadership attributes affect teachers' perceptions of their efficacy and classroom behaviors. An electronic survey was delivered to teachers working in a public Pennsylvania or Ohio K-12 school district. The data from this study examined how instructional leadership traits, such as vision setting, professional support, resource allocation, and feedback systems, impact instructors' confidence in their instructional abilities and teaching approaches. The goal of the research was to understand how leadership practices influence educational environments and impact teacher performance and student outcomes by analyzing the connection between instructional leadership and teacher self-efficacy. The results of this study provide vital knowledge for creating efficient leadership strategies and professional development programs, ultimately improving the standard of education in schools. This will be the first known study to use a Q-method design to investigate teacher self-efficacy.

Research Questions

1. What specific instructional leadership qualities do teachers perceive as most important for principals to exhibit to positively impact classroom instructional practices and enhance teachers' self-efficacy beliefs?
2. What are the differences in how elementary and secondary school teachers perceive the importance of various instructional leadership qualities exhibited by their principals in relation to their own sense of instructional self-efficacy?
3. What are the most significant instructional leadership qualities that teachers perceive as impacting their professional growth, development, and sense of self-efficacy as instructors?
    a. How do these leadership qualities translate to changes in teachers' classroom instruction and their confidence in implementing effective teaching practices?

Research Methodology

Examining teacher perceptions of instructional leadership qualities that impact teacher self-efficacy and classroom practices is a complex task best measured through a mixed methods approach using Q-methodology. Mixed methods research is an investigative approach that combines qualitative and quantitative procedures. It includes fundamental philosophical assumptions, utilizes both qualitative and quantitative procedures, and combines these approaches in a study (Creswell & Plano, 2018). Q-methodology is a unique technique that integrates qualitative and quantitative research methodologies to systematically analyze subjectivity in connection to a particular issue of interest (Valenta & Ulrike, 1997). Q-methodology is a study approach that seeks to

understand individuals' perceptions and opinions on specific themes. The process entails discerning recurring patterns in their reactions (Brown, 1980; Cross, 2005; Watts & Stenner, 2012). Q-sorts can effectively elicit diverse viewpoints on a topic in a non-confrontational way, thanks to the pre-existing Q-set offered to participants. Participants must arrange the statements provided to them rather than coming up with their own assertions (Zabala et al., 2018).

Research Design

The snowball method was employed to gather participants for the study by initially identifying a few certified teachers in Pennsylvania and Ohio, who then referred other qualified colleagues, creating a growing network of teacher participants. In order to achieve a representative sample, the researcher utilized purposeful sampling since Q-methodology demands participants with strong opinions on the topic (Watts & Stenner, 2012). Additionally, gathering primary demographic data ensured population diversity. First, an electronic survey was sent to district teachers in 2024-2025 using Q-methodology software. Study volunteers received email invitations to ensure that they were not coerced. The invitation also emphasized that participation was voluntary, and the researcher informed individuals that they could withdraw at any time. The email included a detailed study summary and Q-sort links. The Q-sort process was assessed using web-based *QMethod Software*. Participants could easily complete the Q-sort anywhere with the *QMethod Software*. Participants' demographic information was taken before the Q-sort after consent. Statistics included years of service, years at present school district, teaching assignment, and education. Demographics helped evaluate leadership ties. No names or identifying information were entered into *QMethod*

Software. Participants utilized this online tool to Q-sort and answer three open-ended questions. Next, the *QMethod Software's* automatic approach recorded participants' answers precisely, avoiding human mistake in Q-sort data collection.

The Q-sort was assessed using Watts and Stenner (2012) criteria. An in-depth data analysis revealed trends and subcategories. The analysis focused on all participants' thoughts rather than individual viewpoints (Watts & Stenner, 2012). Additionally, the open-ended questions and Q-Sort results were studied and compared to better understand the factors, structures, procedures, and practices that affect implementation adherence. Open coding also classified data into subjects and categories, and the study refined and expand categories and subcategories when data was compared in order to accurately represent content (Patton, 2015).

Significance of the Study

Federal and state governments develop guidelines for how teachers are evaluated and how student learning is measured. Nevertheless, those in school leadership positions are left to decipher their instructional leadership's impact on teacher self-efficacy beliefs and classroom practices. Gaining a comprehensive understanding of the relationship between teachers and leaders plays a crucial role in determining how teacher self-efficacy impacts instruction quality and students' academic performance.

Further, understanding teachers’ perceptions regarding instructional leadership qualities that influence teacher self-efficacy and classroom practices may prove relevant to instructional leaders nationwide, providing information on identifying which structures, processes, and practices facilitate or hinder the goal to improve student

academic achievement. This information will benefit all educators and leaders in a school setting.

This research contributes to the broader field of educational leadership by offering empirical evidence on the mechanisms through which leadership impacts teaching. The findings can serve as a foundation for future studies, encouraging further exploration into the complex interactions between leadership, teacher efficacy, and instructional practices.

Definition of Terms

To understand the teachers' perspectives of instructional leadership that impact teacher self-efficacy and classroom practices, it is crucial to establish a clear operational definition of instructional leadership and teacher efficacy.

Instructional leadership - Hallinger and Murphy (1985) refer to instructional leadership as the influence of leaders on teaching and learning through actions associated with identifying the school's mission and vision, motivating staff to meet goals and coordinate classroom-based approaches toward school improvement.

Teacher efficacy - Bandura (1997) defines self-efficacy as the belief in one's personal capabilities. For the purposes of this research teacher efficacy refers to the teacher's belief in his or her ability to teach effectively

Summary

Instructional leadership attributes have a direct influence on teacher self-efficacy and classroom actions. This study focuses on the crucial significance of observational learning, which is based on social cognitive theory. According to this theory, human behavior is influenced by the reciprocal interaction between individuals and their

environments. Personal triumphs, observations, societal influences, and physiological conditions are the key elements that have an impact on self-efficacy. In the context of education, enhancing teacher self-efficacy is crucial for improving both performance and well-being. School administrators who exhibit strong instructional leadership can significantly boost teacher self-efficacy, thereby fostering professional growth and student achievement.

Examining teachers' perceptions of the extent to which instructional leadership influences self-efficacy provided potential challenges. Additionally, examining the perspectives of teachers on instructional leaders and their own self-efficacy, as well as identifying the barriers involved was a complex task. Therefore, the most efficient option for assessing the perceptions of the impact these factors have on the adherence to implementation was to utilize a mixed methods approach that integrated Q-methodology. Understanding teachers' perspectives on instructional leadership and self-efficacy is relevant to many schools or initiatives operating across the nation. Additionally, understanding the factors that either facilitate or hinder this relationship is beneficial for all educators and leaders.

Chapter II

Literature Review

Instructional leadership is crucial in the field of education, as it serves as a foundation for cultivating successful teaching methods and enhancing student learning results (Day et al., 2016). Educational leadership refers to the actions and techniques implemented by school leaders to provide support, guidance, and empowerment to teachers in their educational efforts (Day et al., 2020). Instructional leadership plays a crucial role in influencing teacher self-efficacy, which pertains to an individual's confidence in their ability to successfully promote student learning and utilize effective teaching methods (Hallinger et al., 2018). As educators strive to enhance classroom instruction to cater to the different needs of students it is crucial to comprehend the complex connection between teacher self-efficacy and instructional leadership (Goddard et al., 2021).

As defined in Albert Bandura's social cognitive theory (SCT), teacher self-efficacy has important consequences for instructional methods and student academic performance (Lazarides & Warner, 2020). It includes teachers' assurance in their ability to efficiently design lessons, handle classroom dynamics, use teaching methods, and create meaningful learning opportunities for their pupils (Lazarides & Warner, 2020). Teacher self-efficacy significantly impacts educators' motivation, resilience, and professional dedication. Additionally, it plays a crucial role in determining instructional choices, classroom atmosphere, and student involvement (Li, 2023).

This literature review examines the effect of instructional leadership on teacher self-efficacy and how this, in turn, affects classroom instruction. Instructional leaders,

such as principals, have the responsibility of establishing supportive environments, giving valuable feedback, providing professional development opportunities, and promoting collaborative cultures (Blase & Blase, 2004; Hallinger et al., 2018; Wahlstrom & Louis, 2008). These actions have the potential to strengthen teacher self-confidence and improve instructional methods.

This review is aimed at clarifying the pathways through which instructional leadership impacts teacher self-efficacy and, subsequently, influences instructional quality and student learning outcomes. This review will also examine possible directions for future research and the consequences for educational leadership approaches that aim to enhance teacher self-efficacy and cultivate a culture of excellence in schools.

Theoretical Framework

Within the ever-changing field of education, where the development of young minds is interwoven with changing pedagogical approaches, the job of the teacher is an essential cornerstone. Teacher self-efficacy is a notion that is fundamental to good teaching. Teacher self-efficacy, defined as the conviction that one can affect student learning outcomes, is a powerful factor that shapes teaching strategies, student engagement, and academic success (Perera et al., 2019; Woodcock & Tournaki, 2023). The idea of self-efficacy, rooted in Bandura's theory of social learning from 1977, relates to an individual's confidence in their capability to possess the necessary knowledge and abilities in a specific domain (Özdemir et al., 2020). The sense of self-efficacy is also responsible for several behaviors, including assertiveness, adaptability to changing circumstances, exercising free will, exerting effort, and making choices (Bandura, 1997; Özdemir et al., 2020).

Bandura's Social Cognitive Theory

Bandura's SCT is a strong theoretical framework in psychology that provides a complete perspective for understanding human behavior (Bandura, 1997; Beauchamp et al., 2019). The core principle of SCT is the idea of triadic reciprocal determinism (Bandura, 1997; Beauchamp et al., 2019; Woodcock & Tournaki, 2023). This theory suggests that humans are not passive recipients of their environment, rather, humans actively influence and are influenced by their environment (Bandura, 1997; Beauchamp et al., 2019; Woodcock & Tournaki, 2023). This occurs through a dynamic interaction between personal characteristics, behavior, and environmental circumstances (Bandura, 1997; Beauchamp et al., 2019; Woodcock & Tournaki, 2023). Observational learning is a key mechanism in SCT, where individuals learn new behaviors by seeing others and understanding the outcomes of such activities (Bandura, 1997; Beauchamp et al., 2019; Woodcock & Tournaki, 2023). Bandura identifies four fundamental stages in observational learning: attention, retention, reproduction, and motivation.

Attention is the initial phase of observational learning, during which the subject concentrates on the behavior of the model (Bandura, 1997; Schunk & DiBenedetto, 2020). A number of factors, such as the model's prominence, the complexity of the behavior, and the observer's level of identification with the model, all have an impact on attention (Bandura, 1997; Schunk & DiBenedetto, 2020). Retention is the capacity to store the observed behavior in memory (Bandura, 1997; Schunk & DiBenedetto, 2020). Cognitive processes are significant at this stage, proposing that humans encode observed behaviors into a mental representation that may be recalled later (Bandura, 1997; Schunk & DiBenedetto, 2020). An individual's cognitive ability and the rehearsal of the observed

activity are two factors that affect retention (Bandura, 1997; Schunk & DiBenedetto, 2020). Retention involves humans storing a cognitive representation of the witnessed activity, which helps them reproduce the activity (Bandura, 1997; Schunk & DiBenedetto, 2020). Reproduction involves converting the stored cognitive representation of the observed behavior into visible action (Bandura, 1997; Schunk & DiBenedetto, 2020). Bandura emphasizes the significance of motor skills and self-efficacy throughout this time (Schunk & DiBenedetto, 2020). Motor skills are responsible for an individual's physical ability to imitate seen behavior, while self-efficacy, is the confidence in the capability to achieve the activity, affects the individual's self-confidence in starting the reproduction process (Bandura, 1997; Schunk & DiBenedetto, 2020). Motivation is what drives observational learning (Bandura, 1997; Schunk & DiBenedetto, 2020). Bandura believes that individuals are more inclined to imitate observed actions if they expect favorable consequences or incentives linked to those acts. On the other hand, if there is no encouragement or if there is punishment, it can discourage individuals from imitating observed actions (Bandura, 1997; Schunk & DiBenedetto, 2020). The significance of reinforcement leads to positive outcomes for the model (Bandura, 1997; Schunk & DiBenedetto, 2020). These processes emphasize the cognitive aspects that are crucial for acquiring new behaviors.

Self-efficacy, a fundamental aspect of SCT, pertains to individuals' confidence in their capability to carry out the necessary actions to get desired results (Bandura, 1997; Beauchamp et al., 2019; Woodcock & Tournaki, 2023). Different information sources, such as one's accomplishments, other people's observations, societal influence, and physiological conditions, all impact these ideas (Bandura, 1997; Beauchamp et al., 2019;

Woodcock & Tournaki, 2023). Moreover, outcome expectations have a crucial impact on directing behavior, since individuals' perceptions about the probable results of their actions affect their choices and level of effort (Woodcock & Tournaki, 2023).

Self-regulation is a vital technique that humans use to control their behavior and achieve their goals. It involves processes like goal setting, self-monitoring, and self-reinforcement (Woodcock & Tournaki, 2023). Bandura's SCT has extensive implications in several fields such as education, health psychology, organizational behavior, and therapy (Woodcock & Tournaki, 2023). It provides guidance for treatments that attempt to improve performance, encourage healthy habits, and promote psychological well-being (Beauchamp et al., 2019; Woodcock & Tournaki, 2023). SCT remains influential in research, practice, and intervention efforts by focusing on cognitive processes, behavior, and environmental factors. It provides useful insights into the intricate nature of human behavior (Beauchamp et al., 2019; Woodcock & Tournaki, 2023).

Self-Efficacy Theory

Increased interest in teacher self-efficacy can be attributed to a growing emphasis on enhancing teacher effectiveness and job satisfaction, as well as minimizing teacher turnover rates (Klassen & Tze, 2014; Zee & Koomen, 2016).

The attribution-based locus of control theory by Rotter (1966) and Bandura's (1997) SCT serve as the foundation for Tschannen-Moran and Woolfolk Hoy’s (2001) teacher self-efficacy theory. Teacher self-efficacy is seen as the individual's own assessment of their competence to successfully plan and carry out the required activities to effectively fulfill teaching duties and influence student learning positively (Perera et al., 2019; Woodcock & Tournaki, 2023). Teacher self-efficacy beliefs are assessments of

a teacher's personal teaching abilities, considering their strengths and weaknesses as well as the specific demands of teaching tasks in a particular subject area (Perera et al., 2019; Woodcock & Tournaki, 2023). These assessments also consider external factors such as limitations and available means (Tschannen-Moran et al., 1998). The alignment of assessments of individual teaching abilities with specific instructional requirements in the formation of teacher self-efficacy implies that teachers may not excel in all aspects of teaching (Woodcock & Tournaki, 2023). According to this theoretical perspective, it is believed that teachers may differ in their level of efficacy in different areas (Goddard et al., 2021; Perera et al., 2019; Tschannen-Moran et al., 1998; Zee & Koomen, 2016).

Effective leadership and instructional techniques are crucial to ensuring that schools remain viable in the 21st century (Day, 2000; Fios et al., 2024). Schools' goals and duties are rapidly changing in reaction to their changing surroundings (Fios et al., 2024). Thus, to adequately prepare students to become members of a future society, the efficacy and skills of educational professionals have become increasingly important (Karakose et al., 2024). Principals effectively promote instructional quality and student progress by prioritizing improving learning over administrative tasks (Day et al., 2016). The importance of instructional leadership distinguishes itself from other leadership models by emphasizing teaching and learning activities (Özdemir et al., 2020). When principals actively participate in instructional leadership activities, such as overseeing teachers and students, controlling the curriculum, and addressing instructional challenges, they significantly impact teachers' attitudes, perceptions, and the quality of instruction (Özdemir et al., 2020). Instructional leaders who express a motivating educational vision for the school establish ambitious, yet achievable, objectives, define expectations for both

teachers and students, support the professional growth of teachers, and provide guidance for teachers' successes; these objectives have been identified as factors that enhance teachers' collective efficacy and self-efficacy (Karakose et al., 2024). Additionally, these factors are known to influence the academic performance of both teachers and students (Karakose et al., 2024).

Instructional Leadership Theory

The role of instructional leadership is like having a beacon pointing schools in the direction of equity and excellence. A basic dedication to cultivating a culture of learning, innovation, and continual improvement is at the core of good school leadership. This dedication is embodied by instructional leadership as a paradigmatic framework, which highlights the significance of teaching and learning in educational leadership initiatives.

Within their schools, instructional leaders significantly impact professional learning communities, curriculum creation, and instructional methods (Liu et al., 2021). Instructional leaders unite stakeholders in the pursuit of educational goals and aspirations by creating a common vision of excellence and encouraging collaboration (Day et al., 2020).

History of Instructional Leadership

Instructional leadership originated in the 1970s (Hallinger, 2015; Neumerski, 2013). Researchers began comparing schools that successfully educated children from various socioeconomic origins to schools that unsuccessfully educated children from various socioeconomic origins (Hallinger, 2015). The objective was to identify schools that effectively delivered instruction to every child (Hallinger, 2015). Instructional leadership establishes transparent educational goals, develops the curriculum, and

evaluates educators and their instructional techniques (Day & Sammons, 2016). Instructional leadership involves the principal's capacity to impact staff development and the school environment (Boyce & Bowers, 2018). The emphasis of school administration on instruction and education has a substantial impact on student learning (Zuckerman & O'Shea, 2020). This area of emphasis encompasses a range of leadership responsibilities, such as articulating the school's purpose, overseeing the educational curriculum, and fostering a conducive environment for learning (Zuckerman & O'Shea, 2020). The capacity of leaders to accomplish these tasks relies on several prerequisites: proficiency in pedagogy and cognition, capability to prioritize instructional leadership responsibilities (as opposed to facility management and student discipline), and skill in managing the expectations of numerous stakeholders amidst persistent and ever-changing demands (Zuckerman & O'Shea, 2020). Although there is a widespread anticipation for instructional leadership, there is still a disparity between what is expected and what is done (Hallinger et al., 2020; Zuckerman & O'Shea, 2020).

During the 1980s, the obligations of instructional leadership began to merge with managerial tasks and eventually became the main focus of principals' duties (Hitt & Tucker, 2016). In the initial two decades of the 21st century there has been an increasing demand for principals to manage a school and demonstrate leadership qualities by combining transformational and instructional leadership abilities (Day & Sammons, 2016). Instructional leadership has a more significant influence than transformational leadership since it focuses on improving teaching and learning rather than building relationships with teachers (Day & Sammons, 2016). In order to improve school performance given the current circumstances, principals must acquire the necessary

expertise and abilities to effectively lead and guide education. This includes utilizing data to support goal-setting endeavors, developing educator capabilities, cultivating a data-driven environment, and enhancing instruction based on data (Leithwood et al., 2004; Sun et al., 2016).

The responsibilities of principals have changed from a managerial position to an instructional leader, to implementing assessment system reforms (Kraft & Gilmour, 2016). The reforms substituted the customary yearly observations with a new approach that uses rubrics, mini-observations, and coaching sessions to offer teachers feedback. There are notable differences between school leaders prioritizing leadership and management (Day & Sammons, 2016). Instructional leaders focus on vision, strategy, change, goals, individuals, and ethical decision-making as their top priorities. Leaders who prioritize management use a management-oriented approach to implementing goals, managing operational difficulties, processing transactions, employing resources, and building processes (Day & Sammons, 2016). Although these managerial tasks are crucial for the functioning of schools, these tasks may force principals to allocate less time visiting classrooms or supporting teachers (Stringer & Hourani, 2016). According to Sanchez et al. (2022), school leaders who establish trusting relationships contribute to the development of an environment that motivates teachers to exert greater effort and achieve higher levels of success. Conversely, in situations where there is a lack of trust between teachers and principals, both parties tend to adopt defensive positions to reduce their susceptibility and potential harm (Balcı & Özkan, 2023; Lavigne & Good, 2015). Disengagement, resulting in a decline in student learning, might occur (Balcı & Özkan, 2023; Maurer, 2011). Trust has a higher level of predictive value on student

accomplishment compared to other variables evaluated by educational researchers (Balcı & Özkan, 2023; Lavigne & Good, 2015).

The intention of education is to prepare students for life by equipping them with knowledge and skills. The administrative process, which includes supervision, determines school goals just like in other organizations (Balcı & Özkan, 2023). Although instructional supervision carried out in schools has more than one purpose, its primary purpose is to improve the teaching process (Basilio, 2021). Identifying teaching and learning problems and producing solutions to these problems is an essential part of the supervision process to increase the quality of the teaching process (Balcı & Özkan, 2023). School leaders serve a critical role in promoting the quality of education (Bellibaş et al., 2021).

Teachers' self-efficacy refers to their confidence in their own abilities and their expectations for their students' learning outcomes based on their teaching efforts (Özdemir et al., 2020). Teachers who own a solid sense of self-efficacy are more inclined to employ successful teaching practices and implement efficient classroom management techniques, resulting in a decrease in the percentage of students who experience poor levels of achievement. To enhance the effectiveness of teaching, it is advisable for school administrators to focus on enhancing teacher self-efficacy (Özdemir et al., 2020). The instructional leadership behavior exhibited by school principals has an impactful effect on teacher self-efficacy, leading to the professional growth of teachers, improved school effectiveness, and increased student success. Effective instructional leadership behaviors demonstrated by school administrators significantly influence higher student achievement and a positive school environment (Özdemir et al., 2020).

Improving teacher self-efficacy is essential for promoting effective teaching and achieving positive student outcomes. However, it is equally necessary to consider the wider educational environment influenced by laws and regulations. Education policies and legal frameworks have a substantial impact on determining the criteria, resources, and measures of responsibility that shape school environments and teaching methods. Gaining insight into the effects of education policy on school operations, teacher practices, and student accomplishment is crucial for establishing a conducive environment that fosters teacher self-confidence. Through an examination of the intersection of education and legislation, a deeper understanding can be had of how policy choices impact the level of education provided and investigate methods to promote policies that benefit both educators and students.

Education and Legislation

Evaluating teachers in the 21st century is an important aspect of the educational reforms that have been widespread and began with the implementation of the No Child Left Behind Act of 2001. The primary objective is twofold: firstly, to assess the proficiency of teachers, and secondly, to enhance the overall quality of teaching (Marzano et al., 2011). Nevertheless, the existing teacher evaluation process primarily emphasizes a final assessment that centers on curriculum and grade level standards (Kraft & Gilmour, 2016). This implies that there is potential for more comprehensive approaches to utilizing the evaluation process, such as investigating teachers' self-efficacy. The enactment of the Every Student Succeeds Act (ESSA) in 2015 has granted states and districts greater autonomy in implementing and designing teacher evaluations.

