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By

Orquídea Largo

A Dissertation Submitted to the

Graduate School

In Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF EDUCATION

Gladys L. Benerd School of Education Educational and Organizational Leadership

University of the Pacific Sacramento, California

Ву

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DEDICACIÓN/DEDICATION

La labor de este manuscrito se lo quiero dedicar a mi padre, José Bonifacio Garcia Plascencia, quien comenzó esta marcha conmigo y ahora desde la Gloria de Dios me acompaña.

"Eras el aire que le daba vuelo a mis alas. Tu ímpetu por la superación de tu familia fue el fuego que impulso esta travesía. Te lanzaste conmigo en este camino de incertidumbre, de retos - sin comentario, sin halagos. Tu amor fue incondicional; sentí tu apoyo, tu amor, y tu orgullo sin necesidad de palabras. Un amor silencioso me ofreciste y dejas conmigo. Hoy no estás aquí para verlo, pero caminas conmigo diariamente, tu presencia la siento. Que este sacrificio y pequeño logro honre tu memoria, padre mío."

A mi madre, "Gracias madre, por ser el pilar en quien me apoye para seguir adelante. Por aferrarte a la vida y estar a mi lado en todo momento. Mil gracias por cuidar de tus nietos para yo poder lograr mis sueños. Te amo madre mía."

To my husband, Victor Manuel Largo, I have nothing but love and gratitude for your tremendous love and support. Thank you for caring for our children when I had to be away and lifting me when I lost my way in pain. I could not have done this without you. "We did this together!" To my beautiful children, my pride and joy, Victor Guadalupe, Bonilet, and Fernán, "momma loves you to the heavens and back. I'm sorry for not always being present, for the lost time, and for not always being able to tuck you in bed. Please know you were with me always, and I did this for you!"

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Finally, I thank God for giving me the strength to carry on when my heart and mind were broken. You walk with me and empower me every day to do your will.

Abstract

By Orquidea Largo

University of the Pacific 2022

K–12 leaders' compliance mandates, challenges of adopting a continuous improvement approach to student success, and competing priorities often leave leaders feeling vulnerable and unprepared for the task. This basic qualitative study applied the continuous improvement framework (CIF) to research how improvement science penetrated an educational system. This basic qualitative study explored and described leaders' commitment to employing the principles of improvement science at one California K–12 school district. An in-depth analysis of the interviewees' transcriptions, persona, and experiences unveiled the following themes for continuous improvement: (a) transformational governance, (b) capacity building, (c) accountability, (d) limitations of transactional governance, and (e) outlier findings. Participants' insights and experiences on the application of continuous improvement underscored the power of culture and affording leaders professional development to build their confidence and data literacy. The findings from this study could benefit K–12 leaders who wish to employ the principles of improvement as a system and everyday work.

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CHAPTER 1: INTRODUCTION

Among K–12 leaders are superintendents and principals who sometimes lack confidence and support to effect change and address the needs of students; the gaps may surface in early childhood and intensify as students progress through school (Björk et al., 2014). Cetin and Kinik (2016) stated, "School leaders today are faced with multiple calls for change, improvement, and reform" (p. 675). Federal and state regulations often call upon district and school site leaders to implement new standards, reforms, and improvements. A district leader's task is to comply with federal and state mandates and accountability frameworks (Björk et al., 2014; Stewart et al., 2012). Principals must then alter curriculum and improve teaching methods to address mandated changes that should lead to student success (Dueppen & Hughes, 2018).

This chapter begins with background information on the transformation of schools, K–12 leadership, compliance mandates, challenges of adopting a continuous improvement approach to student success, and leaders' competing priorities. Next, I describe the research problem suggesting the need for professional learning and making unwilling people willing to use data. Finally, I present the purpose of this study, research questions, and the significance to K–12 leaders. This chapter concludes with a brief introduction to the theoretical framework, a description of the study, and a chapter summary.

Background

The transformation of schools is a shared responsibility of many. Still, this transformation lies heavy on the shoulders of district and school site leaders, who must lead constructive change and ultimately impact student outcomes. However, years of forced mandates and compliance have overshadowed school site transformation and sustained

improvement when not aligned with leaders' fundamental beliefs (Dueppen & Hughes, 2018; Larsen & Hunter, 2014). The compliance mindset implanted in district and school staff by the school-based accountability frameworks that surfaced in the mid-1990s through the *No Child Left Behind* reform is a challenge today's K–12 leaders must contest when adopting a continuous improvement approach to student success. For years, this compliance-based mindset and practices promoted a one-size-fits-all approach to student instruction and failed to generate outcomes (Dueppen & Hughes, 2018). Instead, this mindset inflicted fear in school and district leaders, producing the worst student outcomes.