Consequently, it is crucial to analyze how these evaluations play a vital role in school administration and the professional growth of teachers (Steinberg & Kraft, 2017).

The primary element that influences student academic progress in schools is the beneficial impact that highly effective teachers have on student learning (Alexander, 2016; Stronge, 2010). Most states and school districts encountered difficulty demonstrating student learning, prompting increased U.S. government intervention in public education at the beginning of the 21st century through various legislative actions (DuFour et al., 2018). Many educational reformers considered it crucial to use "performative technologies" such as audits, performance measures, and rankings to assess output attributes (Englund & Gerdin, 2019; Good, 2023). These performative technologies provide teachers with a means to objectively fulfill their responsibility for what is regarded as the most essential component of their jobs: providing tangible proof of progress on standardized exams (Ball, 2003; Clarke, 2013; Good, 2023).

Over the past four decades, the U.S. government has progressively exerted more influence on public education (Good, 2023). The educational landscape in the United States has experienced a significant shift due to the implementation of standardization and accountability initiatives. These include influential events such as the publishing of A Nation at Risk in 1983 and the introduction of the competitive federal grant Race to the Top (RTTT) in 2009 (Good, 2023). Although the impact of this phenomenon on all parts of public education is open to debate, there have been notably significant changes in the perception of teacher expertise (Good, 2023). President Bush enacted the NCLB Act in response to concerns regarding the inadequate education of American students in comparison to global standards. This legislation aimed to increase the involvement of the

federal government in the field of education (Good, 2023). States and districts were required to meet NCLB's goals and attainment expectations in order to receive billions of dollars in funding, instead of automatically receiving federal cash based on the previous compensatory method. The act's Title II introduced requirements regarding the "highly qualified teacher," which imposed stricter standards for certification, subject-matter expertise, and effective teaching methods (Cochran-Smith & Lytle, 2006; Good, 2023). This adjustment represented the most significant alteration to the Elementary and Secondary Education Act that was put into effect in 1965 (Klein, 2016). NCLB initiated the current discussion on school accountability in the educational system of the United States (Good, 2023).

President Obama endorsed the four-billion-dollar RTTT competitive grant program in 2009 as a component of the American Reinvestment and Recovery Act (Johnson, 2016). This initiative marked a significant shift in educational policy, emphasizing accountability and performance-based incentives (Howell, 2015). The RTTT reform movement had a significant impact on teacher quality by introducing a requirement for teacher evaluation scores to be partly determined by assessment results for districts to receive federal funding (Baker et al., 2013; Good, 2023).

Emphasis on linking teacher evaluations to student performance catalyzed a nationwide conversation on teacher effectiveness and student outcomes; therefore, setting the stage for subsequent educational reforms (Howell, 2015). Furthermore, the RTTT initiative aligned closely with ESSA; ESSA was signed into law by President Obama in 2015. RTTT continued the focus on accountability while also providing states with more flexibility in meeting academic standards and assessing student progress (Klein, 2016).

Additionally, ESSA built on RTTT's foundation by putting an emphasis on evidence-based interventions and support for underperforming schools while promoting greater local control over educational policies (Gross & Hill, 2016). The endorsement of RTTT by President Obama not only initiated changes in teacher evaluation practices, but also laid the groundwork for broader educational policy reforms under ESSA, ultimately shaping the landscape of American education in the 21st century (Howell, 2015).

Although it was not given official authorization, the Elementary and Secondary Education Act served as a catalyst for many improvements at the district level in terms of teacher and leader effectiveness and student accomplishment (Johnson, 2016). Towards the conclusion of the NCLB and RTTT initiatives, it became evident that the ambitious objectives set by the legislation were unachievable for the majority of schools (Gross & Hill, 2016). ESSA, which replaced NCLB in 2015, was passed after providing state waivers in 2011 to schools who couldn't meet the policies' requirements (Darling-Hammond et al., 2016; Good, 2023; Viteritti, 2013). ESSA of 2015 maintained the accountability standards of the NCLB Act, but granted states greater autonomy in deciding how to handle the repercussions of these accountability measures (Gill & Lerner, 2017). Although high-stakes teacher evaluation systems are still used by states, schools, and districts, there has been a decrease in their popularity across the United States. Additionally, there seems to be a growing willingness to allow states and districts to have more latitude in determining what constitutes teacher expertise (Good, 2023). Due to the implementation of NCLB Act and the ongoing accountability system of the ESSA, 45 states and the District of Columbia have incorporated leadership standards. These standards provide guidance for principals to address the growing need for

accountability and offer educational leaders the chance to encourage their staff to explore novel and inventive methods to improve student achievement (Day et al., 2020). Moreover, research on schools that have successfully improved their performance, sometimes referred to as "turn around" schools, highlights the crucial role of effective leadership, as well as teaching and learning interventions (Galindo et al., 2016).

Education policy development in the United States is a direct and adaptive reaction to states and school districts' difficulties improving student learning (Good, 2023). The increased level of U.S. government involvement in education during the early 2000s, triggered by President Bush's enactment of the NCLB Act in 2002, was a significant shift in educational governance (Good, 2023). The NCLB Act made significant revisions to the Elementary and Secondary Education Act of 1965 due to concerns about global competitiveness (Good, 2023). The subsequent endeavors, such as RTTT program in 2009 and ESSA of 2015, underscore the ongoing efforts to strike a balance between federal oversight and state autonomy. While initiatives that focus on narrowing and quantifying teacher proficiency have gained importance, researchers have expressed apprehensions about their impact on schools and teachers (Ball, 2003; Clarke, 2013; Good, 2023; Holloway, 2021; Holloway & Brass, 2018; Jeffrey, 2002; Wilkins, 2011). In the United States, Holloway (2021), discovered in a crucial evaluation setting influenced by NCLB and RTTT, expert teachers were increasingly distinguished compared to their non-expert peers based on metrics like student academic performance and strict definitions of effective teaching methods (Good, 2023). In the United States, teacher evaluation efforts since the implementation of NCLB have primarily concentrated

on using contentious and high-stakes assessment models to assess teachers (Amrein-Beardsley, 2008; Ford et al., 2017; Good, 2023; Hallinger et al., 2014; Lavigne, 2014).

Legislative Impact on Leadership Focus

The evolution of instructional leadership from the eras of NCLB, RTTT, and ESSA reflect a significant shift in educational policy and practice in the United States. During the NCLB era, instructional leadership was largely characterized by a narrow focus on improving student achievement in core academic subjects, particularly reading and math (Hallinger, 2015). The law mandated annual standardized testing to assess student proficiency and hold schools responsible for meeting Adequate Yearly Progress (AYP) targets (Carlson, 2018). As a result, instructional leadership often revolved around compliance with federal mandates, test preparation, and data-driven decision-making to improve test scores (Hallinger, 2015). School leaders were primarily tasked with ensuring that teachers aligned their instruction with state standards, implemented scripted curricula, and used assessment data to identify and address areas of weakness (Darling-Hammond, 2018).

With the advent of RTTT, instructional leadership underwent a notable shift towards innovation, collaboration, and systemic reform (Fullan, 2015). RTTT encouraged states to develop comprehensive reform plans to improve teaching and learning, enhance teacher and leader effectiveness, and turn around low-performing schools (Dragoset et al., 2016; Howell, 2015). Instructional leaders were called upon to spearhead these reform efforts by fostering a culture of innovation, supporting the implementation of evidence-based instructional practices, and leveraging technology to enhance teaching and learning (Dragoset et al., 2016; Howell, 2015). RTTT also emphasized the need for

making decisions based on evidence and consistently striving for improvement, with instructional leaders playing a critical role in using data to inform instructional practices, identify areas for improvement, and monitor progress towards established goals (Dragoset et al., 2016; Howell, 2015).

Under ESSA, instructional leadership continued to evolve, with a renewed emphasis on flexibility, equity, and holistic approaches to student success (Herman, et al., 2017). ESSA granted states greater autonomy in designing their own accountability systems and school improvement plans, empowering instructional leaders to tailor interventions to cater to the unique needs of their schools and communities (Herman et al., 2017). The legislation also incentivized states to incorporate additional methods of school quality and student success into their accountability systems, including factors such as engagement, climate, and postsecondary readiness (Darling-Hammond et al., 2016). Instructional leaders were tasked with promoting a positive school culture, fostering student engagement, and preparing students for success beyond high school (Day et al., 2016). Moreover, ESSA emphasized the importance of evidence-based practice, encouraging instructional leaders to invest in interventions and strategies proven to support student learning and achievement (Herman et al., 2017).

The shift in instructional leadership from NCLB to RTTT to ESSA reflects a broader evolution towards greater flexibility, innovation, and equity in educational policy and practice (Gross & Hill, 2016). Instructional leaders have increasingly been called upon to play a central role in driving school improvement efforts, fostering collaboration, innovation, and continuous improvement to support the achievement of all students (Stevenson et al., 2016).

Instructional Leadership Practices

Highly effective administrators are instructional leaders who prioritize creating a positive school culture, high standards, and academic rigor for student achievement (Neumerski, 2013; Sanchez et al., 2022). In the early 2000s, there was a change in how instructional leadership was perceived (Hitt & Tucker, 2016). Schools transitioned from inflexible bureaucratic structures to flexible organizational models when districts adopted local control principles (Gamson & Hodge, 2016). This change left the conventional concept of instructional leadership, which involved the principal's sole decision-making power, outdated (Gamson & Hodge, 2016). When adopting shared instructional leadership, leaders should prioritize supporting continuous teacher development above stringent oversight (Balcı & Özkan, 2023; Oliva & Pawlas, 2008). To address the difficulties that arise during the process of implementing desired changes, it is vital for school leaders to allocate resources to support teachers and establish strong connections with them. Consequently, acknowledging and commemorating small achievements have been recognized as a crucial component of the school leader's responsibilities (Sanchez et al., 2022). The evolving responsibilities of school leaders necessitate effective leadership techniques that significantly impact staff and overall school performance (Sanchez et al., 2022).

Feedback on instruction and the belief that teachers' instruction may be enhanced with correct feedback are crucial elements for teacher development in schools (Balyer & Özcan, 2020). Observation systems aim to enhance student achievement by incorporating professional development into the process used for evaluation, leading to improved instructional practices and student success (Warring, 2015). Hattie (2017) stressed the

significance of improving the quality of teacher instruction and classroom practices based on his analysis of over 800 meta-analyses on factors affecting learning. Herman et al. (2017) suggest that administrators can improve teaching by fostering a favorable work environment and motivating teachers through shared decision-making and collaboration.

The system for teacher evaluation has changed due to the influence of federal legislative mandates that have changed the role of the principal from manager to instructional leader (Kraft & Gilmour, 2016). Research on principle leadership affirm the notion that the principal plays a crucial role in directing school reform efforts and enhancing student academic performance (Green, 2018; Sebastian & Allensworth, 2012). Klein (2016) states that reform efforts such as NCLB, RTTT, and ESSA are designed to enhance the quality of education children receive. The strategies involve crucial elements such as well-qualified instructors, enhanced efficacy of educators and school administrators, and ensuring educational fairness for all students (Johnson, 2016). Principals have the ability to improve their professional community, hence enhancing instructional methods that lead to student achievement (Sanchez et al., 2022). Their leadership role has been acknowledged as a critical influence in fostering capacity, particularly through their function as an instructional leader (Sanchez et al., 2022). The assistance that administrators offer to teachers can have a direct influence on the academic progress of children, especially those from economically disadvantaged homes (Johnson, 2016).

To effectively facilitate school reform, principals must enhance the quality of instruction and promote academic progress among students. Increasing self-confidence in teaching methods might prompt instructors to make thoughtful choices about professional

development opportunities that specifically address areas where their instructional practice may be lacking (Smith et al., 2020). By enhancing their belief in their ability to effectively teach, teachers may pursue professional development opportunities to enhance their implementation of instructional practices in the classroom. Improving teachers' instructional approach and effectively implementing professional development can ultimately result in student learning gains (Smith et al., 2020).

Goe et al. (2017) suggest that providing constructive, timely, evidence-based, and comprehensive feedback on instructional strategies and engagement has the potential to enhance teaching methods. Effective feedback and instructional leadership influence successful classroom instruction (Balcı & Özkan, 2023; Zepeda, 2017). Instructional leaders are essential in developing a vision for academic achievement and providing the tools and resources required to make it a reality (Balcı & Özkan, 2023; Sullivan & Wircenski, 1988). At the same time, providing constructive and focused feedback is one of the most critical aspects of student success and instructors' professional development (Balcı & Özkan, 2023; Garber, 2007). Instructors can improve their pedagogical methods by cultivating a culture where instructional leaders offer meaningful guidance, mentorship, and ongoing feedback (Ashdown, 2014; Balcı & Özkan, 2023). This directly impacts the classroom, improving the standard of overall instruction, encouraging student participation, and, eventually, fostering a vibrant learning environment (Balcı & Özkan, 2023; Montgomery, 2012). Effective feedback and instructional leadership have a symbiotic relationship essential for developing successful teaching and learning experiences and ongoing educational growth (Balcı & Özkan, 2023; Oliva & Pawlas, 2008).

Principal instructional leadership is crucial for school effectiveness, as it directly and indirectly impacts several factors at the school, teacher, and student levels. Teacher self-efficacy is a significant indicator of student achievement. Instructional leadership is linked to teacher self-efficacy, which is crucial for maintaining the quality of instruction (Karakose et al., 2024). This association between principal actions and teacher self-efficacy impacts student achievement (Bellibas & Liu, 2017; Goddard et al., 2021; Tschannen-Moran, 2015).

Principals can influence and modify teachers' instructional practices by participating in instructional leadership activities, which in turn can boost teacher self-esteem and motivation (Bellibas & Liu, 2017; Blase & Blase, 2004; Sebastian & Allensworth, 2012). Principals can enhance teacher efficacy by actively participating in activities like directly supervising instruction to enhance teaching (Bellibaş et al., 2021). When instructional leaders establish specific instructional goals, provide resources and support, and offer constructive feedback, teachers experience increased confidence in implementing effective instructional strategies and addressing student learning needs (Thornton et al., 2020).

Vision and Goal Setting

The first dimension of instructional leadership pertains to school mission and goals. Instructional leaders set the goal and vision of a school and deliberately and efficiently convey these principles to the entire school community, which includes teachers, students, and parents (Leithwood, 2021). Principals must set clear expectations and directions to accomplish determined goals (Stronge & Xu, 2021). Effective school leadership plays a central role in achieving, fostering, and averting the dispersal of

educational principles (Benoliel, 2020; Habibi et al., 2018). Leadership is evident in program governance, structure, budgeting, and school curriculum, which can enhance and generate more responsive and adaptable services (Weixler et al., 2019). Thus, in order to successfully build and achieve the long-term vision and goal of an educational institution, effective leadership is crucial in effectively managing the strengths and weaknesses of the school (Christiansen et al., 2021; Murphy et al., 2017; Verhelst et al., 2021).

A compelling vision serves as a guiding force for instructional leaders, outlining the desired future state of the educational organization (Mombourquette, 2017). Effective leaders establish a coherent and ambitious vision that encapsulates their aspirations for student learning, school culture, and overall organizational effectiveness (Fullan, 2015). This vision articulates the core values, beliefs, and priorities that will shape decision-making and action within the educational community (Leithwood et al., 2021). By painting a vivid picture of what success looks like, visionary leaders mobilize support and create a sense of urgency for change (Kouzes & Posner, 2017).

Goal setting is integral to operationalizing the vision into actionable steps and measurable outcomes (Day et al., 2020). Goals provide a concrete framework for translating the broad aspirations of the vision into specific, attainable objectives that can be pursued systematically (Leithwood et al., 2021). By setting clear and challenging goals that align with the vision, instructional leaders provide a framework for action, foster accountability, and promote a shared sense of purpose among stakeholders (Yukl et al., 2019). Goal setting also motivates and empowers educators; therefore, providing a sense of direction and purpose in their work (Leithwood et al., 2021).

Vision and goal setting are not static processes, but rather dynamic and iterative (Daniëls et al., 2019). Effective instructional leaders reflect, collaborate, and refine their vision and goals in response to changing circumstances and feedback (Daniëls et al., 2019; Leithwood et al., 2021). This adaptive approach allows leaders to remain responsive to their educational community's evolving needs and aspirations while staying true to the overarching vision (Bush, 2020).

Vision and goal setting are qualities of instructional leadership that foster continuous improvement by providing direction and inspiring action (Bush, 2020; Naz & Rashid, 2021). By articulating a compelling vision and setting clear, ambitious goals, instructional leaders can mobilize support, drive change, and ultimately enhance student learning and achievement (Naz & Rashid, 2021).

Impact of Leadership on Teacher Self-Efficacy

Research has consistently demonstrated a positive association between instructional leadership vision, goal setting, and teacher efficacy (Hallinger et al., 2018). Principals' leadership behaviors, including articulating a clear vision and setting high expectations for instructional improvement, significantly predicted teachers' collective efficacy beliefs (Meyer et al., 2022).

It is important that instructional leaders shape the school's instructional vision, set clear goals aligned with that vision, and provide support and resources to enable teachers to achieve those goals (Day et al., 2020). To enhance teacher efficacy, instructional leaders engage in collaborative goal-setting processes, involve teachers in decision-making, provide professional development and peer collaboration opportunities, and offer ongoing feedback and support (Meyer et al., 2022). By fostering a collective efficacy and

continuous improvement culture, instructional leaders can empower teachers to strive for excellence, experiment with innovative instructional methods, and enhance student learning results (Day et al., 2020).

Instructional leadership vision and goal setting play integral roles in influencing teacher efficacy beliefs and classroom instructional practices (Hallinger et al., 2018). When instructional leaders articulate a compelling vision, set clear goals, and provide support and resources, teachers' efficacy beliefs are strengthened, leading to enhanced instructional practices and improved student outcomes (Liu et al., 2021). Educational leaders prioritize the cultivation of instructional leadership capacities and foster collaborative school cultures to empower teachers to enact meaningful change and achieve collective goals (Leithwood, 2021).

Relationship to Classroom Instruction Improvement

Instructional leaders are vital in structuring classroom instruction by establishing a clear vision and clarifying goals (Day et al., 2020). A clear and powerful vision offers educators a distinct purpose and orientation, directing their instructional practices and decision-making processes (Leithwood et al., 2021). When instructional leaders establish precise objectives that align with the overall vision, they offer educators explicit standards for achievement and enable efficient teaching approaches (Stronge & Xu, 2021).

Instructional leaders who prioritize goal clarification create opportunities for ongoing reflection and feedback, fostering a cycle of continuous improvement in classroom instruction (Leithwood et al., 2021). Leaders can identify areas of strength and areas in need of improvement by regular monitoring and evaluation of progress towards

established goals (Leithwood et al., 2021). Additionally, instructional leaders can facilitate professional growth and development by providing timely feedback and support to educators; therefore, helping teachers enhance their instructional practices and increase student learning outcomes (Stronge, 2010).

Furthermore, instructional leaders who engage stakeholders in goal-setting create a sense of ownership and accountability among educators (Thessin, 2019). When teachers are actively involved in setting goals and developing action plans to achieve them, they are more likely to be invested in the outcomes and committed to implementing effective instructional strategies (Stronge, 2010). This collaborative approach to goal setting promotes a culture of shared responsibility for student success, leading to improved classroom instruction and overall school effectiveness (Kilag & Sasan, 2023). When teachers actively establish goals that align with student learning objectives and school priorities, they develop a sense of ownership and commitment towards their professional development and the achievement of their students (Kilag et al., 2023). By engaging in collaborative goal setting, instructors can pinpoint areas that need development, obtain assistance from colleagues and instructional leaders, and collectively acknowledge accomplishments (Thessin, 2019). This collaborative endeavor promotes a constructive work atmosphere in which teachers are appreciated, empowered, and competent in significantly influencing student academic achievements (Thessin, 2019). Teachers observe a clear connection between their actions and the achievement of their students, which enhances their belief in their capacity to positively impact student learning—their self-efficacy (Perera et al., 2019). Promoting cooperation in the establishment of

objectives enables schools to not only improve the efficiency of teaching, but also supports the general welfare and career growth of their educators (Kilag et al., 2023).

In order to optimize classroom education and assist teachers in attaining their objectives, it is imperative to offer complete curriculum and instructional assistance. This assistance guarantees that educators are provided with the necessary resources, tools, and chances for professional development to effectively execute high-quality teaching techniques. Schools can establish a conducive atmosphere where teachers are adequately prepared to address the varying requirements of their students and foster academic achievement by synchronizing the curriculum with effective teaching methods and providing specific support.

Curriculum and Instruction Support

Curriculum and instructional support are essential components of effective instructional leadership that contribute significantly to the enhancement of teaching and learning within schools (Kilag & Sasan, 2023). Instructional leaders impact teaching and learning through acquiring the knowledge, skills, and dispositions needed to implement instructional improvement projects, develop teachers, and improve classroom instruction (Stronge, 2010). Instructional leaders draw from educational theories, research on effective teaching and learning, and leadership development best practices to empower teachers to navigate educational contexts and improve instructional practices and student outcomes (Daniëls et al., 2019). Instructional leaders provide resources, techniques, and structures to help teachers deliver high-quality instruction and satisfy students' different needs (Stronge & Xu, 2021). Expert instructional leaders provide teachers with professional development, coaching, mentorship, curricular materials, assessment tools,

and collaborative planning to enhance their classroom instruction (Kilag et al., 2023). Curriculum and instructional support provided by instructional leaders align practices with educational goals, curriculum standards, and evidence-based pedagogical techniques, ensuring coherence and consistency across classrooms and grade levels (Meng, 2023).

Resources and Guidance

Instructional leaders play a crucial role in ensuring that teachers have access to the resources and materials necessary to create engaging and meaningful learning experiences for their students (Kilag et al., 2023). These resources encompass a wide array of tangible assets, including textbooks, technology, instructional materials, manipulatives, and supplementary resources. By providing resources aligned with curriculum standards, educational goals, and the diverse needs of students, instructional leaders empower teachers to effectively address learning objectives, differentiate instruction, and create inclusive learning environments (Mbua, 2023). Resources enable teachers to implement innovative instructional strategies, integrate technology into their lessons, and adapt their teaching to meet the growing needs of 21st-century learners (Yilmaz, 2021).

In addition to providing resources, instructional leaders offer guidance, mentorship, and support to teachers as they navigate the complexities of instructional planning, delivery, and assessment. This guidance encompasses a range of practices, including instructional coaching, feedback sessions, collaborative planning meetings, and professional learning communities (Admiraal et al., 2021). Instructional leaders serve as trusted mentors and instructional experts, providing constructive feedback, sharing best

practices, and offering guidance on effective teaching strategies and classroom management techniques (Stronge & Xu, 2021). By fostering a culture of collaboration and continuous improvement, instructional leaders create opportunities for teachers to reflect on their practice, share insights, and learn from one another (Forman et al., 2021). Instructional leaders play a crucial role in supporting teachers' professional growth and development, identifying their strengths and areas for improvement and providing targeted support and resources to enhance their instructional effectiveness.

Instructional leadership practices significantly influence teacher self-efficacy and classroom instruction; therefore, creating a symbiotic relationship that shapes the educational landscape (Udoudom et al., 2023). Instructional leadership practices such as providing resources, guidance, and support contribute to enhancing teacher self-efficacy the belief in one's ability to implement teaching tasks effectively (Özdemir et al., 2020). By equipping teachers with the necessary resources, instructional leaders instill confidence in educators' capacity to address instructional challenges, adapt teaching strategies, and engage students in meaningful learning experiences (Ma & Marion, 2021). Instructional leaders who offer guidance and support foster a sense of competence and autonomy among teachers, empowering them to take ownership of their professional growth and development (Kilag & Sasan, 2023). When teachers perceive themselves as capable of achieving desired outcomes, their self-efficacy beliefs are strengthened, leading to increased motivation, resilience, and commitment to excellence in classroom instruction (Hallinger et al., 2018). Consequently, classroom instruction becomes more dynamic, student-centered, and aligned with educational goals and standards. Teachers with enhanced self-efficacy are well-equipped to manage classroom dynamics, address

student learning gaps, and foster a positive classroom climate, leading to improved student outcomes and academic success (Darling-Hammond & DePaoli, 2020). By offering teachers feedback and conducting evaluations, instructional leaders can foster a culture of professional development and excellence within their educational communities (Leithwood, 2021). Instructional leaders empower teachers by providing personalized critical feedback that is targeted to their unique teaching styles and specific needs (Kilag & Sasan, 2023). This enables instructors to self-reflect and significantly improve their instructional practices (Schunk & DiBenedetto, 2020). By conducting systematic evaluations, these leaders can evaluate the efficacy of teaching methods, pinpoint areas for further professional growth, and acknowledge accomplishments (Meng, 2023). Feedback and evaluation create a cooperative atmosphere where teachers receive assistance in improving student learning experiences (Kilag et al., 2023). Instructional leaders contribute to their schools' overall performance and attainment by continuously working with teachers to provide meaningful feedback and evaluation (Kilag & Sasan, 2023).

Feedback and Evaluation

Feedback and evaluation are integral components of effective instructional leadership, serving as mechanisms for assessing teaching effectiveness, providing targeted support, and promoting professional development among educators (Hallinger et al., 2020). Feedback offers educators timely and specific information about their instructional practices, highlighting areas of strength and areas for improvement (Bellibaş et al., 2021). Through constructive feedback, instructional leaders can guide teachers in refining their teaching strategies, guide teachers in addressing their student learning

needs, and guide teachers in enhancing their classroom instruction (Fuentes & Jimerson, 2020).

Conversely, evaluation involves a systematic assessment of teacher performance based on specified criteria or standards. The purpose of evaluation is to evaluate performance, with the primary goal being the enhancement of teaching and learning (Donaldson, 2016). Principals who perceive the evaluation process as a means of holding others accountable tend to invest minimal time in providing constructive feedback (Kraft & Gilmour, 2016). Principals who view the evaluation process as more than a means of holding others accountable often allocate adequate time to provide constructive input (Stronge & Xu, 2021). These leaders place a high value on continuous communication and support for their teachers (Kilag et al., 2023). Instructional leaders use evaluation as a chance for reflection, dialogue, and collaboration (Fuentes & Jimerson, 2020). Through regular feedback sessions, leaders cultivate a culture of ongoing enhancement where teachers feel appreciated and empowered to enhance their classroom practices (Kilag et al., 2023). This leadership not only improves the efficacy of teachers, but also fosters a good school environment that is beneficial to the achievement of students (Naz & Rashid, 2021). Principals who view evaluation as a means of professional development make a substantial contribution to the overall quality of their schools (Leithwood, 2021).

Evaluating and providing feedback to teachers can play a crucial part in identifying and developing educators, ultimately leading to improved academic performance. An instructional leader's primary objective is to enhance the capabilities of teachers (Clark & Duggins, 2016). Instructional leaders should actively engage in both formative and summative evaluations; however, they should do so separately.

Instructional leaders can learn about teachers' daily practices and instructional strategies from formative evaluations, which give continual feedback and assessment (Moss & Brookhart, 2019). Formative evaluations help leaders recognize strengths, address weaknesses, and encourage teachers, promoting continual growth and development (Moss & Brookhart, 2019). Summative assessments often evaluate teachers' overall performance and accomplishments over a given period of time (Ford & Hewitt, 2020). By distinguishing formative and summative evaluations, leaders can encourage and provide feedback to instructors to enhance their practice while maintaining educational accountability and standards (Lillejord & Børte, 2020). This balanced approach helps instructional leaders support teacher growth and promote education excellence and accountability (Lillejord & Børte, 2020). Leaders can enhance teacher improvement by integrating formative goals into everyday teaching and use them as a means to reach the summative portion of an evaluation. This approach enables leaders to identify and create professional development plans that promote effective decision-making and actions (Al Maktoum & Al Kaabi, 2024).

Importance of Constructive Feedback. Effective feedback is defined as providing people with the information they need to improve their strengths and eliminate their weaknesses (Bellibaş et al., 2021). Without such feedback, the best skills cannot be identified, weaknesses cannot be fixed, and mistakes will be repeated (Balcı & Özkan, 2023). Feedback is a potent catalyst for modifying behavior and has a significant impant on individuals’ learning and performance (Clark & Duggins, 2016). The feedback that school administrators deliver to teachers during observations is a crucial, yet insufficiently researched, component to the teacher evaluation process.

Researchers acknowledge the importance of feedback in enhancing teacher effectiveness, but there is a shortage of research on this precise influence of feedback on teaching and student performance within an observation system. However, increasing research indicates that feedback can enhance instruction (Cohen & Goldhaber, 2016). Teachers perceive the opportunity for feedback and evidence-based conversations as the most valuable component of observation systems (Donaldson, 2016). Principals must provide accurate feedback to enhance the effectiveness of formative observation systems (Cohen & Goldhaber, 2016).

Engaging in a thorough instructional feedback cycle involves discussing feedback on the curriculum, student-teacher relationships, and instructional strategies used in the session (Balyer & Özcan, 2020). For educational leaders to improve instruction, leaders should be trained to provide specific feedback, give practical instructional examples, collaborate with teachers to critically self-evaluate, and focus on instructional strategies that have the most impact (Fuentes & Jimerson, 2020).

Teacher Evaluation

The future of societies depends on providing quality education, which in turn depends on achieving the education system's goals (Doğan et al., 2023). The level of achievement of the education system's goals and the system's strengths and weaknesses are revealed through supervision (Hall, 2017). Two primary viewpoints on teacher evaluation exist; some believe it is intended to supervise and ensure teachers are responsible for their jobs, while others view it as a tool for teachers to improve through feedback, reflection, and instruction analysis (Kraft & Gilmour, 2016). Teacher evaluation can significantly enhance teaching and learning (Donaldson, 2016). Improving

education by observing teaching methods requires recognizing that observation and assessment are separate tasks that should not be looked at in combination. The principal must have a high ability to carry out both disciplines efficiently. Teacher evaluation enhances teacher quality by encouraging ongoing professional growth (Warring, 2015). Many scholars believe that improving teacher effectiveness depends on using practical evaluation tools to evaluate instructional activities (Donaldson, 2016).

Evaluating the performance of educators can serve as a potential means to enhance student accomplishment by improving the overall efficacy of the educator staff (Garet et al., 2017; Stecher et al., 2016). Giving more frequent, specific feedback on classroom practice may improve teacher performance and student achievement (Clark & Duggins, 2016; Garet et al., 2017; Steinberg & Sartain, 2015; Taylor & Tyler, 2012)

The objective of the feedback and subsequent professional development is to aid teachers in adapting their instructional methods and improving student achievement (Mihaly et al., 2018; Taylor & Tyler, 2012). Leaders should provide teachers with two crucial elements to impact classroom instruction successfully: systematic feedback and a support system (DuFour et al., 2018). Feedback in an observation system is designed to enhance teaching effectiveness and facilitate professional development. An effective approach to improve education involves implementing a system that integrates feedback obtained via observation with targeted practice in specific areas (Marzano et al., 2011; Mbua, 2023).

Teacher self-efficacy is an essential aspect in enhancing classroom education, with structured feedback and a strong support system. Teacher self-efficacy pertains to the confidence that teachers have in their abilities to effectively educate and have a

positive influence on student achievements (Ma et al., 2023). This level of confidence not only impacts their teaching methods, but also their readiness to adopt new approaches and persevere through difficulties. Therefore, comprehending and improving teacher self-efficacy can have a substantial impact on creating an atmosphere where professional development and enhanced student performance are regularly prioritized.

Teacher Self-Efficacy

As a crucial factor of teaching effectiveness and student success, teacher self-efficacy warrants careful definition and measurement within educational research and practice (Zee & Koomen, 2016). Drawing from Bandura's SCT, researchers and educators employ various instruments and methodologies to assess teachers' beliefs in their capabilities and understand the factors influencing their development (Ma et al., 2023). By accurately defining and measuring teacher self-efficacy, scholars and practitioners can gain valuable insights into educators' professional growth needs, inform targeted interventions to optimize instructional efficacy and consequently enhance academic achievements across a wide range of education environments (Ma et al., 2023).

Educators with high levels of self-efficacy are more inclined to set ambitious goals, persist in the face of barriers, and employ instructional practices that promote student engagement and achievement (Woodcock et al., 2022). Teacher self-efficacy is closely linked to teacher motivation, job satisfaction, and professional commitment, underscoring its significance for educator well-being and retention within the profession (Skaalvik & Skaalvik, 2007).

Definition and Measurement

Teacher self-efficacy, a fundamental construct within the realm of education, holds significant implications for teaching effectiveness, student learning outcomes, and educator well-being (Skaalvik & Skaalvik, 2007). As educators grapple with the complexities of classroom instruction and student diversity, understanding and accurately measuring teacher self-efficacy becomes paramount (Karakose et al., 2023).

Teacher self-efficacy indicates an educators' belief in their capabilities to successfully execute teaching tasks and positively influence student learning outcomes (Tschannen-Moran & Hoy, 2001). Rooted in Bandura's (1997) SCT, teacher self-efficacy emphasizes the interplay between cognitive processes, behavior, and environmental factors in shaping teaching effectiveness. Educators with high levels of self-efficacy demonstrate confidence in their ability to engage students, manage classroom dynamics, and adapt instructional strategies to meet the diverse needs of learners (Karakose et al., 2023). Conversely, educators with low self-efficacy may experience feelings of doubt, anxiety, and reluctance to tackle instructional challenges, which can impact their teaching practices and student outcomes (Schunk & DiBenedetto, 2016).

Measuring teacher self-efficacy poses a methodological challenge due to its subjective nature and multifaceted dimensions (Ma et al., 2023). Various self-report instruments have been developed to assess teacher self-efficacy across different domains, including classroom management, instructional strategies, student engagement, and academic achievement (Karbasi & Samani, 2016; Ma et al., 2023). These instruments typically employ Likert-type rating scales to gauge teachers' confidence in their ability to perform specific instructional tasks and overcome challenges in the classroom. Additionally, qualitative methods such as interviews, focus groups, and narrative inquiry

provide valuable insights into teachers' perceptions of their efficacy beliefs and the factors influencing their development and maintenance (Ma et al., 2023).

Self-Efficacy in the Classroom

Understanding the complex connection between a teacher's belief in their abilities and their classroom instruction is paramount for enhancing teaching effectiveness and fostering positive learning experiences (Burić & Kim, 2020). A fundamental manifestation of teacher self-efficacy in classroom instruction is through instructional planning, where educators with elevated self-efficacy approach lesson preparation with confidence in their ability to design and execute effective teaching strategies (Schipper et al., 2018). Highly self-efficacious teachers are inclined to set ambitious instructional goals, utilize diverse teaching methodologies, tailor lesson plans to accommodate diverse student needs, integrate tasks that stimulate higher-order thinking, and cultivate critical thinking skills among their students (Schipper et al., 2018).

Teacher self-efficacy significantly influences classroom management practices, profoundly impacting the overall classroom atmosphere and student behavior (Lazarides et al., 2020). Educators who perceive themselves as capable of managing classroom disruptions and nurturing a conducive learning environment are more likely to implement proactive behavior management strategies (Lazarides et al., 2020). These strategies encompass establishing clear and consistent expectations, employing positive reinforcement techniques, and executing preemptive interventions to address behavioral challenges (Lazarides et al., 2020). Teacher self-efficacy shapes the quality of interactions between teachers and students, delineating the nature of feedback, encouragement, and support provided within the classroom (Hajovsky et al., 2020).

Teachers with heightened self-efficacy are predisposed to furnish constructive feedback, scaffold student learning effectively, and foster positive rapport with their students (Hajovsky et al., 2020).

Enhancing teacher self-efficacy in interpersonal interactions holds the potential to yield improved student outcomes, encompassing academic achievement, self-efficacy beliefs, and attitudes towards learning (Hajovsky et al., 2020). These constructive interactions foster a supportive classroom environment conducive to both academic growth and social-emotional development (Wu et al., 2024). By nurturing environments that cultivate teacher self-efficacy, educators and policymakers can cultivate positive learning experiences, empowering both teachers and students to realize their full potential (Hajovsky et al., 2020). Highly effective teachers wield significant influence over student learning outcomes and are recognized as the primary school-based factor impacting student academic achievement (Alexander, 2016; Clark & Duggins, 2016; Stronge, 2010). Teacher self-efficacy, as a pivotal determinant of teaching effectiveness, significantly influences instructional practices and student learning outcomes (Zee & Koomen, 2016). It plays a vital role in shaping educators' instructional decisions, practices, and interactions with students (Zee & Koomen, 2016). Educators with high levels of self-efficacy are more inclined to employ effective instructional strategies, establish engaging learning environments, and tailor their teaching approaches to accommodate diverse learner needs (Zee & Koomen, 2016). Such educators exhibit confidence in managing classroom dynamics, fostering student engagement, and nurturing positive student-teacher relationships. Moreover, teachers with enhanced self-

efficacy demonstrate resilience in addressing challenges, persisting in refining instructional practices, and elevating student learning outcomes (Zee & Koomen, 2016).

The impact of teacher self-efficacy extends beyond classroom practices to influence student engagement and achievement (Burić & Kim, 2020). Teachers with elevated levels of self-efficacy excel at fostering a sense of competence and motivation among students, encouraging active participation, and instilling a growth mindset towards learning (Lauermann & Berger, 2021). Students taught by teachers with high self-efficacy demonstrate heightened levels of academic engagement, perseverance, and achievement across various subjects and grade levels (Zee & Koomen, 2016). Educators' beliefs in their instructional efficacy contribute to students' perceptions of teacher credibility, trust, and support, fostering positive student-teacher relationships conducive to learning (Jerrim et al., 2023).

In addition to academic outcomes, teacher self-efficacy significantly impacts students' socioemotional development and well-being (Poulou, 2017). Educators with elevated self-efficacy levels are better positioned to cultivate supportive and inclusive classroom environments conducive to nurturing students' social-emotional skills, resilience, and sense of belonging (Darling-Hammond & Cook-Harvey, 2018). Such educators demonstrate empathy, sensitivity, and responsiveness to individual student needs, fostering a positive classroom climate characterized by mutual respect, trust, and collaboration (Darling-Hammond & Cook-Harvey, 2018). Consequently, students instructed by teachers with high self-efficacy experience greater socioemotional growth, emotional regulation, and overall well-being (Poulou, 2017).

Understanding the impact of teacher self-efficacy on teaching practices and student outcomes holds crucial implications for educational practice (Lauermann & Berger, 2021). Schools and educational leaders can bolster teachers' professional development by fostering a culture of efficacy, providing targeted feedback and support, and offering opportunities for collaborative inquiry and reflection (Stronge & Xu, 2021). Prioritizing the cultivation of teacher self-efficacy enables instructional leaders to promote positive teaching practices, enhance student engagement and achievement, and create enriching learning experiences for all students (Day et al., 2016). Teacher self-efficacy profoundly influences teaching practices and student outcomes, shaping learners' educational experiences and achievements (Burić & Kim, 2020). Educators' beliefs in their instructional abilities impact the quality of classroom instruction, student engagement, academic achievement, and socioemotional development (Ma & Marion, 2021). Recognizing the significance of teacher self-efficacy and its implications for educational practice, schools, and instructional leaders can empower teachers to enact positive changes in teaching practices and student outcomes, ultimately fostering a culture of excellence and promoting student success within diverse educational settings (Day et al., 2016).

School leadership significantly influences school outcomes by impacting variables closely associated with teachers’ competence and performance, which further affect classroom practices (Ay & Boz, 2022; Hallinger, 2015). Teacher self-efficacy, a pivotal component of effective teaching, is intricately linked to instructional leadership practices within educational settings (Karakose et al., 2024). Instructional leadership encompasses a spectrum of practices to promote teaching effectiveness and enhance

student learning outcomes (Özdemir et al., 2020). Within this framework, instructional leaders play a pivotal role in shaping educators' self-efficacy beliefs through various means (Liu et al., 2021). Leaders who provide resources, guidance, and support to teachers create an environment conducive to the development of high self-efficacy among educators (Liu et al., 2021). By offering professional development opportunities, constructive feedback, and mentorship, instructional leaders empower teachers to enhance their instructional practices and believe in their ability to positively impact student learning (Meyer et al., 2022).

Instructional leaders play pivotal roles as role models and influencers in shaping educators' beliefs and behaviors (Zuckerman & O'Shea, 2020). Leaders who exemplify effective instructional practices embrace a growth mindset and exude confidence in their leadership abilities inspire confidence and resilience among teachers (Zuckerman & O'Shea, 2020). Through their actions and behaviors, instructional leaders convey the significance of ongoing learning, adaptation, and improvement, thereby reinforcing educators' beliefs in their capacity to effect positive changes in their instructional practices and student outcomes (Ma & Marion, 2021). The interplay between instructional leadership practices and teacher self-efficacy underscores the critical role of effective leadership in promoting teaching effectiveness and enhancing student learning outcomes (Ma & Marion, 2021). By prioritizing practices that support teachers' professional growth, foster collaboration, and cultivate a positive school culture, instructional leaders can empower educators to cultivate high levels of self-efficacy and excel in their instructional roles (Liu et al., 2021). It is imperative for educational leaders to recognize the reciprocal relationship between teacher self-efficacy and instructional

leadership practices and invest in initiatives that foster a culture of excellence and continual improvement within educational settings (Leithwood, 2021).

Based on the literature review, it is clear that positive teacher self-efficacy is imperative to student achievement. However, what is not known is the specific instructional leadership qualities teachers find most influential when it comes to fostering teacher self-efficacy. The current investigation seeks to address these identified gaps by allowing teachers to reflect on their current teaching practices and the qualities of instructional leadership that have the greatest impact on their classroom practices and beliefs.

Summary

The SCT suggests that human behavior is influenced by the reciprocal interaction between individuals and their environments, with a particular emphasis on the role of observational learning. Personal successes, observations, cultural influences, and physiological conditions are all factors that might influence an individual's self-efficacy. This idea has a significant influence in education focusing on enhancing performance and well-being.

School administrators who demonstrate instructional leadership effectively boost teacher self-efficacy, which in turn promotes professional growth and student achievement. The development of teacher evaluation, shaped by laws such as ESSA and NCLB, emphasizes the necessity for thorough evaluation methodologies to enhance the quality of teaching. Instructional leaders have a crucial role in establishing objectives, developing educational programs, evaluating instructional techniques, promoting professional growth, and enhancing school performance. It is essential to establish trust

and have a clear vision in order to develop effective instructional leadership. This involves finding the right balance between managerial responsibilities and teaching duties to improve the overall school culture and promote student accomplishment.

Instructional leadership influences education by fostering learning, encouraging creativity, and facilitating ongoing improvement. Leaders must ensure the provision of essential tools and resources while cultivating a culture that promotes effective collaboration and ongoing growth. Instructional leaders enhance teachers' self-efficacy and overall school performance by providing personalized feedback and evaluation to support professional progress.

Chapter III

Methodology

To improve teacher self-efficacy and investigate how instructional leadership attributes affect classroom instruction, this study examines teacher opinions of these instructional leadership attributes. Data from this investigation can allow principals and other instructional leaders to effectively fulfill their duties of creating collaborative cultures by offering insightful feedback, supporting opportunities for professional growth, and creating supportive environments (Blase & Blase, 2004; Hallinger et al., 2018; Wahlstrom & Louis, 2008). Understanding the complex relationship between instructional leadership and teacher self-efficacy is essential for educators as they work to improve classroom instruction to meet the diverse needs of students (Goddard et al., 2021). It is critical to learn how and what instructional leadership qualities influence teacher self-efficacy and effective teaching strategies to improve student outcomes.

Teacher perceptions of instructional leadership qualities that impact classroom practices and teacher self-efficacy can be measured best through a mixed methods approach using Q-methodology. The study was informed by the following research questions:

1.What specific instructional leadership qualities do teachers perceive as most important for principals to exhibit to positively impact classroom instructional practices and enhance teachers' self-efficacy beliefs?

2. What are the differences, if any, in how elementary and secondary school teachers perceive the importance of various instructional leadership qualities exhibited by their principals in relation to their own sense of instructional self-

efficacy?

3. What are the most significant instructional leadership qualities that teachers perceive as impacting their professional growth, development, and sense of self-efficacy as instructors?

   a. How do these leadership qualities translate to changes in teachers' classroom instruction and their confidence in implementing effective teaching practices?

Participants

The participants in the Q-methodology were specifically chosen to ensure that a wide range of viewpoints on the phenomenon were recorded (Watts & Stenner, 2012). Therefore, the participants for this study were full-time, state certified teachers from Pennsylvania and Ohio. According to Watts and Stenner (2012), it is ideal to have a participant group that can offer a pertinent, informed, engaging, and objective point of view toward the issue of interest. This recommendation guided the selection of participants. The number of participants that were chosen was based on the recommendation of Rogers (1995), who suggested that a range of 40–60 people would be enough for the Q-methodology. According to Brown (1980) and Stephenson (1953), fewer individuals would be sufficient for a comprehensive study. Furthermore, Webler et al., (2009) proposed that the ideal participant count for a Q-Methodological study is between 12 and 36 people.