Transformational leadership must break barriers, starting with the compliance mentality the era of accountability brought to schools and their governance (Dueppen & Hughes, 2018). Addressing the missteps of reforms like No Child Left Behind requires visionary leaders to transform education, practices, and outcomes. The challenging task of managing the everchanging dynamics and demands of education requires bold leadership. Today, K–12 education leaders must demonstrate a capacity to enact reforms and question them when they fail to raise all students' academic achievement. Datnow and Park (2018) and Dueppen and Hughes (2018) suggested leaders can break barriers with a strong vision and support to change school site practices through data to identify students' needs.

The frustration from constituencies at a local, state, and national level led the nation to adopt reforms that sought to increase students' scores on standardized exams, high school graduation requirements, teacher licensing requirements, and lengthen the school day and year (Björk et al., 2014). Reforms like No Child Left Behind mandated district and school leaders implement recommended changes in education and accountability for student achievement (Björk et al., 2014; Dueppen & Hughes, 2018). To this extent, reforms prompted a call for

change. However, K–12 leaders were not always equipped with resources and backing to expeditiously address students' academic readiness and achievement. In addition, a lack of human and capital assets created numerous tasks and competing priorities for K–12 leaders in managing districts and schools, hindering their ability to prioritize students' teaching and learning (Mestry, 2017).

At the local level, county and district superintendents provide vision and direction for meeting students' academic standards at state and national levels (Kowalski & Björk, 2005; Rorrer et al., 2008). However, superintendents alone cannot meet the obligations to students, parents, and communities at large, which is a task too large for one person. School improvement requires district and school leaders to collectively promote and engage in continuous improvement. Thus, there is a need to examine the principal roles and responsibilities and how these roles compare to the districts' recommended course of action at a site level (Honig et al., 2017; Jamal, 2014). Improving student achievement is a shared responsibility. Collaboration among district and school leaders can reveal academic, teaching, and learning disparities that hinder students' academic progression (Datnow & Park, 2018; Haxton & O'Day, 2015).

Hein and Smerdon (2013) underscored the importance of assessing students' physical, socioemotional, language, and cognitive development to increase students' academic success. They suggested addressing student educational gaps requires districts and site principals to establish district and school priorities. However, the multifaceted role of superintendents and principals and the day-to-day demands often meant school leaders shifted their priorities from long-range planning to short-term solutions (Björk et al., 2018; Curry & Wolf, 2017; Pellicer et al., 1981).

Developing an appreciation for data used to make informed decisions offers K–12 leaders a method to prioritize students' needs (Datnow & Park, 2018). However, it was not until the 1990s that districts and schools were urged to consider assessments, analysis, and data-driven methodology for addressing student achievement (Guerra et al., 2017). Depending heavily on K–12 leadership, students' academic preparation and achievement will affect California's future workforce. Therefore, researchers have encouraged K–12 leaders to access, assess, and interpret predictors and data systems linking essential success measures for students (Datnow & Park, 2018; Hein & Smerdon, 2013). The prioritization of students' academic readiness through the effective use of indicators can offer K–12 leaders access to real-time data to support student success (Datnow & Park, 2018; Nichols & Schak, 2019).

Description of the Research Problem

K–12 leaders' complex roles and competing priorities make principals' and superintendents' roles challenging (Björk et al., 2018; Honig & Rainey, 2019). Hence, it is not always achievable to have a culture of continuous improvement among all district and school site leaders and data-informed staff that positively impacts student achievement (Honig & Rainey, 2019). Managing school districts and addressing students' learning outcomes are challenging tasks. Superintendents' differing roles are equally demanding. The functions of superintendents as teacher—scholars, managers, democratic leaders, applied social scientists, and communicators aimed to guarantee students access to quality instruction and learning (Björk et al., 2014). As the district manager, superintendents rely on principals to help deliver quality instruction while handling the school district's daily affairs, which is a responsibility too complex to take on their own (Björk et al., 2018; Redding et al., 2017).