Creating a growing network of teacher participants using the snowball method and purposeful sampling, current full-time public-school teachers were recruited to engage in the research study. To ensure that they did not feel under any obligation to

participate, interested parties were contacted electronically with invitations to engage in the study. A comprehensive overview of the study and a unique link to the *QMethod Software* was included in the email. By providing each participant with a distinct four-character alphanumeric identification, this connection guaranteed anonymity. Participants gave informed consent when they signed up for the *QMethod Software* program, and personal information was never entered into the program at any time. The participants completed the follow-up survey and Q-sort using the *QMethod Software* application.

Further, the researcher asked participants for demographic data to guarantee participant variety and the representation of different viewpoints in the final sample. The following demographic data was gathered: informed permission; current grade level; number of years of teaching; state of certification; highest degree earned.

Instrumentation: Developing the Concourse

Q-methodology begins by establishing and constructing a concourse, as outlined by Watts and Stenner (2012). A concourse refers to a compilation of statements that represent several potential viewpoints on the study subject (Watts & Stenner, 2012). A well-designed Q-set consists of concise assertions that each provide unique information and do not repeat each other (Watts & Stenner, 2012). Furthermore, it is important that the concluding comments in the concourse not be influenced by any certain perspective or bias (Watts & Stenner, 2012).

According to Stephenson (1953), a concourse typically includes multiple unique perspectives for observing and discussing the subject being studied. Multiple methods can be employed to construct a concourse. The concourse statements for this study were collected from Tschannen-Moran and Woolfolk Hoy's Teachers' Sense of Efficacy Scale

(TSES) (2001). The study includes a list of 24 statements, which can be found in Table 1. The table also provides information on the type of question and the specific area of instructional leadership in which each statement corresponds. Additionally, three open-ended questions were provided for the participants:

1. In what ways do the specific leadership behaviors and actions of your principal influence your instructional methods and your confidence in teaching?
2. Can you describe any experiences where your principal's instructional leadership has either positively or negatively affected your professional development and growth as a teacher?
3. Think about your professional growth as a teacher over the past year. How has your instructional leader helped your teaching efficacy evolve during this time, and what events or experiences influenced this change?

These questions provided an opportunity for participants to share experiences or information that was not addressed by the Q-sort method.

Table 1

Proposed Concourse Statements

Proposed Concourse Statements for the Q-Sort	Type of Statement Wording (Positive. Negative, Neutral)	Focus of Statement
I can get through to the most difficult students.	Positive	Student Engagement
I have little control over helping students think critically.	Negative	Student Engagement
I have control over disruptive behavior in the classroom.	Positive	Classroom Management
I have no control over students who show low interest in schoolwork.	Negative	Student Engagement
My expectations about student behavior are clear.	Neutral	Classroom Management
My students believe they can do well in schoolwork.	Neutral	Student Engagement
I am fully capable of responding to difficult questions from my students.	Positive	Instructional Strategies
Routines to keep my activities running smoothly cannot be established.	Negative	Classroom Management
Training on how to help my students value learning is needed.	Neutral	Student Engagement
Student comprehension of what I taught can be gauged.	Neutral	Instructional Strategies
Good questions for my students can be crafted.	Neutral	Instructional Strategies
Student creativity can be fostered.	Neutral	Student Engagement

Children follow classroom rules.	Neutral	Classroom Management
A failing child can improve.	Neutral	Student Engagement
A student who is disruptive and noisy can be calmed.	Neutral	Classroom management
A classroom management system can be established with each group of students.	Neutral	Classroom Management
My lessons can be adjusted to the proper level for individual students.	Neutral	Instructional Strategies
Assessment strategies should be varied.	Neutral	Instructional Strategies
A few problem students can ruin my entire lesson.	Negative	Instructional Strategies
Alternative explanation or example can be provided when students are confused.	Neutral	Instructional Strategies
I respond well to defiant students.	Positive	Classroom Management
Families need my support in helping their students do well in school.	Neutral	Student Engagement
Alternative strategies can be implemented in my classroom.	Neutral	Instructional Strategies
Capable students are challenged.	Neutral	Instructional Strategies

Procedures

After receiving approval from the Youngstown State University Human Subjects Institutional Review Board (Appendix A), the study proceeded by inviting chosen participants via email utilizing purposive sampling. The researcher utilized purposive sampling to ensure a representative sample of persons. Q-methodology requires the participation of individuals who have strong and well-developed viewpoints on the topic

being studied (Watts & Stenner, 2012). Therefore, the participant recruitment strategy aligned with this purpose since the participant emails specifically addressed this matter. Both the email and the study suggested that engaging in the activities would potentially require dedicating a period ranging from 30 to 45 minutes. Individuals that exhibited apathy towards this subject matter were unlikely to give their assent to partake in the investigation due to its protracted duration.

Additionally, this study posed no inherent risk of harm, and the data collected did not include any personally identifiable information. The Q-methodology allowed for the examination of multiple perspectives on an issue in a non-confrontational way by giving participants a pre-determined set of questions. This eliminated the need for participants to create their own specific statements about the instructional leadership qualities that shape classroom practices and teacher self-efficacy (Zabala et al., 2018). The Q-sort was performed via *QMethod Software*, an online platform. The *QMethod Software* allows users to easily access the Q-sort on any device at any time without the requirement of downloading additional software or applications. Furthermore, the Q-sort was available for a duration of two weeks. The *QMethod Software* precisely captures the data of every participant, hence removing the possibility of human error, therefore, a Q-sort method was used to capture the subjective viewpoints of each participant (Herrington & Coogan, 2011).

Each participant was provided with comprehensive information regarding the study's goals and the protocols for anonymizing their personal data. Strict confidentiality was maintained throughout the study and even after its conclusion. The information also included a statement on the voluntary nature of participating in the study, and the

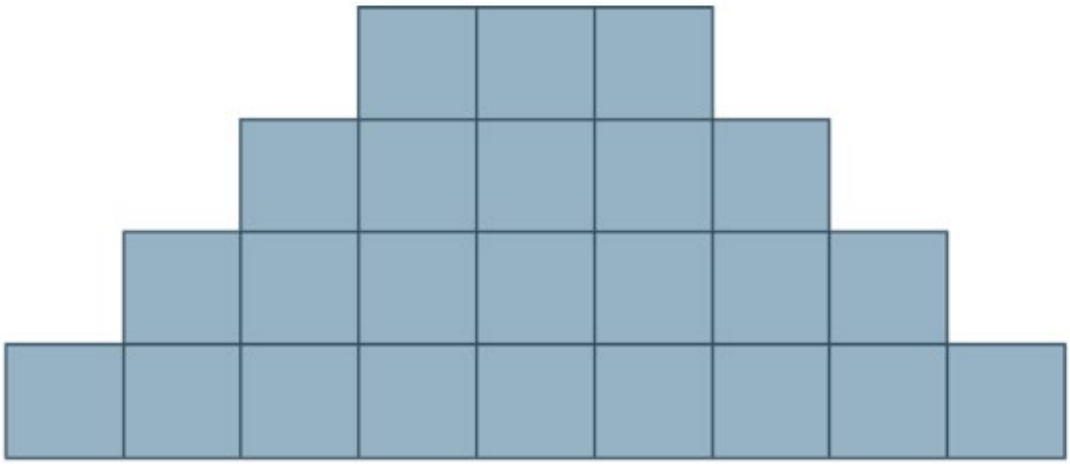
researcher informed participants that they could choose to stop and withdraw from the study at any time. After finishing the study, participants had the option to receive a copy of the data and research findings.

Within the Q-sort, the participants will be given the prompt: “What instructional leadership qualities are most important for impacting teacher self-efficacy and classroom practices? For each statement, click the icon that aligns most with your view.” The icons represented “strongly agree, neutral, strongly disagree.” The participants carefully examined each concourse statement and categorized it into the group that most accurately aligned with their individual perspective and beliefs on the factors.

During the final stage of the sort, participants arranged the pre-sorted concourse statements on the distribution framework based on their perspectives. Next, they arranged them in ascending order, starting from strongly disagree and ending with strongly agree. A forced distribution method was put into effect, allowing participants to arrange the statements in a specific order of preference. Due to the requirement for mandatory distribution, all concourse statements were placed on the distribution framework. Figure 1 illustrates the distribution framework of the Q-sort, which was based on a 24-item concourse.

Figure 1

Q-Sort Distribution Framework



Strongly Disagree Neutral Strongly Agree

Note. Multimedia elements and suggestions guided the participant through the Q sort. There was no time limit for completing the Q-sort.

The *QMethod Software* eliminated the chance of human mistakes in data capture by automatically recording each response during Q-sorts. Once the task was finished, the data from each participant was immediately accessed (*QMethods Software*, 2024). Furthermore, alongside the assertions in the Q-sort, an online poll was incorporated as a component of the *QMethod Software* procedure. This survey needed participants to indicate their current grade level of instruction, length of time at their current district, highest degree earned and specify their teaching experience within the following ranges: 0-4 years, 5-10 years, or more than 10 years.

Additionally, the *QMethod Software* incorporated an online survey. The survey requested demographic information, assessed participants' self-efficacy rating, and

evaluated their impressions of their principal's instructional leadership style. In addition, participants were asked open-ended questions regarding their perspectives on classroom practices, self-efficacy, and instructional leadership characteristics that influence their teaching.

Upon finishing the online Q-sort, participants had the opportunity to enter a drawing for a $50 Amazon gift card. Two gift cards were awarded. Prospective participants could register for the drawing by clicking on a provided link, which become accessible after submission. Users had the option to fill out an electronic form by providing either their email address or phone number, which served as the recipient's contact information for the digital gift card. It is crucial to emphasize that this form was completely independent from the finalized Q-sort or survey items in order to preserve anonymity. The form automatically generated a unique identifier for each participant, which was utilized for the purpose of conducting the gift card drawing. A digital random number generator was utilized to choose the two victorious contestants.

Data Analysis

The analysis of the Q-sort adhered to the guidelines set forth by Watts and Stenner (2012). A thorough analysis allowed the data to be examined in a comprehensive manner to identify themes and subgroups. The analysis focused on the collective ideas rather than the individual viewpoints of each participant (Watts & Stenner, 2012). Next, the researcher could determine the principal component analysis (PCA), Pearson, Kendall, or Spearman correlation, rotation methods (orthogonal, oblique, or Varimax), and the desired number of components using the *QMethod Software* (*Qmethod Software*, 2024). The *QMethod Software* generated comprehensive reports for analyzing data,

encompassing various elements such as total rank statements, normalized scores for factors, descending array of differences for factors, factor characteristics, statement of factor scores, standard error of differences, correlation between factor Z-Scores, distinguishing statements, and consensus statements (*QMethods Software*, 2024).

The demographic data of each participant was collected as a component of the *QMethod Software* procedure. The open-ended responses from the survey were analyzed using factor analysis to identify important themes associated with participants' subjective views of instructional leadership qualities, teacher self-efficacy, and classroom practices.

Summary

This study, which utilized mixed methods, investigated teachers' opinions of instructional leadership attributes that have an impact on both teacher self-efficacy and classroom practices. The research took place in a physical K-12 school system in Pennsylvania. The participants were chosen through a deliberate and targeted sampling method. A number of precautions were implemented to ensure the safety of the study participants, and each subject provided their agreement by completing the Q-sort in a passive manner. The researcher anonymized participants' identities, and generic descriptors were employed to portray persons when presenting findings. The investigation's findings have the potential to enhance the relationships between teachers and principals, which will have an impact on classroom instruction.

Chapter IV

Results

This research explores the perceptions teachers have on how instructional leadership qualities impact teacher self-efficacy and classroom practices. Quantitative and qualitative data were collected and examined to find meaning in the perspectives of state certified teachers in Pennsylvania and Ohio. The results of this data were used to answer the following research questions for this study:

1. What specific instructional leadership qualities do teachers perceive as most important for principals to exhibit to positively impact classroom instructional practices and enhance teachers' self-efficacy beliefs?
2. What are the differences in how elementary and secondary school teachers perceive the importance of various instructional leadership qualities exhibited by their principals in relation to their own sense of instructional self-efficacy?
3. What are the most significant instructional leadership qualities that teachers perceive as impacting their professional growth, development, and sense of self-efficacy as instructors?
    b. How do these leadership qualities translate to changes in teachers' classroom instruction and their confidence in implementing effective teaching practices?

Participants

Participants were provided with a link to complete this study. The survey was sent to 221 individuals, of which 18% (n = 40) chose to participate. Five participants decided not to participate in the demographic questions. The participants were asked to indicate in

what state, Pennsylvania or Ohio, they currently teach. Of the 35 participants 17% (*n* = 6) currently teach in Ohio and 83% (*n* = 29) currently teach in Pennsylvania. The participants were asked to indicate how many years of teaching experience they acquired and their current teaching level. Of the 35 that chose to respond, 9% (*n* = 3) had 0-5 years of experience, 11% (*n* = 4) had 6-11 years of experience, 17% (*n* = 6) had 11-15 years of experience, 46% (*n* = 16) had 16-20 years of experience, and 17% (*n* = 6) had 21 or more years of experience. The participants taught across three groups, elementary, middle and high school. Thirty-one percent (*n* = 11) of the participants teach at the elementary (K-6) grade band. Six percent (*n* = 2) of the participants teach in both the elementary (K-6) and middle school (7-8) grade bands. Thirty-four percent (*n* = 12) teach in the middle school (7-8) grade band. Twenty-nine percent (*n* = 10) teach in the high school (9-12) grade band. The participants were also asked to indicate their highest degree held. Twenty percent (*n* = 7) hold a bachelor's degree. Twenty-nine percent (*n* = 10) hold a master's degree. Forty-six percent (*n* = 16) hold a master's degree plus thirty. Five percent (*n* = 2) hold a PhD or EdD. A crosstabulation analysis of teaching experience across current teaching assignment level was completed and presented in Table 2.

Table 2

Crosstabulation of Teaching Experience and Current Teaching Assignment Grade Level

Current Grade Level	Years of Teaching Experience				
	0-5	**6-10**	**11-15**	**16-20**	**21+**
Elementary (K-6)	2	0	1	8	2
Middle (7-8)	0	2	2	6	2
High (9-12)	1	2	3	2	2

Table 2 highlights the distribution and potential correlation between educators' years of teaching experience and their familiarity with working with instructional leaders. This information reveals that most teacher participants report having 16-20 years of teaching experience.

Participants were asked to indicate what leadership behaviors and actions influence their instructional decisions. This information is crucial to the study because it provides an understanding of how instructional leaders impact classroom instructional practices. Table 3 illustrates what instructional behaviors impact teachers' classroom instruction.

Table 3

Teachers' Perceptions of Which Instructional Leadership Behaviors Impact Classroom Practices

Instructional Leadership Behaviors	Percentage of Participants
Minimal or No Impact	26%
Support and Encouragement	22%
Feedback and Communication	16%
Modeling Leadership and Instructional Methods	13%
Autonomy and Risk-Taking	13%
Focus on Professional Development and Data Driven Instruction	10%

Table 3 shows that 26% (n = 8) of the participants feel that instructional leadership behaviors had little to no impact on their classroom practices and teacher self-efficacy. Support and Encouragement follow with 22% (n = 7), and Feedback and Communication with 16% (n = 5).

In comparison, Table 4 details the teachers' perceptions of which instructional leadership behaviors impact teacher self-efficacy.

Table 4

Teachers' Perceptions of Which Instructional Leadership Behaviors Impact Teacher Self-Efficacy

Instructional Leadership Behaviors	Percentage of Participants
Positive Reinforcement and Praise	17%
Negative Leadership or Lack of Support	14%
Constructive Feedback	14%
Trust and Autonomy	11%
Supportive Leadership	11%
Collaborative Leadership	11%
Inconsistent or Hands off Leadership	11%
Negative Feedback	11%

Positive reinforcement and praise are perceived to be the strongest instructional leadership behavior, with 17% (n = 6) of participants identifying them as having the greatest impact on teacher self-efficacy. This is followed by Negative Leadership or Lack of Support, identified by 14% (n = 4) of participants, and Constructive Feedback, noted by 14% (n = 4).

Q-Sort Results

Correlation Matrix

The correlation matrix is a comparison or intercorrelation between each Q-sort (Watts & Stenner, 2012). Table 5 represents the correlation between factor scores.

Table 5

Correlation Between Factor Scores

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 1	-	0.50	0.50	0.42	0.13
Factor 2	-	-	0.38	0.35	0.11
Factor 3	-	-	-	0.40	0.30
Factor 4	-	-	-	-	0.04
Factor 5	-	-	-	-	-

The results showed most factors having moderate correlations between respondents, upholding distinguishing viewpoints from the participants' Q-sort. As indicated in Table 5, the highest association is between Factor 1 and Factor 2 and Factor 1 and Factor 3 (r =.50), with a low association between Factor 5 with Factors 1, 2, and 5.

The 40 Q-sorts were intercorrelated, and factors were analyzed by extracting five centroid factors and a Varimax rotation of those five factors. Auto-flagging was set to $p < 0.05$, and a majority of common variance was required. Factor analysis determines which individual can be grouped by demonstrating similar perspectives on a particular issue (Watts & Stenner, 2012). Continued analysis involved identifying and removing common variance from the results to determine the variability and look for shared meaning in the data.

The quantum (Q) analysis was computed three times to ensure the optimal number of factors for participants with Q-sort extraction. Initially, a seven-factor model was used, resulting in 66% variance being captured with 13 participants not loading into one of the factors. A six-factor model was then used, resulting in a 66% variance, with 13 participants not loading into one of the factors. Finally, a five-factor model was run, resulting in 57% of the variance, with eight participants not loading into one of the factors. The comparison between the models determined that a five-factor model is the most prudent and fits best for this study.

A review of the characteristics of the five factors was then completed, shown in Table 6. The unknown category represents the five participants who did not complete the demographic or open-ended information of the study.

Table 6

Crosstabulation of Current Teaching Level and Factors

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Elementary (K-6)		2	4	2	
Middle School (7-8)	1	4	2	1	1
High School (9-12)	4		2	2	2
Unknown	2	1		2	

Table 7 provides years of teaching experience and participant's factor loading.

Table 7

Crosstabulation of Years of Teaching Experience and Factors

Teaching Experience	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
0-5	1		1		
6-10	1	2		1	
11-15	1	1	1		1
16-20		2	6	3	1
21+	2	1		1	1
Unknown	2	1		2	

Table 8 demonstrates a breakdown of the factor characteristics, including number of defining variables, reliability coefficient, composite reliability, and standard error for each factor's z-score.

Table 8

Factor Characteristics

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
No. of Defining Variables	7.00	7.00	8.00	7.00	3.00
Avg. Rel. Coef.	0.80	0.80	0.80	0.80	0.80
Composite Reliability	0.97	0.97	0.97	0.97	0.92
S.E. of Factor Z-Scores	0.19	0.19	0.17	0.19	0.28

As Table 8 indicates, the factors have good reliability. The five-factor model resulted in seven defining variables in Factor 1, Factor 2, and Factor 4, eight in Factor 3, and three in Factor 5.

These five factors represent participants with similar perspectives on teacher self-efficacy. Table 9 represents the eigenvalues ranging from the highest level of 12.29 to the lowest level of 2.00. The analysis indicated that 57% of the variance responses could be identified in the five factors.

Table 9

Eigenvalues

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Eigenvalues	12.29	3.06	2.85	2.69	2.00
% Explained Variance	31.00	8.00	7.00	7.00	5.00
Cumulative % Expln Var	31.00	38.00	45.00	52.00	57.00
Standard Error	0.05	0.05	0.05	0.05	0.05

The five factors exceed the acceptable 1.0 cutoff with eigenvalues of 12.29, 3.06, 2.85, 2.69, and 2.00. This supports the five-factor model as the most parsimonious model in representing the participants' perceptions of factors influencing teachers' sense of self-efficacy.

Varimax Rotation

Factor rotation using varimax rotation was used in this analysis. Varimax rotation is a statistical technique that uses an algorithm to explain the connections between elements by reducing the variance (Watts & Stenner, 2012). The method determines the

degree of alignment between the responses of one participant and those of others who have similar responses (Watts & Stenner, 2012). This ensures that the Q-sort will have the highest possible factor loading, leading to a fit depicted by only one factor. Table 10 represents the Q-sort associated with each participant following the varimax rotation. Bold numbers and X indicate the factor extraction in the appropriate factor column.

Table 10

Factor Matrix with an X Indicating a Defining Sort

Participant	Factor 1		Factor 2		Factor 3		Factor 4		Factor 5	
0ZBJ	0.26		-0.03		-0.18		-0.12		**0.61**	**X**
1C8J	**0.60**	**X**	0.30		0.36		0.16		0.08	
3K0F	0.34		-0.08		0.33		-0.02		-0.19	
586N	0.18		**0.56**	**X**	0.18		0.09		-0.08	
5BIJ	0.39		0.15		0.27		0.60	**X**	-0.06	
62HJ	0.07		0.12		**0.67**	**X**	-0.13		0.21	
6JH1	0.55		0.19		0.54		0.17		0.27	
6OPM	0.22		**0.66**	**X**	0.11		0.34		0.08	
6ZIZ	0.43		-0.21		**0.62**	**X**	0.35		0.12	
8ERY	0.12		-0.07		0.26		-0.11		**0.58**	**X**
8EU1	**0.81**	**X**	0.29		0.05		0.19		0.33	
8TAL	-0.19		0.09		0.25		0.09		**0.65**	**X**
AN4L	**0.72**	**X**	0.33		-0.03		0.16		0.19	
BF20	0.28		0.40		**0.61**	**X**	0.20		0.07	
DLFU	0.26		0.35		0.46		0.40		0.49	

E8HI	0.18		0.24		**0.52**	**X**	0.09		-0.06
EKCQ	-0.22		0.27		0.01		-0.09		0.05
HA79	0.31		-0.04		**-0.41**	**X**	0.07		0.09
HB8R	0.06		0.05		0.31		**0.81**	**X**	-0.11
IFIK	0.03		**0.62**	**X**	0.09		-0.07		0.51
IJFD	0.13		0.23		0.46		0.37		0.48
IU2E	0.62		0.00		0.58		0.24		0.05
JR0I	-0.11		0.38		0.18		**-0.48**	**X**	-0.06
KP90	0.16		0.11		**0.54**	**X**	0.05		0.13
LQWU	0.51		0.36		0.13		0.20		0.30
NWJR	0.28		**0.76**	**X**	0.23		0.07		-0.02
P8FH	**0.69**	**X**	0.51		0.18		0.14		-0.09
PD1O	0.12		**0.55**	**X**	-0.09		0.40		0.30
QFTQ	**0.61**	**X**	0.14		0.25		-0.06		0.03
R8US	**0.86**	**X**	0.09		0.25		0.12		-0.13
R9CB	0.53		0.03		0.32		0.59		0.19
RG5T	0.34		0.07		0.03		**0.73**	**X**	0.02
T03X	0.16		0.40		0.20		0.63	**X**	-0.04

VP9T	0.04		**0.49**	**X**	-0.28		0.39		-0.11
W9ZZ	0.11		-0.01		0.16		**0.66**	**X**	-0.04
WFAX	-0.18		0.27		-0.28		**0.51**	**X**	0.08
XNPH	0.46		0.27		**0.58**	**X**	0.19		0.10
XSOC	**0.65**	**X**	-0.21		-0.03		0.33		0.07
Z8ER	0.05		0.05		**0.64**	**X**	0.31		0.16
Z8RL	0.07		**0.49**	**X**	0.20		-0.06		0.06

Note. X indicates a significant factor loading.

Of the 40 participants 32 loaded significantly into one of the five criteria. Collectively, these five factors account for 57% of the variability observed in the study. The remaining 8 participants did not exhibit significant weight on any of the five factors. This suggests that the five primary variables extracted from the study were not well suited to the participants. For this study, Factor 1 will be referred to as *Sculptors of Curiosity and Creativity*; Factor 2 will be referred to as *The Orchestrators of Harmony and Growth*; Factor 3 will be referred to as *The Champions of Potential and Possibility*; Factor 4 will be referred to as *Architects of Confidence and Curiosity*; Factor 5 will be referred to as *Masterminds of Adaptability and Structure*.

Factor Arrays, Identification, and Interpretation

Q-methodology reflects the participants' perspectives and, for the current study, the participants subjective experiences with instructional leadership qualities and teacher self-efficacy. A factory array is a visual tool showing the participants' collective ideas. It

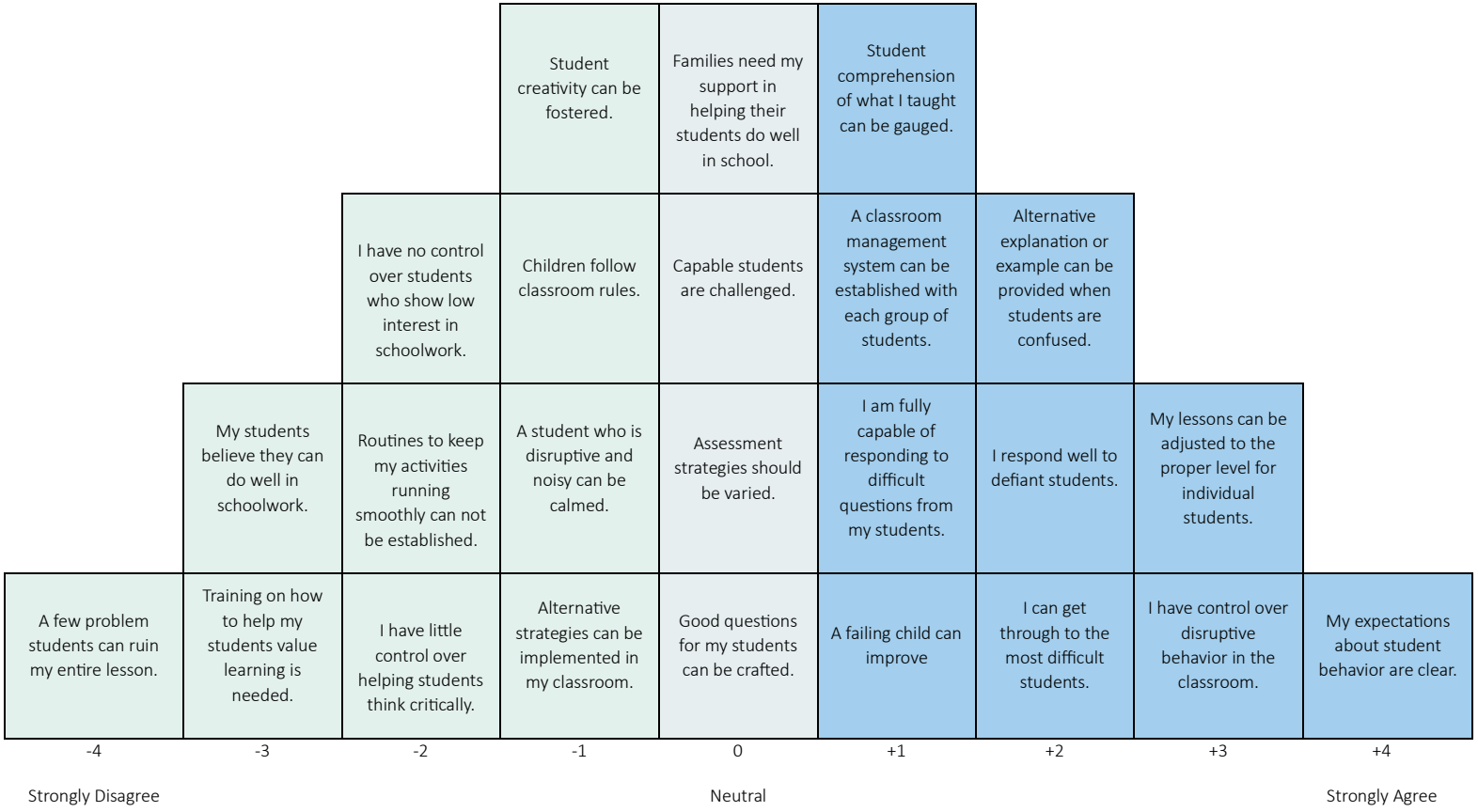
does not represent any individual's remarks or views but rather is a collection of individuals who share similar ideas. In the following section, arrays will be provided to reach the five-factor models, identify the factor, and interpret the participant's point of view.

Factor 1: Sculptors of Curiosity and Creativity

The factor array for *Sculptors of Curiosity and Creativity* is shown in Figure 2.

Figure 2

Model Sort of Teachers Who Loaded Significantly on Factor 1: Sculptors of Curiosity and Creativity



There are seven individuals statistically loading into this factor. The demographic and open-ended survey that was included in the study was completed by five of the Factor 1 participants. These educators ranged from novice to experienced, with two teaching experiences in the state of Ohio and three teaching experiences in Pennsylvania. Four of the participants currently teach in high school, and one teaches middle school. This group accounted for 17% of the study variance and has an eigenvalue of 12.29. Table 11 lists the distinguishing statements for *Sculptors of Curiosity and Creativity.*

Table 11

Distinguishing Statements for *Sculptors of Curiosity and Creativity*

No.	Statement	Endorsement
11	Good questions for my students can be crafted.	Neutral
12	Student creativity can be fostered.	Neutral
6	My students believe they can do well in schoolwork.	Neutral

Sculptors of Curiosity and Creativity **General Viewpoint.** This group of teachers sees themselves as artists shaping the minds of their students. They focus on asking the right questions, sparking creativity, and instilling a sense of confidence in students that they can succeed in school. These educators believe that with the right touch curiosity blooms into knowledge and creativity fuels deeper understanding.

When prompted to reflect on instructional leadership behaviors that impact classroom practices and self-efficacy, participants QFTQ and XSOC stated that instructional leaders can best impact their classroom practices through using research-

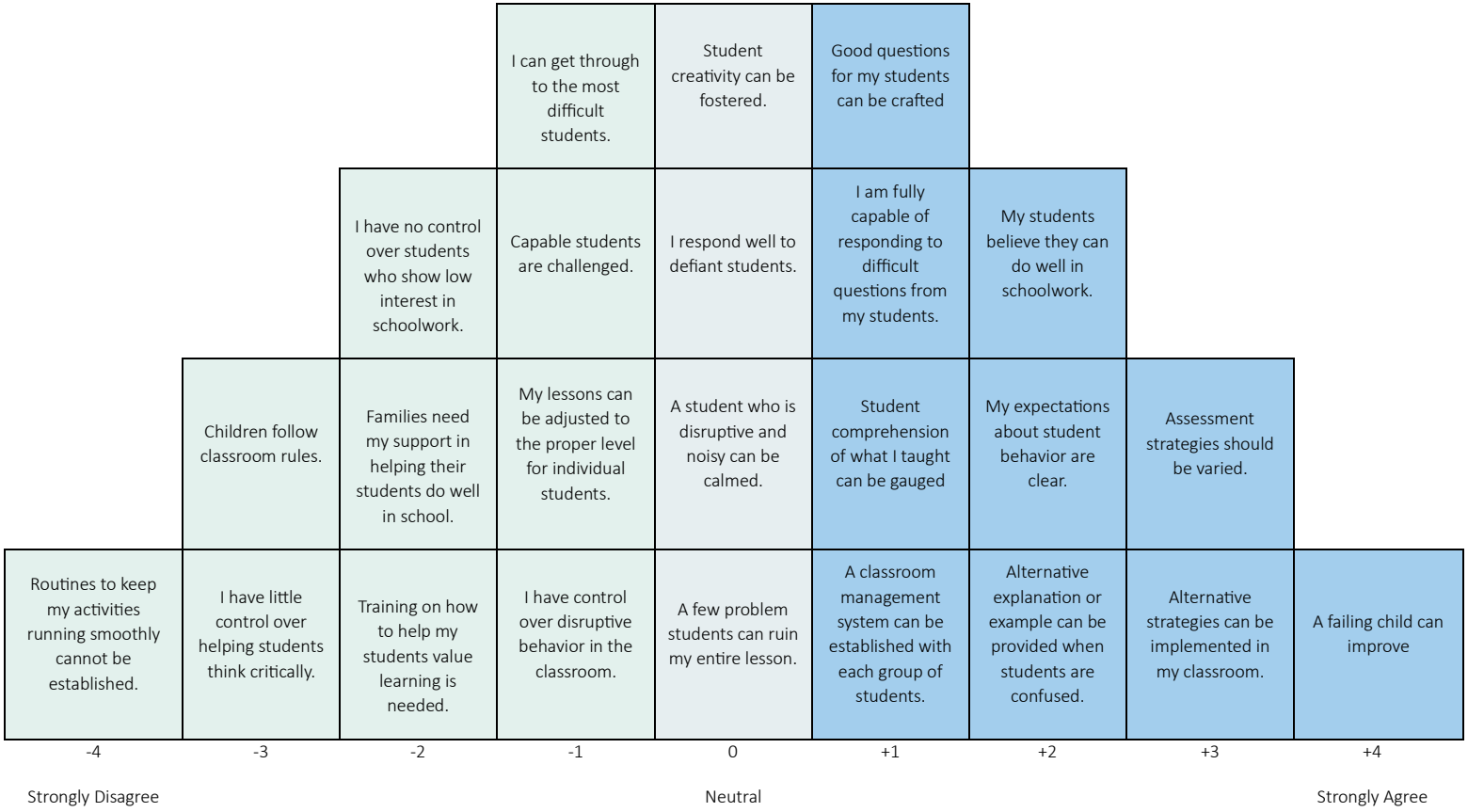
based strategies and personal data to support their practices. Participant P8FH stated encouragement, positive support, and creativity are the behaviors which have an impact on self-efficacy.

Factor 2: The Orchestrators of Harmony and Growth

The factor array for *The Orchestrators of Harmony and Growth* is shown in Figure 3.

Figure 3

Model Sort for Teachers Who Loaded Significantly on Factor 2: The Orchestrators of Harmony and Growth



There are seven individuals statistically loading into this factor. The demographic and open-ended survey that was included in the study was completed by six of the Factor 2 individuals. Six of the educators teach in Pennsylvania. Two currently teach in the elementary grade band and four teach in the middle school grade band. The teachers who loaded into this factor are more experienced and range in teaching experience from six to over 20 years. This group accounted for 18% of the study variance and had an eigenvalue of 3.06. Table 12 lists the distinguishing statements for Factor 2: *The Orchestrators of Harmony and Growth.*

Table 12

Distinguishing Statements for *The Orchestrators of Harmony and Growth*

No.	Statement	Endorsement
3	I have control over disruptive behavior in the classroom.	Positive
21	I respond well to defiant students.	Positive
18	Assessment strategies should be varied.	Neutral
22	Families need my support in helping their students do well in school.	Neutral
9	Training on how to help my students value learning is needed.	Neutral
6	My students believe they can do well in schoolwork.	Neutral
19	A few problem students can ruin my entire lesson.	Negative

The Orchestrators of Harmony and Growth **General Viewpoints.** These teachers are maestros conducting the symphony of learning. They skillfully balance classroom management, respond to challenging behaviors, and adapt assessment strategies like varied musical notes. They also recognize that family support plays an essential role in student success. Their approach is about orchestrating harmony in the classroom while guiding individual student growth with precision and care.

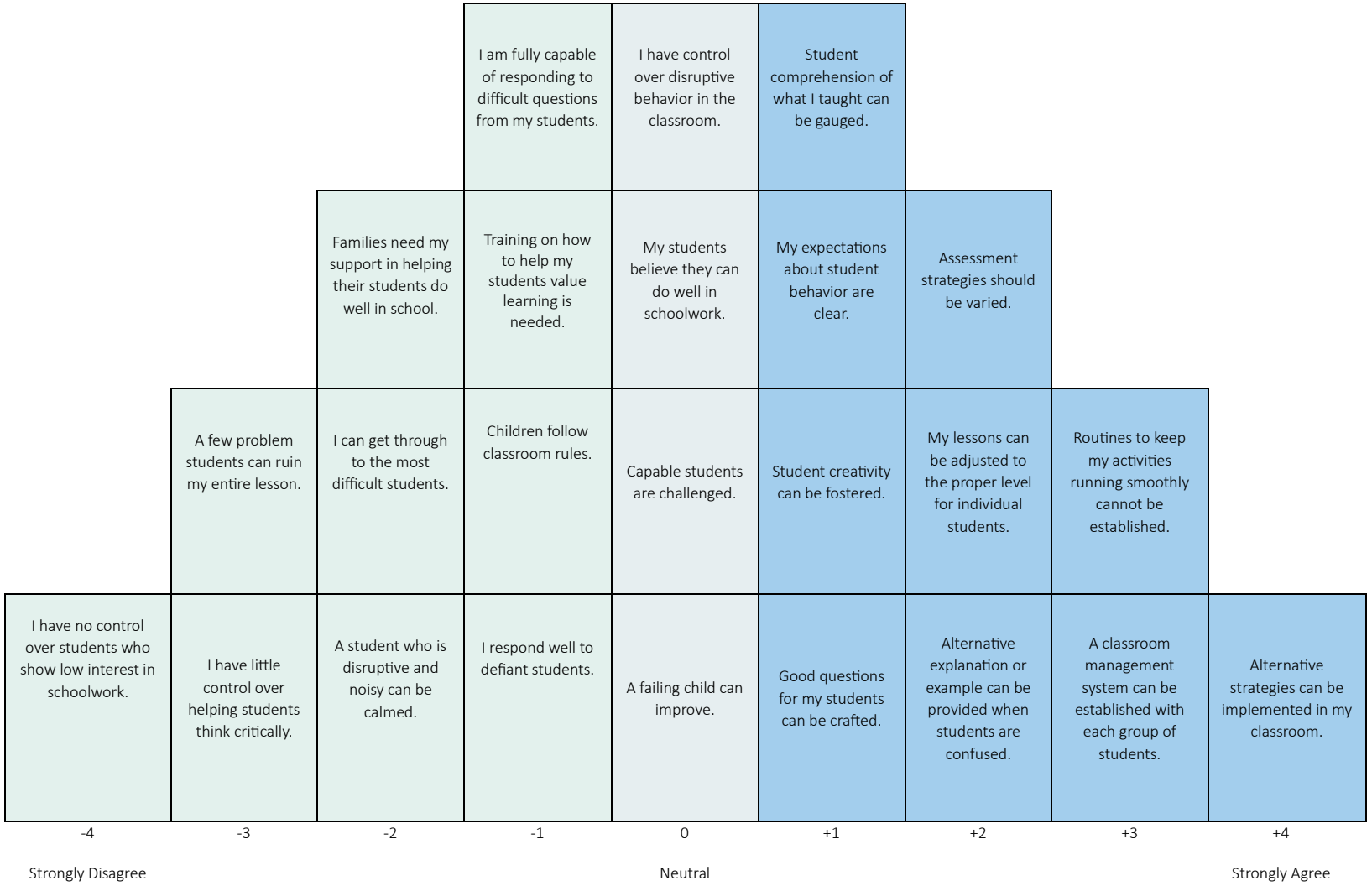
When prompted to reflect on instructional leadership behaviors that impact classroom practices and self-efficacy, participant PD1O stated that instructional leaders impact classroom practice by being clear in goal setting and being a source of guidance and support when needed. Participant Z8RL stated that to increase teacher self-efficacy, instructional leaders must foster confidence, be supportive and caring, and encourage educators to try new activities and learning opportunities.

Factor 3: Champions of Potential and Possibility

The factor array of *Champions of Potential and Possibility* is shown in Figure 4.

Figure 4

Model Sort for Teachers Who Loaded Significantly on Factor 3: Champions of Potential and Possibility



There are eight individuals who statistically load into this factor. One participant teaches in Ohio while the other seven teach in Pennsylvania. Four participants currently teach the elementary grade band, two teach in middle school, and two teach at the high school. One participant has 0-5 years of experience, one has 11-15 years of experience, and six have been teaching 16-20 years. This group accounted for 20% of the study variance with an eigenvalue of 2.85. Table 13 lists the distinguishing statements for Factor 3: *Champions of Potential and Possibility.*

Table 13

Distinguishing Statements for Champions of Potential and Possibility

No.	Statement	Endorsement
14	A failing child can improve.	Neutral
6	My students believe they can do well in schoolwork.	Neutral
15	A student who is disruptive and noisy can be calmed.	Neutral

***Champions of Potential and Possibility* General Viewpoints.** In this theme, teachers are relentless believers in the power of change. They champion the idea that every failing student can turn things around and that disruptive behaviors can be soothed. These educators nurture a belief that, with the right support, even the most challenging students can rise. Their classroom is a safe space where potential thrives, and obstacles are opportunities.

When prompted to reflect on instructional leadership behaviors that impact classroom practices and self-efficacy, participant Z8ER stated that instructional leaders

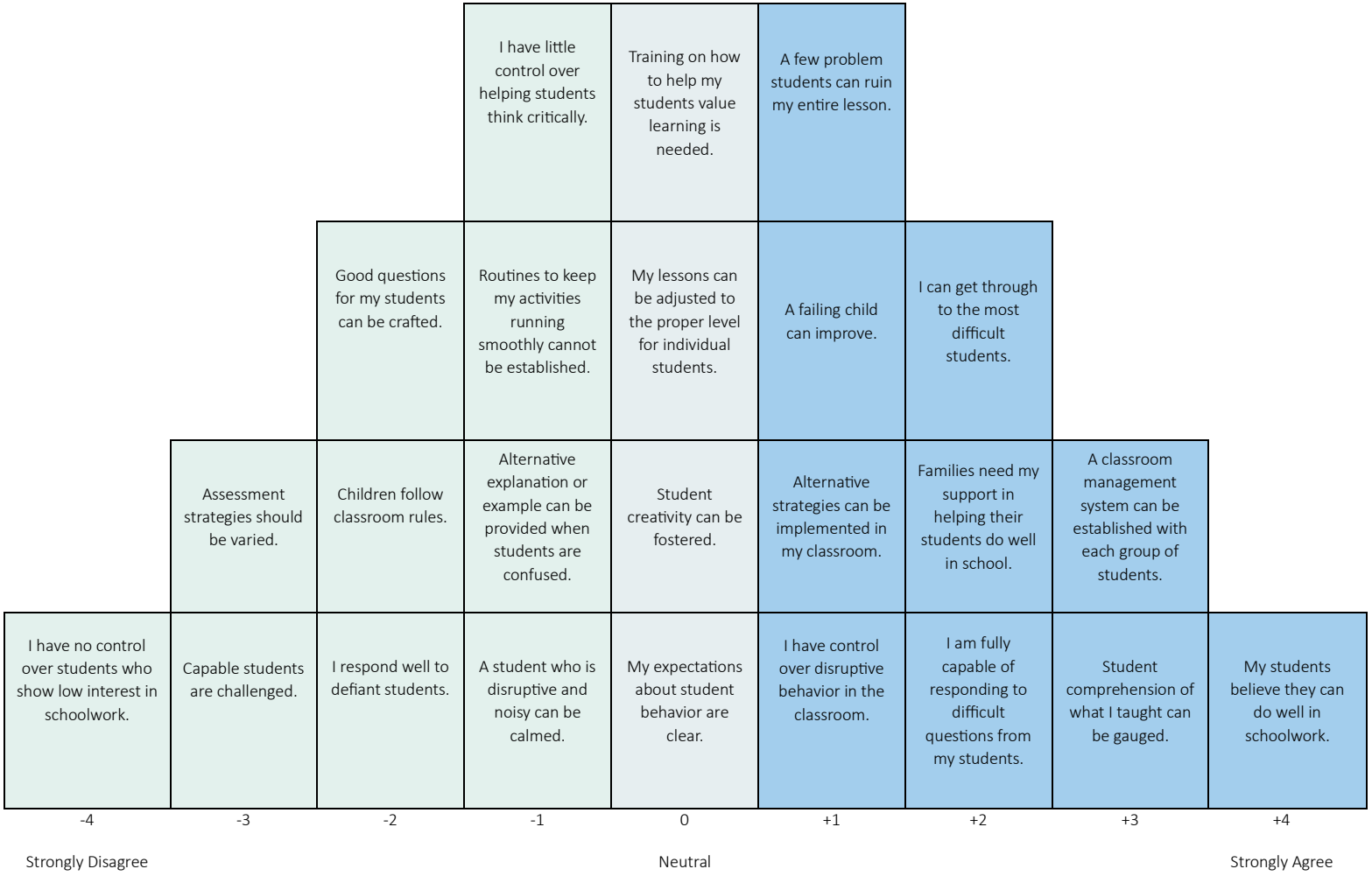
impact their classroom practices by fostering a sense of patience and calmness. 6ZIZ stated that self-efficacy is fostered through praise and encouragement.