Although some principals are willing to grow as instructional leaders to improve teaching and student outcomes, others do not progressively engage in challenging instructional leadership. Saltzman (2016) shared, "Upending the old ways isn't easy, especially in school districts comfortable with the status quo" (p. 8). It is troublesome to know districts' support sometimes comes from inexperienced principal supervisors who lack the preparation needed to bolster principals' readiness as instructional leaders. These former principals often assume supervisor roles with limited training to support principals' engagement in continuous improvement practices (Saltzman, 2016).

Although principals complain they lack support from the district, they neither want to lose their autonomy nor do they appreciate the increased focus on instruction (Saltzman, 2016). Moore et al. (2017) suggested administrators were less willing to embrace accountability and use data if perceived as a mandate, even when it helped inform school improvement. According to the Public Policy Institute of California (2016) Higher Education Center, California has lacked a unified, comprehensive data system for administrators to access longitudinal data for students from kindergarten to postsecondary. The lack of a robust data system hinders K–12 administrators' ability to assess student achievement trends, gaps, and failures (Datnow & Park, 2018; Schildkamp & Datnow, 2020). Although focused on effectiveness and improvement, principals' induction pays little attention to their preparation to engage in improvement practices (Celoria & Roberson, 2015; Honig et al., 2017).

Only recently has the California Department of Education (2021) attempted to understand how to strategically use data to assess students' academic progress and inform school improvement. Current fragmented and individualistic data systems cannot offer administrators an effective way of measuring students' academic progress and achievement (Moore et al.,

2017). Further, although teachers engage in data-informed practices in a team setting, school administrators have had limited involvement. As a result, districts must rely on external organizations to facilitate school teams and professional learning not available internally (Derrington & Campbell, 2015).

Although there is significant research on the evolution of district leadership, there is limited empirical evidence on how leadership and vision contribute to organizational learning (Kurland et al., 2010). Secondly, there is not enough literature on evaluating principals and how evaluations are used effectively to inform principal leadership and preparation (Clifford & Ross, 2012; Derrington & Campbell, 2015). Thirdly, literature suggests access and data use in K–12 still require further development (Datnow & Park, 2018). More compelling is the lack of attention to the concept of sustainability (Dueppen & Hughes, 2018).

This study aimed to understand the intricacies of district leadership, vision, and direction, and how the superintendent and principals promoted organizational learning and continuous improvement. Assessing K–12 leadership, educational backgrounds, experiences, needs, challenges, and professional knowledge can offer insight into best practices to support student achievement. Information and data gathered could be helpful in the professional learning and development of superintendents and principals interested in promoting a culture of continuous improvement by engaging staff in data-informed decision making to impact student outcomes.

There is extensive research on how school site leaders lack the necessary support to effect systemic reform. Study outcomes are available to (a) administrative credential and principal preparation programs, (b) county offices of education, (c) K–12 districts, (d) postsecondary institutions, and (e) nonprofits interested in preparing K–12 leaders to engage in continuous improvement practices effectively. Secondly, findings highlighted how leaders at one K–12

district interpreted and operationalized a continuous improvement framework (CIF) at a school site level. In clearly depicting the trajectory and leadership of one superintendent, school site principals, and district leaders, K–12 professionals can learn the complexities of embedding continuous improvement practices for school reform. Finally, the study drew attention to essential drivers that help advance continuous improvement methods of practice that, if acted upon, can enable K–12 leaders to affect change in real time.

Purpose of the Study and Research Questions

The purpose of this study was to use an established CIF to understand and describe continuous improvement practices and their impact at one school district to serve as a blueprint for other districts that wish to implement continuous improvement practices. In addition, this study sought to answer the following three research questions:

- 1. How does the superintendent move continuous improvement from policy/theory to practice and action?
- 2. How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?
- 3. Using a continuous improvement framework (CIF), what prominent drivers do district leaders identify as the most crucial to sustaining continuous improvement practices?

Significance of the Study

An exploratory basic qualitative study was appropriate for studying one district's leadership and continuous improvement practices that impact students' teaching and learning. The study provided a detailed depiction of one district and school site leadership, effects, and mutual understanding of improvement practices necessary to address student needs. Collecting data through semistructured interviews supported the analysis of patterns in practice, procedures, and resources that affected K–12 leaders' ability to transform a district.