Factor 4: Architects of Confidence and Curiosity

Figure 5 demonstrates the factor array of *Architects of Confidence and Curiosity.*

Figure 5

Model Sort for Teachers Who Loaded Significantly on Factor 4: Architects of Confidence and Curiosity



Seven participants statistically loaded into this factor. Two participants did not complete the demographic or open-ended portion of the study. Four participants teach in Pennsylvania, and one teaches in Ohio. Two teach at the elementary grade band, one teaches in middle school, and two teach in high school. One teacher has 6-10 years of experience. Three teachers have 16-20 years of experience, and one has more than 21 years of experience. This group accounted for 18% of the study variance and had an eigenvalue of 2.69. Table 14 lists the distinguishing statements for Factor 4: *Architects of Confidence and Curiosity.*

Table 14

Distinguishing Statements for Architects of Confidence and Curiosity

No.	Statement	Endorsement
8	Routines to keep my activities running smoothly can not be established.	Negative
11	Good questions for my students can be crafted.	Neutral
6	My students believe they can do well in schoolwork.	Neutral
7	I am fully capable of responding to difficult questions from my students.	Positive

***Architects of Confidence and Curiosity* General Viewpoints.** Teachers in this group are architects, building strong foundations for learning. They have confidence in their ability to guide students through tough questions and design smooth-running routines. They approach teaching with the mindset that every challenge is a blueprint

waiting to be mastered, and they lay down the bricks of curiosity, one thoughtful question at a time.

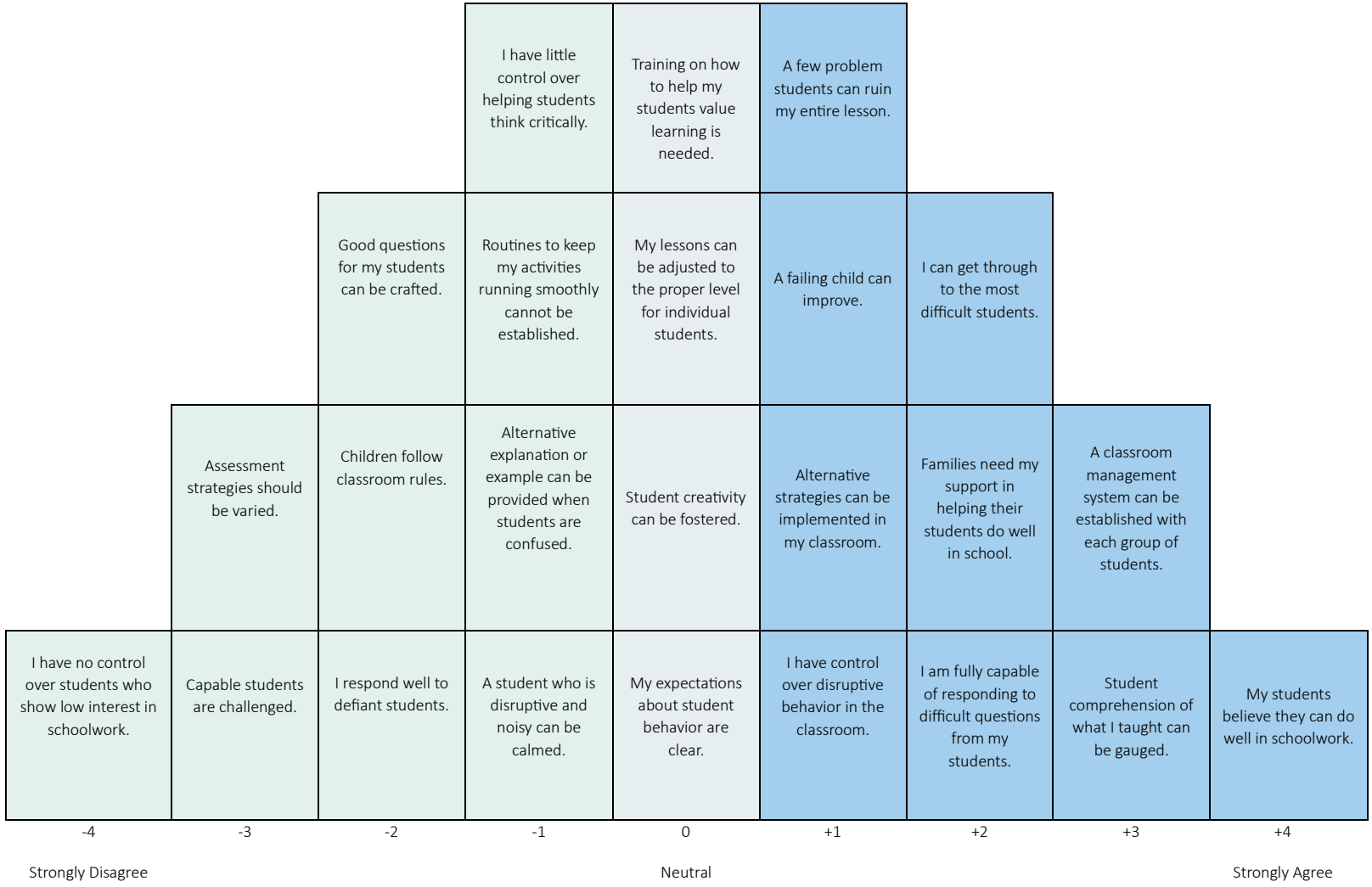
When prompted to reflect on instructional leadership behaviors that impact classroom practices and self-efficacy, participant 5BIJ stated that instructional leaders provide professional development opportunities and support when it comes to implementing instructional strategies. Participant RG5T stated to instructional leaders who are committed to researching and supporting initiatives they implement, increase teachers' sense of self-efficacy.

Factor 5: Masterminds of Adaptability and Structure

Figure 6 represents the array of *Masterminds of Adaptability and Structure.*

Figure 6

Model Sort for Teachers Who Loaded Significantly on Factor 5: Masterminds of Adaptability and Structure



There are three individuals who statistically load into this factor. Two participants teach in the state of Pennsylvania, and one teaches in Ohio. Two participants teach at the high school level, while one teaches at the middle school level. One participant has 11-15 years of teaching experience, one has 16-20 years of teaching experience, and one has over 21 years of teaching experience. This group accounted for 8% of the study variance and has an eigenvalue of 2.00. Table 15 lists the distinguishing statements for Factor 5: *Masterminds of Adaptability and Structure.*

Table 15

Distinguishing Statements for Masterminds of Adaptability and Structure

No.	Statement	Endorsement
6	My students believe they can do well in schoolwork.	Neutral
3	I have control over disruptive behavior in the classroom	Positive
20	An alternative explanation or example can be provided when students are confused.	Neutral
11	Good questions for my students can be crafted.	Neutral
18	Assessment strategies should be varied.	Neutral

***Masterminds of Adaptability and Structure* General Viewpoints.** These educators are flexible strategists who thrive on adjusting their approach to meet the needs of their students. They are the type who can easily switch gears, offering alternative explanations when students are confused, while still maintaining control over classroom

dynamics. For them, the balance between structure and adaptability is key to ensuring discipline and dynamic learning.

When prompted to reflect on instructional leadership behaviors that impact classroom practices and self-efficacy, participants 0ZBJ and 8TAL state that instructional leaders impact their classroom practices minimally. Participant 8ERY stated that to increase teacher self-efficacy, instructional leaders need to better provide constructive feedback as well as provide better support and encouragement.

Outlying Participants

Eight of the participants did not significantly load into one of the study's factors. These participants had perceptions that did not fit well with the five main factors that were extracted from the Q-sort. However, they did respond to the open-ended questions and were included in the analysis of those responses. Three of the participants expressed that they feel their instructional leaders have little to no impact on their classroom practices. These teachers feel that their instructional leaders lack execution of relevant feedback, support, and guidance negatively impact their self-efficacy. The remaining five participants feel that their instructional leaders encourage, support, and model strategies which impact their classroom behaviors. These teachers also feel that their instructional leaders positively impact their sense of self-efficacy by providing opportunities for professional development and leadership growth.

Summary

This chapter presented the results of quantitative and qualitative factor analysis that was completed following the sorting of 24 statements by 40 Pennsylvania and Ohio state certified teachers. Thirty-five of the 40 participants completed the demographic and

open-ended questions on the survey. Q-methodology was used to explore a variety of teachers' perceptions of how instructional leadership qualities impact classroom practices and teachers' sense of self-efficacy. Thirty-one of the 40 participants loaded significantly into one of the five district factors indicating similarities of viewpoints. The five factors were Factor 1: *Sculptors of Curiosity and Creativity*; Factor 2: *The Orchestrators of Harmony and Growth*; Factor 3: *Champions of Potential and Possibility*; Factor 4: *Architects of Confidence and Curiosity*; Factor 5: *Masterminds of Adaptability and Structure.*

Chapter Five will discuss findings and how the findings align with existing research, limitations of the study, recommendations for future research, and a summary.

Chapter V

Discussion

In the evolving landscape of education, instructional leadership has garnered significant attention as a pivotal factor in enhancing classroom instruction and fostering teacher self-efficacy. By examining the interplay between leadership practices and their effects on instructional quality and teacher confidence, this research contributes to a deeper understanding of how effective leadership can shape educational environments.

The findings underscore the essential qualities of instructional leaders, including their ability to inspire, support, and challenge teachers. Leaders can create a culture of continuous improvement that not only elevates classroom instruction but also strengthens teachers' belief in their capabilities (Bellibas & Liu, 2017; Goddard et al., 2021; Tschannen-Moran & Gareis, 2015). These findings will offer actionable recommendations for school leaders aiming to enhance their impact on instructional quality and teacher self-efficacy.

As educational systems face increasing demands for accountability and effectiveness (Good, 2023), the insights derived from this study provide valuable guidance for leaders at all levels. School leaders can cultivate environments that empower teachers and ultimately improve student outcomes by prioritizing instructional leadership behaviors that promote engagement, collaboration, and growth (Neumerski, 2013; Sanchez et al., 2022).

The research questions presented in this study are critical to understanding how instructional leaders can influence teacher classroom practices, self-efficacy, and enhance student learning (Day et al., 2016).

Research Question 1: What specific instructional leadership qualities do teachers perceive as most important for principals to exhibit to positively impact classroom instructional practices and enhance teachers' self-efficacy beliefs?

The study identified several specific instructional leadership qualities that teachers perceive as most important for principals to exhibit to positively impact classroom instructional practices and enhance teachers' sense of self-efficacy beliefs.

Firstly, positive reinforcement and praise emerged as the most impactful instructional leadership behavior, particularly highlighted by teachers in *Sculptors of Curiosity and Creativity*, and *Champions of Potential and Possibility*. Teachers in these groups see themselves as artists and relentless believers in the power of change, respectively. They value positive reinforcement and praise as it boosts their confidence and motivates them to implement effective teaching practices.

Support and encouragement were also crucial, as emphasized by teachers across multiple factors. *Sculptors of Curiosity and Creativity* noted that encouragement and positive support significantly impact their self-efficacy. Similarly, *The Orchestrators of Harmony and Growth* and *Champions of Potential and Possibility* highlighted the importance of supportive leadership in balancing classroom management and fostering a sense of patience and calmness. *Masterminds of Adaptability and Structure* also underscored the need for better support and encouragement to enhance teacher self-efficacy.

Constructive feedback was another essential quality, particularly valued by teachers in *The Orchestrators of Harmony and Growth* and *Architects of Confidence and Curiosity*. Teachers in these groups appreciated clear goal setting, guidance, and

professional development opportunities provided by their principals. Constructive feedback helps them refine their instructional methods and fosters a growth mindset. *Masterminds of Adaptability and Structure* also highlighted the need for better constructive feedback to increase teacher self-efficacy.

Modeling leadership and instructional methods was significant for professional growth, especially for *Architects of Confidence and Curiosity* teachers. These teachers valued principals who lead by example, demonstrating effective instructional strategies and leadership behaviors that they can emulate in their own classrooms. This modeling helps build strong foundations for learning and instills confidence in teachers' abilities to guide students through tough questions and design smooth-running routines.

Trust and autonomy were particularly important for secondary school teachers, as highlighted in *Masterminds of Adaptability and Structure*. These teachers valued principals who trust them to make instructional decisions and give them the autonomy to implement innovative teaching practices. This trust empowers teachers and enhances their sense of self-efficacy, allowing them to adapt their approach to meet the needs of their students while maintaining control over classroom dynamics.

Lastly, collaborative leadership was important, especially for elementary school teachers in *Orchestrators of Harmony and Growth*. These teachers appreciated principals who foster a collaborative environment where they can work together, share ideas, and support each other. This collaboration enhances teachers' instructional practices and their confidence in their abilities.

The most important instructional leadership qualities perceived by teachers include positive reinforcement and praise, support and encouragement, constructive

feedback, modeling leadership and instructional methods, trust and autonomy, and collaborative leadership. These qualities contribute to enhancing teachers' self-efficacy and positively impacting their classroom instructional practices.

Research Question 2: What are the differences in how elementary and secondary school teachers perceive the importance of various instructional leadership qualities exhibited by their principals in relation to their own sense of instructional self-efficacy?

The study revealed notable differences in how elementary and secondary school teachers perceive the importance of various instructional leadership qualities exhibited by their principals in relation to their own sense of instructional self-efficacy.

Elementary school teachers, represented significantly in *The Orchestrators of Harmony and Growth* and *Architects of Confidence and Curiosity*, emphasized the importance of supportive and collaborative leadership. These teachers valued principals who provide clear goal setting, guidance, and support when needed. For instance, participant PD1O from *The Orchestrators of Harmony and Growth* highlighted the impact of clear goal setting and being a source of guidance and support. Additionally, participant Z8RL noted that fostering confidence, being supportive and caring, and encouraging new activities and learning opportunities are crucial for increasing teacher self-efficacy. Elementary teachers also appreciated professional development opportunities and support in implementing instructional strategies, as mentioned by participant 5BIJ in *Architects of Confidence and Curiosity*. This group of teachers sees their principal as architects who build strong foundations for learning by guiding them through tough questions and designing smooth-running routines.

In contrast, secondary school teachers placed a higher value on trust and autonomy, particularly those in *Sculptors of Curiosity and Creativity* and *Masterminds of Adaptability and Structure*. These teachers appreciated principals who trust them to make instructional decisions and provide them with the autonomy to implement innovative teaching practices. For example, *Masterminds of Adaptability and Structure*, described as flexible strategists, thrive on adjusting their approach to meet the needs of their students while maintaining control over classroom dynamics. Participant 8ERY emphasized the need for better constructive feedback and support to increase self-efficacy. Additionally, secondary teachers in *Sculptors of Curiosity and Creativity* focused on sparking creativity and instilling confidence in students, with participant P8FH noting the importance of encouragement, positive support, and creativity in impacting self-efficacy.

Overall, elementary teachers tend to prioritize supportive and collaborative leadership that provides clear guidance and professional development opportunities, which helps them feel more confident and capable in their roles. On the other hand, secondary teachers value trust and autonomy, allowing them to innovate and adapt their instructional methods to better meet the needs of their students. These differences highlight teachers' varying needs and preferences at different educational levels and underscore the importance of tailoring instructional leadership approaches to effectively enhance teacher self-efficacy.

Research Question 3: What are the most significant instructional leadership qualities that teachers perceive as impacting their professional growth, development, and sense of self-efficacy as instructors?

How do these leadership qualities translate to changes in teachers' classroom instruction and their confidence in implementing effective teaching practices?

The study identified several significant instructional leadership qualities that teachers perceive as impacting their professional growth, development, and sense of self-efficacy as instructors.

Positive reinforcement and praise were perceived as the most impactful instructional leadership behaviors. Teachers in *Sculptors of Curiosity and Creativity* and *Champions of Potential and Possibility* emphasized the importance of positive reinforcement and praise in enhancing their self-efficacy. This quality helps teachers feel valued and recognized for their efforts, which in turn boosts their confidence and motivation to implement effective teaching practices.

Support and encouragement were also crucial for professional growth and development. Teachers across multiple factors *Sculptors of Curiosity and Creativity*, *The Orchestrators of Harmony and Growth*, and *Masterminds of Adaptability and Structure* highlighted the importance of supportive leadership. For instance, participant PD1O from *The Orchestrators of Harmony and Growth* noted that principals' clear goal setting and guidance significantly impact their classroom practices. Similarly, participant Z8RL emphasized that fostering confidence, being supportive and caring, and encouraging new activities are essential for increasing teacher self-efficacy.

Constructive feedback was another essential quality, particularly valued by teachers in *The Orchestrators of Harmony and Growth* and *Architects of Confidence and Curiosity*. Constructive feedback helps teachers refine their instructional methods and foster a growth mindset. Participant 5BIJ from *Architects of Confidence and Curiosity*

mentioned the importance of professional development opportunities and support in implementing instructional strategies facilitated by constructive feedback from principals.

Modeling leadership and instructional methods was significant for professional growth, especially for *Architects of Confidence and Curiosity* teachers. These teachers valued principals who lead by example, demonstrating effective instructional strategies and leadership behaviors that they can emulate in their own classrooms. This modeling helps build strong foundations for learning and instills confidence in teachers' abilities to guide students through tough questions and design smooth-running routines.

Trust and autonomy were particularly important for secondary school teachers, as highlighted in *Masterminds of Adaptability and Structure*. These teachers appreciated principals who trust them to make instructional decisions and give them the autonomy to implement innovative teaching practices. This trust empowers teachers and enhances their sense of self-efficacy, allowing them to adapt their approach to meet the needs of their students while maintaining control over classroom dynamics.

Leadership Qualities Translation to Changes in Classroom Instruction and Confidence

These instructional leadership qualities translate to changes in teachers' classroom instruction and their confidence in implementing effective teaching practices in several facets. First, positive reinforcement and praise boost teachers' confidence and motivation, leading to more enthusiastic and effective teaching. Support and encouragement from principals help teachers feel more secure and capable in their roles, which translates to a more positive and proactive approach to classroom management and instruction.

Constructive feedback provides teachers with specific, actionable insights that help them improve their instructional methods. This continuous improvement fosters a

growth mindset and encourages teachers to experiment with new strategies and techniques, ultimately enhancing their teaching effectiveness. Additionally, modeling leadership and instructional methods by principals is a practical guide for teachers, showing them how to implement best practices in their classrooms. This hands-on approach helps teachers feel more confident in their abilities and more willing to adopt innovative teaching methods.

Trust and autonomy empower teachers to take ownership of their instructional decisions and implement creative and effective teaching practices. This autonomy fosters a sense of responsibility and confidence, encouraging teachers to take risks and explore new approaches to teaching. Collaborative leadership, particularly valued by elementary teachers, creates a supportive environment where teachers can share ideas and strategies, further enhancing their instructional practices and confidence.

The most significant instructional leadership qualities that impact teachers' professional growth, development, and sense of self-efficacy include positive reinforcement and praise, support and encouragement, constructive feedback, modeling leadership and instructional methods, trust and autonomy, and collaborative leadership. These qualities collectively contribute to enhancing teachers' classroom instruction and their confidence in implementing effective teaching practices.

Interpretation of Findings

The findings from this study provide valuable insights into the perceptions of teachers regarding the impact of instructional leadership qualities on their self-efficacy and classroom practices.

Factor 1: Sculptors of Curiosity and Creativity

This group highlights the importance of fostering creativity and confidence in students. Teachers in this group see themselves as artists shaping young minds through curiosity and creativity. They value instructional leaders who use research-based strategies and personal data to support their practices. Encouragement, positive support, and creativity are seen as crucial behaviors that enhance teacher self-efficacy. This emphasizes the role of positive reinforcement and innovative teaching methods in boosting teacher confidence and effectiveness (Özdemir et al., 2020).

Factor 2: The Orchestrators of Harmony and Growth

These participants underscore the significance of balancing classroom management with student growth. Teachers in this group appreciate clear goal setting, guidance, and support from their principals. They also value a collaborative environment where family support is recognized as essential for student success. This factor reflects the importance of supportive and caring leadership in fostering a harmonious and growth-oriented classroom environment (Neumerski, 2013; Sanchez et al., 2022).

Factor 3: Champions of Potential and Possibility

This group focuses on the belief in the potential for change and improvement in students. Teachers in this group are relentless in their efforts to support even the most challenging students. They value praise and encouragement from their principals, which helps foster a sense of patience and calmness in the classroom. This factor highlights the importance of positive reinforcement and a supportive leadership style in enhancing teacher self-efficacy and classroom practices (Bellibas & Liu, 2017; Goddard et al., 2021; Tschannen-Moran & Gareis, 2015).

Factor 4: Architects of Confidence and Curiosity

These teachers emphasize the role of confidence and curiosity in effective teaching. Teachers in this group value professional development opportunities and support in implementing instructional strategies (Smith et al., 2020). They appreciate principals who are committed to researching and supporting initiatives that enhance teaching practices. This factor underscores the importance of modeling leadership and instructional methods and providing constructive feedback to foster a growth mindset among teachers (Balcı & Özkan, 2023; Zepeda, 2017).

Factor 5: Masterminds of Adaptability and Structure

This group highlights the need for flexibility and structure in teaching. Teachers in this group thrive on adjusting their approach to meet the needs of their students while maintaining control over classroom dynamics. They value constructive feedback and support from their principals, which helps them adapt their teaching methods effectively. This factor reflects the importance of trust and autonomy in empowering teachers to innovate and implement effective teaching practices (Karakose et al., 2024).

Overall, the findings indicate that positive reinforcement and praise, support and encouragement, constructive feedback, modeling leadership and instructional methods, trust and autonomy, and collaborative leadership are the most significant instructional leadership qualities that impact teachers' professional growth, development, and sense of self-efficacy. These qualities translate to changes in classroom instruction by boosting teachers' confidence, fostering a positive and proactive approach to teaching, and encouraging continuous improvement and innovation in instructional methods. The study underscores the need for tailored instructional leadership approaches that address

teachers' specific needs and preferences at different educational levels to effectively enhance their self-efficacy and classroom practices.

Context of the Findings

The findings of this study are situated within the broader context of instructional leadership and its impact on teacher self-efficacy and classroom practices. Despite the increasing emphasis on teacher self-efficacy as a determinant of classroom success (Day, 2000; Fios et al., 2024), a notable gap exists in research concerning how educators evaluate their self-efficacy. Specifically, there is limited exploration of using Q-sort methodology to assess teachers' nuanced perceptions of their capabilities. The Q-sort method, while powerful in capturing subjective opinions and uncovering underlying belief structures, has seen limited application in the context of teacher self-efficacy, which may restrict the depth of insight into the diverse ways teachers conceptualize their influence in the classroom.

The forced ranking inherent in the Q-sort can add an important layer to understanding self-efficacy by encouraging participants to prioritize specific aspects of their beliefs. This technique differs significantly from traditional Likert scale surveys, where all statements might receive high ratings, thus masking variability in educators' views. However, the existing body of research rarely leverages Q-sort for this purpose, which leaves unexplored potential in understanding the relative importance teachers place on various facets of self-efficacy, such as instructional strategies, student engagement, and classroom management.

Current studies often rely on quantitative measures that may not fully capture the complex, contextualized beliefs teachers hold about their effectiveness. This

methodological void suggests a missed opportunity to uncover latent dimensions of teacher self-efficacy that could inform more targeted professional development programs.