The study was instrumental in identifying essential professional learning and supports K–12 leaders required to serve as transformative leaders, enacting the leadership, behaviors, policies, and practices that improve student achievement through continuous improvement. In addition, evaluating district and school site leadership practices and performance ascertained how the support received contributed to a culture of continuous improvement. It was more informative to listen to and access policies, procedures, and data archives and describe how district and school site leaders continuously used them to improve internal practices that impacted student success. Ultimately, this study highlighted key areas where district and school site leaders excelled or required support, development, and empowerment as they enacted a continuous improvement plan.

Documenting the exemplary and challenging practice of a district's continuous improvement will be made available to K–12 districts, postsecondary partners interested in district partnerships, and administrative credential programs. The findings will enlighten practitioners on what supports or hinders a district's commitment to continuous improvement. Highlighting potential barriers districts face when cultivating a continuous improvement approach to student success will inform districts who wish to embark on a similar journey. Further, the detailed artifacts are described for districts that want to improve internal policies and procedures, and practices to consider. Finally, the study and framework could benefit the professional development of superintendents and principals.

Superintendents

In this study, I measured alignment between district expectations of principals and principals' perception of their role and performance. I also measured the alignment of values, mindsets, behaviors, attitudes, policies, and practices. To superintendents, the findings

suggested principals' areas of competence and confidence and areas requiring additional support and growth. The study provided district administrators with proven strategies, interventions, and decision-making skills that could contribute to positive practitioner practices and student outcomes. Leaders' insight into one district's leadership, performance, experiences, and strategies could help other districts cultivate a continuous improvement mindset and evidence-based practices. Finally, superintendents will consider methods and cultural artifacts appropriate for their school settings.

Principals

This study supports the enhancement of principals' professional learning. Findings from this study aimed to offer information on conditions, responsibilities, challenges, and supports that shape principals' performance to lead through continuous improvement. In addition, the study's insight into K–12 leadership could highlight priority areas for principals engaged in continuous improvement that require immediate attention to foster student achievement. Ultimately, this study aimed to expose leadership practices that cultivated trust, belief, and confidence in a continuous improvement mindset that promoted practices leading to students' success.

Theoretical Framework

This study applied the CIF, which stemmed from the Japanese word *Kaizen*, which means changing for the better (Singh & Singh, 2009). Singh and Singh (2009) described the process of continuous improvement as a way of work that strives for excellence, commonly used in the manufacturing sector to support lean production and rapid-cycle evaluation. Furthermore, systemic research produces actionable evaluation findings that contribute to achieving better outcomes in a reasonable amount of time and active employee engagement (Hough et al., 2018;

Singh & Singh, 2015; Stimec & Grima, 2019; Yen-Tsang et al., 2012). As described by Daniel (2020), CIF is grounded on Kaizen's 7 steps on how to implement continuous improvement: (1) get employees involved in the identification of problems to create buy in, (2) find problems with feedback from employees, (3) encourage employees to offer solutions, (4) test the solution with employees' participation, (5) analyze results at various stages to assess the success of the solution, (6) standardize the solution if it yields positive results, and (7) repeat the steps on an ongoing basis.

The Alliance for Regional Collaboration to Heighten Educational Success (ARCHES; n.d.), a statewide collaborative of schools, postsecondary institutions, businesses, and community organizations, provides an in-depth illustration of 10-step drivers that could influence the continuous improvement process. Figure 1 illustrates research-based drivers essential to the continuous learning, development, and improvement of districts, intersegmental, and multisector collaboratives. The drivers proposed by ARCHES aim to guide districts to become more effective and robust organizations (ARCHES, n.d.).

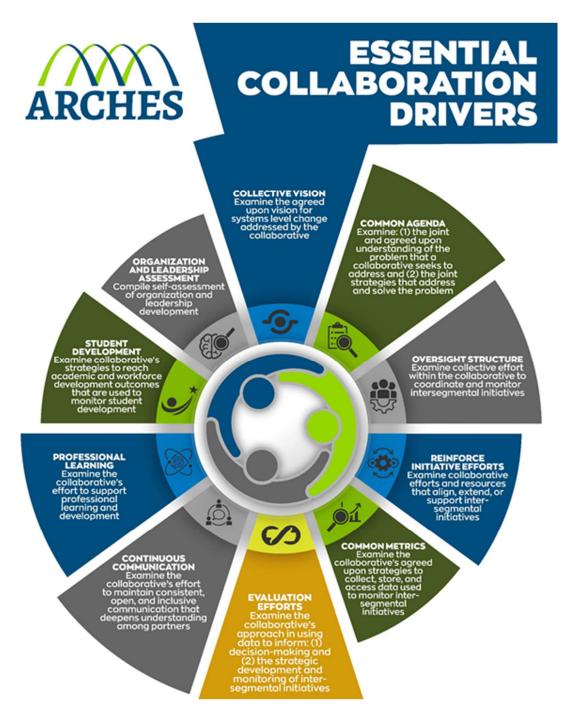


Figure 1. ARCHES essential collaboration drivers. From *The ARCHES ten essential drivers*, by The Alliance for Regional Collaboration to Heighten Educational Success, n.d. (http://arches-cal.org/resources/). Reprinted with permission.

This study applied the CIF to research how improvement science applied to educational systems. The CIF is appropriate for organizations that struggle to implement improvement practices, procedures, and interventions that, although difficult, can yield positive effects (Robert et al., 2000; Stimec & Grima, 2019). Researchers can evaluate processes using the CIF while identifying effective strategies appropriate across settings, including one school district and feeder school sites. In addition, the use of the CIF provides an opportunity to assess the implementation of strategies, initiatives, policies, procedures, and practices where management and active employee participation are essential (Baumann & Brennan, 2017; Hough et al., 2018; Robert et al., 2000; Yen-Tsang et al., 2012).

Applying the CIF is fitting for assessing K–12 leaders' behaviors and determining how systems, strategies, and human actions can positively impact student outcomes by taking a rapid response to decision making. The CIF provides an opportunity to assess, identify, and promote the implementation of the most valuable professional learning and development of practitioners in K–12 (Gallagher et al., 2019; Robert et al., 2000; Stimec & Grima, 2019). The alignment of these effective leadership practices across a school district was conducive to measuring practitioners' efficacy and systemic change. The study relied heavily on mapping strategies, learning, and improvement to increase district and school efficiency. The CIF was crucial in identifying the most impactful coaching practices, policies, and decision making among district and school site leaders that improved school performance and students' outcomes (Baumann & Brennan, 2017; Kruse, 2001; Stimec & Grima, 2019).

Description of the Study

This exploratory basic qualitative study studied current policies, practices, and leadership behaviors in one school district in California. The study analyzed district and school site leaders'

primary functions and application of the CIF. Study participants comprised one school district superintendent, school site principals, and other district leaders from an exemplary district in California. In preparation for potential challenges in the study's recruitment of participants, I outreached to professional networks to provide recommendations. The study aimed to assess the role, functions, preparation, learning, decision making, and district and school site leaders' practices essential for a thriving district. The study did not assess or seek to directly impact teachers, teacher preparation, curriculum, or instruction. Furthermore, the study did not assess students' preparation and direct student services.

The study applied the CIF to ensure systemic research provided actionable evaluation findings that contributed to achieving better outcomes in a reasonable amount of time (Hough et al., 2018; Singh & Singh, 2015; Stimec & Grima, 2019; Yen-Tsang et al., 2012). The study used several data collection methods for a basic qualitative study: (a) semistructured virtual interviews, (b) a review of state data, and (c) archival sources. Based on the literature review and the CIF, study participants consisted of one superintendent, two school site principals, and three leaders in the district, including an instructional superintendent. Ultimately, the study aimed to contribute to existing research promoting continuous improvement in education.

Chapter Summary

Student achievement remains a growing concern across the United States and continues to draw attention from researchers and practitioners. Although there are many contributing factors to student achievement, this study focused on K–12 leaders' continuous improvement mindset, behaviors, practices, and procedures. The study was conducted in one district where the superintendent, site school principals, and other district leaders were asked to share their perspectives and mutual expectations through semistructured interviews. The purpose of this

study was to identify: (a) current conditions leaders operate under, (b) impact of these conditions on continuous improvement practices, (c) role and influence of leaders' performance, and (d) impact of these practices on school improvement. The findings aimed to help inform future professional learning for K–12 leaders.