The findings underscore the essential theory of instructional leadership, including leaders' ability to inspire, support, and challenge teachers (Liu et al., 2021). Leaders can create a culture of continuous improvement that not only elevates classroom instruction but also strengthens teachers' belief in their capabilities (Bellibas & Liu, 2017; Goddard et al., 2021; Tschannen-Moran & Gareis, 2015). The study was conducted with state-certified teachers in Pennsylvania and Ohio, providing a regional perspective on the perceptions of instructional leadership qualities. The participants included a diverse group of teachers with varying years of experience and teaching levels, from elementary to high school.

The data revealed that most participants had significant teaching experience, with the majority reporting 16-20 years in the profession. This extensive experience suggests that a substantial amount informs the teachers' perceptions of practical knowledge and interaction with instructional leaders. The study's context within Pennsylvania and Ohio is particularly relevant, as it highlights the specific needs and preferences of teachers in these states, which may differ from those in other regions.

The study's findings align with existing literature on the importance of instructional leadership in fostering a positive school environment and enhancing teacher efficacy. This is connected to Bandura's SCT that suggests humans are not passive recipients of their environment, rather, humans actively influence and are influenced by their environment (Bandura, 1997; Beauchamp et al., 2019; Woodcock & Tournaki, 2023). The emphasis on qualities such as positive reinforcement, support and

encouragement, constructive feedback, and modeling leadership and instructional methods reflects well-established principles of educational leadership (Hallinger, 2015; Neumerski, 2013). These qualities are known to contribute to a supportive and effective teaching environment, which is crucial for teacher development and student success (Blase & Blase, 2004; Day et al., 2016).

The regional focus of the study also provides insights into the unique challenges and opportunities faced by teachers in Pennsylvania and Ohio. For instance, the emphasis on collaborative leadership and the need for clear goal setting and guidance may reflect specific cultural or institutional characteristics of schools in these states. The study's findings on the importance of trust and autonomy for secondary teachers highlight the need for leadership approaches that empower teachers to innovate and adapt their instructional methods (Smith et al., 2020).

Overall, the context of the findings underscores the importance of tailored instructional leadership approaches that address the specific needs and preferences of teachers at different educational levels and in different regions. By understanding and addressing these contextual factors, school leaders can more effectively enhance teacher self-efficacy and classroom practices, ultimately leading to improved educational outcomes for students (Karakose et al., 2024).

Implications of Findings

The findings from this study have several important implications for instructional leadership and its impact on teacher self-efficacy and classroom practices. These implications are particularly relevant for school leaders, policymakers, and educators who aim to enhance the effectiveness of teaching and learning environments.

School Leaders

The study highlights the critical role of positive reinforcement and praise in enhancing teacher self-efficacy. School leaders should prioritize recognizing and celebrating teachers' efforts and successes, as this boosts their confidence and motivation. Additionally, providing ongoing support and encouragement is essential. Leaders should create a supportive environment where teachers feel valued and backed by their principals. Constructive feedback is another key element; school leaders should offer specific, actionable feedback that helps teachers improve their instructional methods and fosters a growth mindset.

Modeling leadership and instructional methods is also significant. Principals should lead by example, demonstrating effective teaching strategies and leadership behaviors that teachers can emulate. This hands-on approach helps build strong foundations for learning and instills confidence in teachers' abilities. Trust and autonomy are particularly important for secondary school teachers. School leaders should empower these teachers by trusting them to make instructional decisions and providing them with the autonomy to implement innovative teaching practices. This trust fosters a sense of responsibility and confidence, encouraging teachers to take risks and explore new approaches to teaching.

Policymakers

The findings suggest that policies should support professional development programs that emphasize collaborative leadership and feedback mechanisms. Encouraging a culture of trust and autonomy can help secondary teachers feel more empowered and effective in their roles. Policymakers should also consider the specific

needs and preferences of teachers at different educational levels and in different regions. Tailoring policies to address these contextual factors can enhance the effectiveness of instructional leadership and improve educational outcomes.

Educators

Teachers can benefit from understanding the qualities that enhance their self-efficacy and classroom practices. By seeking out and advocating for positive reinforcement, support and encouragement, constructive feedback, and professional development opportunities, teachers can create a more effective and supportive teaching environment. Additionally, teachers should strive to build collaborative relationships with their colleagues and school leaders, fostering a culture of shared learning and continuous improvement.

The study underscores the importance of tailored instructional leadership approaches that address the specific needs and preferences of teachers. By understanding and implementing these key leadership qualities, school leaders can enhance teacher self-efficacy, improve classroom practices, and ultimately lead to better educational outcomes for students. The findings also highlight the need for ongoing research and professional development to support effective instructional leadership and foster a positive and productive teaching and learning environment.

Limitations

While this study provides valuable insights into the perceptions of teachers regarding the impact of instructional leadership qualities on their self-efficacy and classroom practices, several limitations should be acknowledged. One of the primary limitations is the relatively small sample size. Out of 221 individuals invited to

participate, only 40 chose to do so, representing an 18% response rate. This limited sample size may affect the generalizability of the findings to a broader population of teachers. Additionally, the study was conducted in only two states, Pennsylvania and Ohio, which may not reflect the perceptions of teachers in other regions. The regional focus limits the ability to generalize the findings to a national or international context.

The study relied on self-reported data, which can introduce bias. Participants may have provided socially desirable responses or may have interpreted the survey questions differently. Self-reported data can also be influenced by the participants' current mood or recent experiences, which may not accurately reflect their overall perceptions and experiences with instructional leadership. The study employed a cross-sectional design, capturing data at a single point in time. This design does not allow for the examination of changes in perceptions over time or the long-term impact of instructional leadership qualities on teacher self-efficacy and classroom practices. Longitudinal studies would be beneficial to understand how these perceptions and impacts evolve.

While the study collected some demographic information, such as years of teaching experience and current teaching level, it did not capture other potentially relevant factors, such as the specific school context, socioeconomic status of the student population, or the presence of other support systems. These factors could influence teachers' perceptions of instructional leadership and their self-efficacy. The study found that different groups of teachers (elementary versus secondary) value different instructional leadership qualities. However, the interpretation of these qualities may vary among individuals, leading to potential inconsistencies in how participants understood

and responded to the survey questions. This variation could affect the reliability of the findings.

Five participants chose not to participate in the demographic questions, and eight participants did not significantly load into one of the study's factors. The non-participation and missing data could have introduced some bias, as the perspectives of these individuals were not fully captured in the analysis. Lastly, the study focused on teachers' perceptions of instructional leadership qualities and their impact on self-efficacy and classroom practices. While perceptions are important, they may not always align with actual behaviors and outcomes. Future research could benefit from incorporating observational data or other objective measures to complement the self-reported data.

While the study provides important insights into the impact of instructional leadership on teacher self-efficacy and classroom practices, these limitations should be considered when interpreting the findings. Addressing these limitations in future research could enhance the robustness and generalizability of the results.

Future Directions

The findings from this study provide a foundation for several avenues of future research to further explore the impact of instructional leadership on teacher self-efficacy and classroom practices. Given the limitations and insights gained, future studies can build on this work in several keyways.

First, expanding the sample size and geographic scope of the research would enhance the generalizability of the findings. Future studies should aim to include a larger and more diverse sample of teachers from various states and regions. This broader scope would allow for comparisons across different educational contexts and provide a more

comprehensive understanding of how instructional leadership qualities impact teachers in diverse settings.

Longitudinal studies are also recommended to examine how perceptions of instructional leadership qualities and their impact on teacher self-efficacy and classroom practices evolve over time. Such studies would provide valuable insights into the long-term effects of instructional leadership and help identify which qualities have sustained impacts on teacher development and student outcomes.

Future research should also explore the role of contextual factors, such as school culture, socioeconomic status of the student population, and the presence of other support systems, in shaping teachers' perceptions of instructional leadership. Understanding these contextual influences would help tailor leadership approaches to better meet the needs of teachers in different environments.

Finally, future studies should consider the impact of professional development programs focused on enhancing instructional leadership qualities. Evaluating the effectiveness of such programs would provide evidence-based recommendations for school leaders and policymakers on how to best support teachers' professional growth and development. Central office staff can play a critical role in this process by using data from these studies to guide instructional leaders in identifying targeted areas for growth. By aligning professional development opportunities with district priorities and instructional needs, central office personnel can ensure that resources are allocated effectively, fostering a culture of continuous improvement and instructional excellence across schools.

Conclusion

This study aimed to investigate the perceptions of teachers regarding the impact of instructional leadership qualities on their self-efficacy and classroom practices. By examining the perspectives of state-certified teachers in Pennsylvania and Ohio, the research sought to identify the specific instructional leadership qualities that teachers perceive as most important, the differences in perceptions between elementary and secondary school teachers, and the qualities that significantly impact teachers' professional growth and development.

The findings revealed that positive reinforcement and praise, support and encouragement, constructive feedback, modeling leadership and instructional methods, trust and autonomy, and collaborative leadership are the most significant instructional leadership qualities that enhance teacher self-efficacy and classroom practices. These qualities were highlighted across the five factors identified in the study: *Sculptors of Curiosity and Creativity*, *The Orchestrators of Harmony and Growth*, *Champions of Potential and Possibility*, *Architects of Confidence and Curiosity*, and *Masterminds of Adaptability and Structure*.

Elementary and secondary school teachers exhibited different preferences for instructional leadership qualities. Elementary teachers emphasized the importance of supportive and collaborative leadership, while secondary teachers valued trust and autonomy. These differences underscore the need for tailored leadership approaches that address the specific needs of teachers at different educational levels.

The study also highlighted the importance of professional development opportunities and the role of instructional leaders in providing clear guidance, support,

and constructive feedback (Zuckerman & O'Shea, 2020). These elements are crucial for fostering a growth mindset and encouraging continuous improvement in teaching practices (Özdemir et al., 2020).

Despite the valuable insights gained, the study has several limitations. The relatively small sample size and regional focus limit the generalizability of the findings. The reliance on self-reported data and the cross-sectional design also introduces potential biases and limit the ability to examine long-term impacts. Future research should aim to address these limitations by expanding the sample size, incorporating longitudinal methods, and exploring the role of contextual factors in shaping teachers' perceptions.

The implications of the findings are significant for school leaders, policymakers, and educators. By understanding and implementing the key instructional leadership qualities identified in this study, school leaders can enhance teacher self-efficacy, improve classroom practices, and ultimately lead to better educational outcomes for students. Policymakers should support professional development programs that emphasize collaborative leadership and feedback mechanisms, while educators can benefit from advocating for and seeking out supportive and constructive leadership (Sanchez et al., 2022).

This study underscores the critical role of instructional leadership in shaping teacher self-efficacy and classroom practices. By addressing the specific needs and preferences of teachers, school leaders can create a more supportive and effective teaching environment, fostering professional growth and development and enhancing the overall quality of education.

References

Admiraal, W., Schenke, W., De Jong, L., Emmelot, Y., & Sligte, H. (2021). Schools as professional learning communities: What can schools do to support professional development of their teachers? *Professional Development in Education*, *47*(4), 684-698. https://doi.org/10.1080/19415257.2019.1665573

Alexander, E. (2016). *Teacher evaluation: The relationship between performance evaluation ratings and student achievement* (Publication No.10162752). [Doctoral dissertation, Liberty University]. ProQuest Dissertations Publishing. https://digitalcommons.liberty.edu/doctoral/1271

Al Maktoum, S. B., & Al Kaabi, A. M. (2024). Exploring teachers' experiences within the teacher evaluation process: A qualitative multi-case study. *Cogent Education*, *11*(1), 2287931. https://doi.org/10.1080/2331186X.2023.2287931

Ay, C., & Boz, A. (2022). Does instructional leadership make a difference? Investigating the relationship between instructional leadership and teacher autonomy. *Cukurova University Faculty of Education Journal*, *51*(3), 1518-1551. https://doi.org/10.14812/cufej.939224

Amrein-Beardsley, A. (2008). Methodological concerns about the education value-added assessment system. *Educational Researcher, 37*(2), 65-75. https://doi.org/10.3102/0013189X08316420

Ashdown, L. (2014). *Performance management*. Kogan Page Publishers.

Baker, B. D., Oluwole, J. O., & Green, P. C. (2013). The legal consequences of mandating high stakes decisions based on low quality information: Teacher evaluation in the Race-to-the Top era. *Education Policy Analysis Archives, 21*(5).

https://doi.org/10.14507/epaa.v21n5.2013

Balcı, S., & Özkan, H. (2023). Development, implementation, and evaluation of an effective feedback program for school principals to improve in-class teaching. *Shanlax International Journal of Education, 11*(S1), 242–258. https://doi.org/10.34293/ education.v11iS1-July.6283

Ball, S. J. (2003). The teacher's soul and the terrors of performativity. *Journal of Education Policy, 18*(2), 215–228. https://doi.org/10.1080/0268093022000043065

Balyer, A., & Özcan, K. (2020). School principals' instructional feedback to teachers: Teachers' views. *International Journal of Curriculum and Instruction*, *12*, 295–312. http://ijci.wcci international.org/index.php/IJCI/issue/view/12

Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.

Basilio, M. B. (2021). Instructional supervision and assessment in the 21st-century and beyond. *Institutional Multidisciplinary Research and Development Journal*, *4*. https://doi.org/10.13140/RG.2.2.24038.09280

Beauchamp, M. R., Crawford, K. L., & Jackson, B. (2019). Social cognitive theory and physical activity: Mechanisms of behavior change, critique, and legacy. *Psychology of Sport and Exercise*, *42*, 110-117. https://doi.org/10.1016/j.psychsport.2018.11.009

Benoliel, P. (2020). Principals' boundary activities and school violence: The mediating role of school management teams. *Educational Management Administration & Leadership, 48*(2), 286–304. https://doi.org/10.1177/1741143218802592

Bellibas, M. S., & Liu, Y. (2017). Multilevel analysis of the relationship between

principals' perceived practices of instructional leadership and teachers' self-efficacy perceptions. *Journal of Educational Administration*, *55*(1), 49-69. https://doi.org/10.1108/JEA-12-2015-0116

Bellibaş, M. Ş., Gümüş, S., & Liu, Y. (2021). Does school leadership matter for teachers' classroom practice? The influence of instructional leadership and distributed leadership on instructional quality. *School effectiveness and school improvement*, *32*(3), 387-412. https://doi.org/10.1080/09243453.2020.1858119

Blase, J., & Blase, J. (2004). *Handbook of instructional leadership: How successful principals promote teaching and learning*. Corwin Press.

Boyce, J., & Bowers, A. J. (2018). Toward an evolving conceptualization of instructional leadership as leadership for learning. *Journal of Educational Administration, 56*(2), 161–182.

Burić, I., & Kim, L. E. (2020). Teacher self-efficacy, instructional quality, and student motivational beliefs: An analysis using multilevel structural equation modeling. *Learning and instruction*, *66*, 101302. https://doi.org/10.1016/j.learninstruc.2019.101302

Bush, T. (2020). *Theories of educational leadership and management*. Sage.

Brown, S. R. (1980). *Political subjectivity: Applications of Q methodology in political science*. Yale University Press.

Carlson, D. (2018). Testing and accountability: What have we learned and where do we go. *Bush-Obama school reform: Lessons learned*, 13-31.

Christiansen, L.B., Clausen, K., Smedegaard, S., & Skovgaard, T. (2021). A qualitative

exploration of implementation, adaptation, and sustainability of a school-based physical activity intervention: Move for well-being in school. *Sage Open, 11*(1), 1–12. https://doi.org/10.1177/21582440211000053

Clark, S., & Duggins, A. (2016). *Using quality feedback to guide professional learning*. Corwin.

Clarke, M. (2013). Terror/enjoyment: Performativity, resistance and the teacher's psyche. *London Review of Education, 11*(3), 229-238. https://doi.org/10.1080/14748460.2013.840983

Cochran-Smith, M., & Lytle, S. L. (2006). Troubling images of teaching in No Child Left Behind. *Harvard Educational Review, 76*(4), 668-697. https://doi.org/10.17763/haer.76.4.56v8881368215714

Cohen, J., & Goldhaber, D. (2016). Building a more complete understanding of teacher evaluation using classroom observations. *Educational Researcher, 45*(6), 378–387. https://doi.org/10.3102/0013189X16659442

Creswell, J. W., & Plano, V. L. (2018). In *Designing and conducting mixed methods research* (3rd ed.) (pp. 226-239). Sage.

Cross, R. (2005). Exploring attitudes: The case for Q-methodology. *Health Education Research, 20*(2), 206-213. https://doi.org/10.1093/her/cyg121

Daniëls, E., Hondeghem, A., & Dochy, F. (2019). A review on leadership and leadership development in educational settings. *Educational research review*, *27*, 110-125. https://doi.org/10.1016/j.edurev.2019.02.003

Darling-Hammond, L. (2018). From "separate but equal" to "No Child Left Behind": The

collision of new standards and old inequalities. In *Thinking about schools* (pp. 419-437). Routledge.

Darling-Hammond, L., Bae, S., Cook-Harvey, C. M., Lam, L., Mercer, C., Podolsky, A., & Stosich, E. L. (2016, April). Pathways to new accountability through the Every Student Succeeds Act. *Learning Policy Institute*. https://doi.org/10.54300/966.414

Darling-Hammond, L., & Cook-Harvey, C. M. (2018). Educating the whole child: Improving school climate to support student success. *Learning Policy Institute*.

Darling-Hammond, L., & DePaoli, J. (2020). Why school climate matters and what can be done to improve it. *State Education Standard*, *20*(2), 7.

Day, C. (2000). Teachers in the twenty-first century: Time to renew the vision. *Teachers and teaching*, *6*(1), 101-115.

Day, C., & Sammons, P. (2016). *Successful school leadership*. Education Development Trust. https://files.eric.ed.gov/fulltext/ED565740.pdf

Day, C., Sammons, P., & Gorgen, K. (2020). *Successful school leadership*. Education Development Trust.

Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational Administration Quarterly*, *52*(2), 221-258. https://doi.org/10.1177/0013161X15616863

Doğan, S., Yıldız, S., & Katıtaş, S. (2023). Two sides of the coin: Comparison of Administrators and teachers' perspectives on classroom supervision. *International Innovative Education Researcher, 3*(2), 1-31. http://dx.xoi.org/10.29228/iedres.69245

Donaldson, M. L. (2016). Teacher evaluation reform: Focus, feedback, and fear. *Educational Leadership*, *73*(8), 72–76.

Dragoset, L., Thomas, J., Herrmann, M., Deke, J., James-Burdumy, S., Graczewski, C., Boyle, A., Tanenbaum, C., Giffin, J., Upton, R., Wei, T. E. (2016). Race to the Top: Implementation and relationship to student outcomes. *U.S. Department of Education.*

DuFour, R., Reeves, D., & DuFour, R. (2018). *Responding to the Every Student Succeeds Act with the PLC at work process*. Solution Tree Press.

Englund, H., & Gerdin, J. (2019). Performative technologies and teacher subjectivities: A conceptual framework. *British Educational Research Journal, 45*(3), 502-517. https://doi.org/10.1002/berj.3510

Fios, F., Marzuki, M., Ibadurrahman, I., Renyaan, A. S., & Telaumbanua, E. (2024). Innovative leadership strategies for school principals: Building a holistic educational environment focused on student achievement in the era of technology and globalization. *International Journal of Teaching and Learning*, *2*(1), 266-281. https://injotel.org/index.php/12/article/view/64/92

Ford, T. G., & Hewitt, K. (2020). Better integrating summative and formative goals in the Design of next generation teacher evaluation systems. *Education policy analysis archives*, *28*, 63-63. https://doi.org/10.14507/epaa.28.5024

Ford, T. G., Van Sickle, M. E., Clark, L. V., Fazio-Brunson, M., & Schween, D. C. (2017). Teacher self-efficacy, professional commitment, and high-stakes teacher evaluation policy in Louisiana. *Educational Policy, 31*(2), 202-248. https://doi.org/10.1177/0895904815586855

Forman, M. L., Stosich, E. L., & Bocala, C. (2021). *The internal coherence framework: Creating the conditions for continuous improvement in schools*. Harvard Education Press.

Fuentes, S. Q., & Jimerson, J. B. (2020). Role enactment and types of feedback: The influence of leadership content knowledge on instructional leadership efforts. *Journal of Educational Supervision*, *3*(2), 6. . https://doi.org/10.31045/jes.3.2.2

Fullan, M. (2015). *The new meaning of educational change*. Teachers College Press.

Gamson, D. A., & Hodge, E. M. (2016). Education research and the shifting landscape of the American school district, 1816 to 2016. *Review of Research in Education*, *40*, 216–249. http://www.jstor.org/stable/44668623

Garber, P. (2007). *50 activities for employee engagement*. Human Resource Development.

Garet, M.S., Wayne, A.J., Brown, S., Rickles, J., Song, M., & Manzeske, D. (2017). The impact of providing performance feedback to teachers and principals. *U.S. Department of Education.*

Galindo, C., Stein, K., & Schaffer, E. (2016). A case study of a turnaround high school: An examination of the Maryland State Department of Education Breakthrough Center intervention. *Journal of Education for Students Placed at Risk (JESPAR)*, *21*(4), 208-229. https://doi.org/10.1080/10824669.2016.1220307

Goe, L., Wylie, E. C., Bosso, D., & Olson, D. (2017). State of the states' teacher evaluation and support systems: A perspective from exemplary teachers. *ETS Research Report Series*, *2017*(1), 1–27.

https://doi.org/10.1002/ets2.12156

Goddard, R. D., Bailes, L. P., & Kim, M. (2021). Principal efficacy beliefs for Instructional leadership and their relation to teachers' sense of collective efficacy and student achievement. *Leadership and Policy in Schools*, *20*(3), 472-493. https://doi.org/10.1080/15700763.2019.1696369

Good, M. W. (2023). "Who are these for? Is this for the teacher?": Understandings of expertise and evaluation in the era of ESSA. *Education Policy Analysis Archives, 31*(55). https://doi.org/10.14507/epaa.31.7807

Green, T.L. (2018). School as community, community as school: Examining principal leadership for urban school reform and community development. *Education and Urban Society, 50*(2), 111-135.

Gross, B., & Hill, P. T. (2016). The state role in K-12 education: From issuing mandates to experimentation. *Harv. L. & Pol'y Rev.*, *10*, 299.