The evolution of education has transformed the role of district leaders and principals (Björk et al., 2014; Pellicer et al., 1981). However, unlike the transformations in K–12's superintendency adopted to manage school districts and meet student learning outcomes effectively, expectations for principals remain challenging (Curry & Wolf, 2017; Honig & Rainey, 2015). This study aimed to understand the impact of K–12 leaders' mindset, behaviors, policies, and procedures that promote a culture of continuous improvement. The study's outcome intended to inform aspiring district and school site leaders' preparation to behave as change agents who demonstrate leadership that supports continuous improvement to meet student outcomes (Redding et al., 2017). As Ross and Cozzens (2016) suggested, ever-changing demands, competition, and quality of instruction require an ongoing shift of educational practices to address a diverse student population's achievement gap.

The complexity of the principal role and responsibilities can result in the misidentification of principals' priorities. School leaders are faced with multiple pressures to increase students' academic achievement (Huggins et al., 2017). For instance, Redding et al. (2017) stated a principal must lead and persuade teachers and staff to adjust their behaviors to the shifting conditions of students' academic needs and adopt appropriate curriculum and instruction methods. Mestry (2017) shared it is just as important to judiciously manage school budgets when resources are often inadequate.

This literature review synthesized a brief overview of education reforms in the United States, the impact and evolution of the K–12 superintendent role, emerging barriers for K–12

superintendents, the evolution of the principal leadership role, the manner in which principals affect change, leadership supports, theoretical framework, and a conclusion.

Brief Overview of Education Reforms in the United States

Researchers have recognized the complexities of educational reform and need to evolve as new research-based reports are released. For example, Cetin and Kinik (2016) shared, "School leaders today are faced with multiple calls for change, improvement, and reform" (p. 675). Making the Grade, Action for Excellence and Educating Americans for the 21st Century was the first report to set off a wave of educational reforms that held school districts accountable for student outcomes. The reform aimed to increase students' standardized scores and high school graduation requirements, lengthen the school day and year, and add rigor to teacher licensing requirements (Björk et al., 2014). Björk et al. (2014) and Curry and Wolf (2017) proclaimed this era of district-level bureaucracies increased superintendents' workload and demands. The U.S. Department of Education, Office of Educational Technology (n.d.) stressed the importance of superintendents offering professional learning to support teachers, administrators, and personnel. However, Spanneut et al. (2011) called attention to superintendents' need for professional development to be lifetime learners who understand education's evolving trends.

The second wave report in educational reform, *A Nation Prepared, Tomorrow's*Teachers, Time for Results, Investing in Our Children, and Children in Need, brought to light recurring education themes (Björk et al., 2014). The reform redirected superintendents' focus to (a) standardized-based assessments for accountability purposes; (b) children's problem solving, critical thinking, and technology skills development; (c) teaching and learning for at-risk children and children in poverty; (d) bureaucratic school structures hindering student

achievement; and (e) a decentralized decision-making process to build a sense of ownership by increasing teacher participation (Björk et al., 2014).

Spanneut et al. (2011) explained the evolving trends and demands of education are ongoing challenges for new and veteran superintendents to navigate. The *Turning Points:*Visions of a Better Way, A Black Appraisal of Public Schooling, Education That Works: An Action Plan for the Education of Minorities, Beyond Rhetoric: A New American Agenda for Children and Families, National Excellence: A Case for Developing American's Talent, and Great Transitions reports ushered the third educational reform, drawing the attention of superintendents to student learning and the role of parents in building students' capacity to learn (Björk et al., 2014). The U.S. Department of Education, Office of Educational Technology (n.d.) suggested superintendents must demonstrate aptitudes in collaborative student learning activities to guide instruction. Equally important is superintendents' commitment to support and analyze student-based learning, ensure access to a robust infrastructure, and offer internal and external technology to support teaching and student learning.

Spanneut et al. (2011) declared students' learning and achievement can only be improved when educational leaders take a stand and prioritize their schools' culture, instruction, and staff and teachers' professional learning. School district superintendents characterized *An Education Strategy, Goals 2000 Educate America Act of 1994, and the No Child Left Behind Act(NCLB) of 2001* as unfunded education mandates with increased federal influence over K–12 education (Stewart et al., 2012), setting an expectation for superintendents at the time to engage in data-driven decision making (Björk et al., 2014).