Gill, B., & Lerner, J. (2017). *Here's what works for teacher accountability*. Education Week. https://www.edweek.org/teaching-learning/opinion-heres-what-works-for-teacher-accountability/2017/01

Habibi, A., Mukminin, A., Najwan, J., Sofwan, M., Haswindy, S., Marzulina, L., Sirozi, M, & Sofwan, M. (2018). Investigating EFL classroom management in pesantren: A case study. *Qualitative Report, 23*(9), 2105–2123. https://doi.org/10.46743/2160-3715/2018.3117

Hajovsky, D. B., Chesnut, S. R., & Jensen, K. M. (2020). The role of teachers' self-efficacy beliefs in the development of teacher-student relationships. *Journal of School Psychology*, *82*, 141-158. https://doi.org/10.1016/j.jsp.2020.09.001

Hall, J. B. (2017). Examining school inspectors and education directors within the Organization of school inspection policy: Perceptions and views. *Scandinavian Journal of Educational Research, 61*(1), 112-126. https://doi.org/10.1080/00313831.2015.1120234

Hallinger, P., Gümüş, S., & Bellibaş, M. Ş. (2020). 'Are principals instructional leaders yet?' A science map of the knowledge base on instructional leadership, 1940–2018. *Scientometrics*, *122*(3), 1629-1650.

Hallinger, P., & Murphy, J. (1985). Assessing the instructional management behavior of principals. *The Elementary School Journal*, *86*(2), 217-247. https://doi.org/10.1086/461445

Hallinger, P. (2015). The evolution of instructional leadership. *Assessing Instructional Leadership with the Principal Instructional Management Rating Scale*, 1-23. https://doi.org/10.1007/978-3-319-15533-3_1

Hallinger, P., Heck, R. H., & Murphy, J. (2014). Teacher evaluation and school improvement: An analysis of the evidence. *Educational Assessment, Evaluation and Accountability, 26*, 5-18. https://doi.org/10.1007/s11092-013-9179-5

Hallinger, P., Hosseingholizadeh, R., Hashemi, N., & Kouhsari, M. (2018). Do beliefs make a difference? Exploring how principal self-efficacy and instructional leadership impact teacher efficacy and commitment in Iran. *Educational Management Administration & Leadership*, *46*(5), 800-819. https://doi.org/10.1177/1741143217700283

Hattie, J. (2017). *Visible learning: 250+ influences on student achievement*. Visible

Learning. https://visible-learning.org/hattie-ranking-influences-effect-sizes-learning-achievement/

Herman, R., Gates, S. M., Arifkhanova, A., Bega, A., Chavez-Herreias, E. R., Han, E., Harris, M., Migacheva, K., Ross, R., Leschitz, J. T, & Wrabel, S. L. (2017). *School leadership interventions under the Every Student Succeeds Act: Evidence review.* Rand Corporation.

Herrington, N., & Coogan, J. (2011). Q methodology: An overview. *Research in Teacher Education*, *1*(2), 24-28.

Hitt, D. H., & Tucker, P. D. (2016). Systematic review of key leader practices found to influence student achievement: A unified framework. *Review of Educational Research*, *86*(2), 531–569. https://doi.org/10.3102/0034654315614911

Holloway, J. (2021). *Metrics, standards, and alignment in teacher policy: Critiquing fundamentalism and imagining pluralism*. Springer Singapore. https://doi.org/10.1007/978-981-33-4814-1

Holloway, J., & Brass, J. (2018). Making accountable teachers: The terrors and pleasures Of performativity. *Journal of Education Policy, 33*(3), 361–382. https://doiorg/10.1080/02680939.2017.1372636

Howell, W. G. (2015). Results of President Obama's Race to the Top. *Education Next*, *15*(4), 58-67.

Jeffrey, B. (2002). Performativity and primary teachers relations. *Journal of Education Policy, 17*(5), 531- 546. https://doi.org/10.1080/02680930210158302

Jerrim, J., Sims, S., & Oliver, M. (2023). Teacher self-efficacy and pupil achievement: much ado about nothing? International evidence from TIMSS. *Teachers and*

Teaching, *29*(2), 220-240. https://doi.org/10.1080/13540602.2022.2159365

Johnson, M. (2016). *The Every Student Succeeds Act: Opportunities and responsibilities*. The Hunt Institute. https://files.eric.ed.gov/fulltext/ED569954.pdf

Karakose, T., Kardas, A., Kanadlı, S., Tülübaş, T., & Yildirim, B. (2024). How collective efficacy mediates the association between principal instructional leadership and teacher self-efficacy: Findings from a meta-analytic structural equation modeling (MASEM) study. *Behavioral Sciences (2076-328X), 14*(2), 85. https://doi.org/10.3390/bs14020085

Karakose, T., Polat, H., Yirci, R., Tülüba¸s, T., Papadakis, S., Ozdemir, T.Y., & Demirkol, M. (2023). Assessment of the relationships between prospective mathematics teachers' classroom management anxiety, academic self-efficacy beliefs, academic motivation and attitudes toward the teaching profession using structural equation modeling. *Mathematics 2023, 11*, 449. https://doi.org/10.3390/math11020449

Karbasi, S., & Samani, S. (2016). Psychometric properties of teacher self efficacy scale. *Procedia. Soc. Behav. Sci. 217*, 618–621. https://doi.org/10.1016/j.sbspro.2016.02.069

Kilag, O. K. T., & Sasan, J. M. (2023). Unpacking the role of instructional leadership in teacher professional development. *Advanced Qualitative Research*, *1*(1), 63-73. https://doi.org/10.31098/aqr.v1i1.1380

Kilag, O. K. T., Uy, F. T., Abendan, C. F. K., & Malbas, M. H. (2023). Teaching leadership: An examination of best practices for leadership educators. *Science and Education*, *4*(7), 430-445.

Klassen, R. M., & Tze, V. M. (2014). Teachers' self-efficacy, personality, and teaching effectiveness: A meta-analysis. *Educational Research Review, 12*,59–76. https://doi.org/10.1016/j.edurev.2014.06.001

Klein, A. (2016, March 31). *The Every Student Succeeds Act: An ESSA overview*. Education Week. http://www.edweek.org/ew/issues/every-student-succeeds-act/

Kraft, M. A., & Gilmour, A. F. (2016). Can principals promote teacher development as evaluators? A case study of principals' views and experiences. *Educational Administration Quarterly, 52*(5), 711–753. https://doi.org/10.1177/0013161X16653445

Kouzes, J. M., & Posner, B. Z. (2017). *A coach's guide to developing exemplary leaders: Making the most of the leadership challenge and the leadership practices inventory (LPI)*. John Wiley & Sons.

Lauermann, F., & Berger, J. L. (2021). Linking teacher self-efficacy and responsibility With teachers' self-reported and student-reported motivating styles and student engagement. *Learning and Instruction*, *76*, 101441. https://doi.org/10.1016/j.learninstruc.2020.101441

Lavigne, A. L. (2014). Exploring the intended and unintended consequences of high-Stakes teacher evaluation on schools, teachers, and students. *Teachers College Record, 116*(1), 1-29. https://doi.org/10.1177/016146811411600103

Lavigne, A. L., & Good, T. L. (2015). *Improving teaching through observation and feedback: Beyond state and federal mandates*. Routledge.

Lazarides, R., & Warner, L. M. (2020). Teacher self-efficacy. In *Oxford research*

Encyclopedia of education. Oxford University Press.

Lazarides, R., Watt, H. M., & Richardson, P. W. (2020). Teachers' classroom management self-efficacy, perceived classroom management and teaching contexts from beginning until mid-career. *Learning and Instruction*, *69*, 101346. https://doi.org/10.1016/j.learninstruc.2020.101346

Leithwood, K. (2021). A review of evidence about equitable school leadership. *Education Sciences*, *11*(8), 377. https://files.eric.ed.gov/fulltext/EJ1307355.pdf

Leithwood, K., Jantzi, D., & Steinbach, R. (2021). Leadership and other conditions which foster organizational learning in schools. In *Organizational learning in schools* (pp. 67-90). Taylor & Francis.

Leithwood, K., Louis, K. S., Anderson, S., & Wahlstorm, K. (2004). *Review of research: How leadership influences student learning.* Wallace Foundation. https://www.wallacefoundation.org/knowledge-center/Documents/How-Leadership-Influences-Student-Learning.pdf

Li, S. (2023). The effect of teacher self-efficacy, teacher resilience, and emotion regulation on teacher burnout: a mediation model. *Frontiers in Psychology*, *14*, 1185079. https://doi/org/10.3389/fpsyg.2023.1185079

Lillejord, S., & Børte, K. (2020). Trapped between accountability and professional learning? School leaders and teacher evaluation. *Professional development in education*, *46*(2), 274-291. https://doi.org/10.1080/19415257.2019.1585384

Liu, Y., Bellibaş, M. Ş., & Gümüş, S. (2021). The effect of instructional leadership and Distributed leadership on teacher self-efficacy and job satisfaction: Mediating

roles of supportive school culture and teacher collaboration. *Educational Management Administration & Leadership*, *49*(3), 430-453.

Ma, K., Luo, J., Cavanagh, M., Dong, J., & Sun, M. (2023). Measuring teacher self-efficacy: Validating a new comprehensive scale among Chinese pre-service teachers. *Frontiers in Psychology*, *13*, 1063830. https://doi.org/10.3389/fpsyg.2022.1063830

Ma, X., & Marion, R. (2021). Exploring how instructional leadership affects teacher efficacy: A multilevel analysis. *Educational Management Administration & Leadership*, *49*(1), 188-207. https://doi.org/10.1177/1741143219888742

Marzano, R. J., Frontier, T., & Livingston, D. (2011). *Effective supervision: Supporting the art and science of teaching.* ASCD.

Maurer, R. (2011). *Feedback toolkit: 16 tools for better communication in the workplace*. CRC Press.

Mbua, E. M. (2023). Principal leadership: Raising the achievement of all learners in inclusive education. *American Journal of Education and Practice*, *7*(1), 1-25. https://doi.org/10.47672/ajep.1313

Meng, S. (2023). Enhancing teaching and learning: Aligning instructional practices with education quality standards. *Research and Advances in Education*, *2*(7), 17-31.

Meyer, A., Richter, D., & Hartung-Beck, V. (2022). The relationship between principal leadership and teacher collaboration: Investigating the mediating effect of teachers' collective efficacy. *Educational management administration &*

leadership, *50*(4), 593-612. https://doi.org/10.1177/17411432209456

Mihaly, K., Schwartz, H. L., Opper, I. M., Grimm, G., Rodriguez, L., & Mariano, L. T. (2018). *Impact of a checklist on principal–teacher feedback conferences following classroom observations* (REL 2018–285). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southwest. http://ies.ed.gov/ncee/edlabs.

Mombourquette, C. (2017). The role of vision in effective school leadership. *International Studies in Educational Administration (Commonwealth Council for Educational Administration & Management (CCEAM))*, *45*(1).

Montgomery, D. (2012). *Helping teachers develop through classroom observation*. Routledge.

Moss, C. M., & Brookhart, S. M. (2019). *Advancing formative assessment in every classroom: A guide for instructional leaders*. ASCD.

Murphy, J., Louis, K.S., & Smylie, M. (2017). Positive school leadership: How the Professional standards for educational leaders can be brought to life. *Phi Delta Kappan, 99*(1), 21–24

Naz, F., & Rashid, S. (2021). Effective instructional leadership can enhance teachers' Motivation and improve students' learning outcomes. *SJESR*, *4*(1), 477-485. https://doi.org/10.36902/sjesr-vol4-iss1-2021(477-485)

Neumerski, C. M. (2013). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership, and where

should we go from here? *Educational Administration Quarterly*, *49*(2), 310–347. https://doi.org/10.1177/0013161X12456700

Oliva, P. F., & Pawlas, G. E. (2008). *Supervision for today's schools*. John Wiley & Sons.

Özdemir, G., Sahin, S., & Öztürk, N. (2020). Teachers' self-efficacy perceptions in terms of school principal's instructional leadership behaviours. *International Journal of Progressive Education*, *16*(1), 25-40. https://files.eric.ed.gov/fulltext/EJ1244970.pdf

Patton, M. Q. (2015). *Qualitative evaluation and research methods*. Sage.

Perera, H. N., Calkins, C., & Part, R. (2019). Teacher self-efficacy profiles: Determinants, outcomes, and generalizability across teaching level. *Contemporary Educational Psychology, 58*, 186–203. https://doi-org.eps.cc.ysu.edu/10.1016/j.cedpsych.2019.02.006

Poulou, M. S. (2017). An examination of the relationship among teachers' perceptions of social emotional learning, teaching efficacy, teacher-student interactions, and students' behavioral difficulties. *International Journal of School & Educational Psychology*, *5*(2), 126-136. https://doi/org/10.1080/21683603.2016.1203851

QMethod Software. (2024). *Data analysis*. https://qmethodsoftware.com/study- dashboard/

Rogers, W. S. (1995). Q methodology. In J. A. Smith, R. Harre, & L. V. Langenhove (Eds.), *Rethinking methods in psychology* (pp. 178–192). Sage.

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of

reinforcement. *Psychological monographs: General and applied*, *80*(1), 1. https://doi.org/10.1037/h0092976

Sanchez, J.E., Paul, J.M., & Thornton, B.W. (2022). Relationships among teachers' perceptions of principal leadership and teachers' perceptions of school climate in the high school setting, International Journal of Leadership in Education, 25:6, 855-875. https://doi.org/10.1080/13603124.2019.1708471

Schipper, T., Goei, S. L., de Vries, S., & van Veen, K. (2018). Developing teachers' self-Efficacy and adaptive teaching behaviour through lesson study. *International journal of educational research*, *88*, 109-120. https://doi.org/10.1016/j.ijer.2018.01.011Get rights and content

Schunk, D. H., & DiBenedetto, M. K. (2016). Self-efficacy theory in education. In *Handbook of motivation at school* (pp. 34-54). Routledge.

Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary educational psychology*, *60*, 101832. https://doi.org/10.1016/j.cedpsych.2019.101832

Sebastian, J., & Allensworth, E. (2012). The influence of principal leadership on classroom instruction and student learning: A study of mediated pathways to learning. *Educational Administration Quarterly, 48*, 626-663. https://doi/org/10.1177/0013161X11436273

Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of teacher self-efficacy and relations With strain factors, perceived collective teacher efficacy, and teacher burnout. *Journal of educational psychology*, *99*(3), 611. https://doi/org/10.1037/0022-0663.99.3.611

Smith, E. C., Starratt, G. K., McCrink, C. L., & Whitford, H. (2020). Teacher evaluation feedback and instructional practice self-efficacy in secondary School teachers. *Educational Administration Quarterly, 56*(4), 671–701. https://doi.org/10.1177/0013161X19888568

Stecher, B., Garet, M. S., Hamilton, L. S., Steiner, E. D., Robyn, A., Porier, J., Holzman, D., Fulbeck, E. S., Chambers, J., and Reyes, I. B. (2016). *Improving teaching effectiveness: Implementation*. RAND.

Steinberg, M. P., & Kraft, M. A. (2017). The sensitivity of teacher performance ratings to The design of teacher evaluation systems. *Educational Researcher*, *46*(7), 378-396. https://doi.org/10.3102/0013189X177267

Steinberg, M., and Sartain, L. (2015). Does teacher evaluation improve school performance? Experimental evidence from Chicago's excellence in teaching project. *Education Finance and Policy, 10*(4), 1–38. https://doi.org/10.1162/EDFP_a_00173

Stephenson, W. (1953). *The study of behavior: Q technique and its methodology*. University of Chicago Press.

Stevenson, M., Hedberg, J. G., O'Sullivan, K. A., & Howe, C. (2016). Leading learning: The role of school leaders in supporting continuous professional development. *Professional development in education*, *42*(5), 818-835. https://doi/org/10.1080/19415257.2015.1114507

Stronge, J. H. (2010). *Effective teachers=student achievement: What the research says*. Eye on Education.

Stronge, J. H., & Xu, X. (2021). *Qualities of effective principals*. ASCD.

Stringer, P., & Hourani, R. B. (2016). Transformation of roles and responsibilities of Principals in times of change. *Educational Management Administration & Leadership*, *44*(2), 224-246. https://doi.org/10.1177/1741143214549971

Sun, J., Johnson, B., & Przybylski, R. (2016). Leading with data: An increasingly important feature of school leadership. *International Studies in Educational Administration [Commonwealth Council for Educational Administration & Management (CCEAM)], 44*(3), 93–128.

Sullivan, R. L., & Wircenski, J. L. (1988). Clinical supervision: The role of the principal. *NASSP Bulletin*, 34-39. https://doi.org/10.1177/019263658807251006

Taylor, E.S., and Tyler, J.H. (2012). The effect of evaluation on teacher performance. *American Economic Review, 102*(7): 3628–3651.

Thessin, R. A. (2019). Establishing productive principal/principal supervisor partnerships for instructional leadership. *Journal of Educational Administration*, *57*(5), 463-483. https://scholar.harvard.edu/files/evaluation-performance-tt.pdf

Thornton, B., Zunino, B., & Beattie, J. (2020). Moving the dial: Improving teacher efficacy to promote instructional change. *Education*, *140*(4), 171-180.

Tschannen-Moran, M., & Gareis, C. R. (2015). Faculty trust in the principal: An essential ingredient in high-performing schools. *Journal of Educational Administration*, *53*(1), 66-92. https://doi/org/10.1108/JEA-02-2014-0024

Tschannen-Moran, M., & Hoy, W. A. (2001). Teacher efficacy: Capturing an elusive construct. *Teach. Teach. Educ., 17*, 783–805. https://doi.org/10.1016/S0742-051X(01)00036-1

Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning

And measure. *Review of educational research*, *68*(2), 202-248. https://doi.org/10.3102/00346543068002202

Udoudom, U. I., Aondowase, S., & Igiri, A. (2023). Impact of education and communication on behaviour change. *Journal of Language, Literature, Social and Cultural Studies*, *1*(3), 271-280. https://doi/org/10.58881/jllscs.v1i3.120

Valenta, A. & Ulrike, W. (1997). Q-methodology: Definition and application in health care informatics. *Journal of the American Medical Informatics Association, 4*(6), 501-510. https://doi/org/10.1136/jamia.1997.0040501

Verhelst, D., Vanhoof, J., & Van Petegem, P. (2021). School effectiveness for education for sustainable development (ESD): What characterizes an ESD-effective school organization? *Educational Management Administration & Leadership, 51*(2), 502–525. https://doi.org/10.1177/1741143220985196

Viteritti, J. P. (2013). The federal role in school reform: Obama's Race to the Top. *Notre Dame Law Review, 87*(5), 2087-2122. https://scholarship.law.nd.edu/ndlr/vol87/iss5/10

Wahlstrom, K. L., & Louis, K. S. (2008). How teachers experience principal leadership: The roles of professional community, trust, efficacy, and shared responsibility. *Educational administration quarterly*, *44*(4), 458-495. https://doi.org/10.1177/0013161X08321502

Watts, S., & Stenner, P. (2012). *Doing Q methodological research: Theory, method & interpretation.* Sage.

Warring, D. F. (2015). Teacher evaluations: Use or misuse? *Universal Journal of*

Educational Research, 3(10), 703–709. https://doi/org/10.13189/ujer.2015.031007

Webler, T., Danielson, S., & Tuler, S. (2009). Using Q method to reveal social perspectives in environmental research. *Social and Environmental Research Institute*. http://www.seri-us.org/sites/default/files/Qprimer.pdf

Weixler, L.B., Lincove, J.A., & Gerry, A. (2019). The provision of public Pre-K in the Absence of centralized school management. *American Educational Research Journal, 56*(6), 2439–2473. https://doi.org/10.3102/0002831219845 62

Wilkins, C. (2011). Professionalism and the post-performative teacher: New teachers reflect on autonomy and accountability in the English school system. *Professional Development in Education, 37*(3), 389-409. https://doi-org/10.1080/19415257.2010.514204

Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers' engagement with inclusive practices. *Teaching and teacher education*, *117*, 103802. https://doi.org/10.1016/j.tate.2022.103802

Woodcock, S., & Tournaki, N. (2023). Bandura's Triadic Reciprocal Determinism model and teacher self-efficacy scales: A revisit. *Teacher Development*, *27*(1), 75-91. https://doi.org/10.1080/13664530.2022.2150285

Wu, T. T., Silitonga, L. M., Dharmawan, B., & Murti, A. T. (2024). Empowering students to thrive: The role of CT and self-efficacy in building academic resilience. *Journal of Educational Computing Research, 62*(3). https://doi.org/10.1177/07356331231225468

Yilmaz, A. (2021). The effect of technology integration in education on prospective teachers' critical and creative thinking, multidimensional 21st century skills and academic achievements. *Participatory Educational Research*, *8*(2), 163-199. https://doi.org/10.17275/per.21.35.8.2

Yukl, G., Mahsud, R., Prussia, G., & Hassan, S. (2019). Effectiveness of broad and specific leadership behaviors. *Personnel Review*, *48*(3), 774-783. https://doi/org/10.1108/PR-03-2018-0100

Zabala, A., Sandbrook, C., & Mukherjee, N. (2018). When and how to use Q-methodology to understand perspectives in conservation research. *Conservation Biology, 32*(5), 1185-1194. https://doi.org/10.1111/cobi.13123

Zee, M., & Koomen, H. M. (2016). Teacher self-efficacy and its effects on classroom processes, student academic adjustment, and teacher well-being: A synthesis of 40 years of research. *Review of Educational Research, 86*(4), 981–1015. https://doi.org/10.3102/0034654315626801

Zepeda, S. J. (2017). *Instructional supervision: Applying tools and concepts*. Taylor & Francis.

Zuckerman, S. J., & O'Shea, C. (2020). Principals' schema: Leadership philosophies and instructional leadership. *Journal of School Leadership, 31*(4), 274-296. https://doi.org/10.1177/1052684620966063

Appendix A

Jul 11, 2024 9:54:06 AM EDT

Karen Larwin
Teacher Ed and Leadership St

Re: Exempt - Initial - 2025-5 Teacher Perceptions of Instructional Leadership Qualities that Impact Classroom Instructional Practices and Teacher Self-Efficacy

Dear Dr. Karen Larwin:

Youngstown State University Human Subjects Review Board has rendered the decision below for Teacher Perceptions of Instructional Leadership Qualities that Impact Classroom Instructional Practices and Teacher Self-Efficacy

Decision: Exempt

Selected Category: Category 1. Research, conducted in established or commonly accepted educational settings, that specifically involves normal educational practices that are not likely to adversely impact students' opportunity to learn required educational content or the assessment of educators who provide instruction. This includes most research on regular and special education instructional strategies, and research on the effectiveness of or the comparison among instructional techniques, curricula, or classroom management methods.
Category 3.(i)(C). Research involving benign behavioral interventions in conjunction with the collection of information from an adult subject through verbal or written responses (including data entry) or audiovisual recording if the subject prospectively agrees to the intervention and information collection.
The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by §46.111(a)(7).

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly
reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,
Youngstown State University Human Subjects Review Board