Hill and Jochim (2018) affirmed, had superintendents followed the traditional role of only working with a community of experts to address instruction, it would have been

dangerously limiting. The Council of the Great City Schools (2014) claimed that superintendents could only exercise real power to accomplish anything by forging coalitions with other power centers and the community. As change agents, superintendents must effectively collaborate and communicate their vision with all stakeholders. Hornung and Yoder (2014) from the Center on Great Teachers & Leaders of American Institution for Research concurred district leaders must promote student learning by communicating a shared vision and mission while engaging stakeholders.

The Impact and Evolution of the K-12 Superintendent Role

The superintendent's role is governed by The American Association of School Administrators (AASA) and Interstate School Leaders Licensure Consortium standards (Björk et al., 2014). According to Björk et al. (2014), the average superintendent term at a school district is 3 years, and superintendents are likely to serve two to three districts over their career span. A superintendent's role has had to continuously redefine itself to social, economic, and political changes (Björk et al., 2014).

In the 1800s, superintendents were perceived as ordinary clerks who were mainly task oriented (Björk et al., 2014; Curry & Wolf, 2017). In 1837, in Buffalo, New York, the role of superintendent was formalized to address state mandates, curriculum, and financial accountability, which was a concern to civic and government leaders who feared losing control of the state of education (Björk et al., 2014). Honig and Rainey (2015) described the superintendent role as primarily supervisory. Still, it would eventually evolve into the role of "head teacher" (Rorrer et al., 2008, p. 314), which is known today as an instructional leader.

Rorrer et al. (2008) reminded us there was a time when superintendents as instructional leaders were to inspire, train, and supervise teachers. In addition, internal and external

stakeholders expected superintendents to provide visionary leadership to manage change processes and implement mandated curriculums to guarantee student academic outcomes (Kowalski & Björk, 2005). Also, Björk et al. (2014) and Honig and Rainey (2015) agreed superintendents were mandated to meet compliance requirements, which required more extensive administrative staff, standardized procedures, and centralization in school districts.

Hornung and Yoder (2014) from the Center on Great Teachers & Leaders of American Institutes for Research suggested superintendents promoted student learning by offering instructional leadership support. A superintendent's charge was coordinating, aligning, and establishing curriculum while embedding professional development to capacitate and leverage staff's skills and competencies (Honig & Rainey, 2015). After 1910, district superintendents' conceptualization as teacher—scholars weakened. However, the role never became irrelevant (Kowalski & Björk, 2005).

Björk et al. (2014) explained the increase in school districts' size and complexity caused the superintendents' role to evolve to its second role as an organizational manager. As a manager, the superintendent applied management concepts to address operations, personnel, and facilities. Curry and Wolf (2017) emphasized superintendents behaved as school districts' chief executive officers in the manager role. As the school district's chief executive officer, the superintendent handled the school district's daily affairs and budgets and dealt with scarce financial resources (Björk et al., 2014; Curry & Wolf, 2017).

Björk et al. (2014) reminded us the postdepression era triggered parents' advocacy for changes in their children's education, which compelled superintendents to develop a third role as autonomous–political leaders for school districts. Björk et al. and Curry and Wolf (2017) suggested superintendents as political leaders became political advisers, advocates, lobbyists,

and political strategists who worked with a broad spectrum of stakeholders and the public. At times, superintendents had to navigate situations when special interest groups attempted to influence school board decisions (Honig & Rainey, 2015).

Björk et al. (2014) and Honig and Rainey (2015) concluded the changing landscape of education and civil and women's rights movements required superintendents to embrace their fourth role as applied social scientists. The characterization of superintendents as applied social scientists required their effective use of research and data to make informed decisions (Honig & Rainey, 2015; Petersen et al., 2011). Since then, superintendents have continued to use data on students' demographics, socioeconomic status, and other characteristics influencing learning outcomes to resolve problems (Honig & Rainey, 2015). However, data alone did not address the growing dissatisfaction with the perceived inadequate school system, which led to an unprecedented systemic educational reform (Björk et al., 2014).

In the mid-1970s, growing concern for the state of education required superintendents to regularly communicate their schools' status with their stakeholders, assuming their fifth role as communicators (Björk et al., 2014; Curry & Wolf, 2017). As the primary communicator for the school district, the superintendent was responsible for communicating to stakeholders the condition of schools and student learning outcomes (Björk et al., 2014; Honig & Rainey, 2015). The newest emerging reforms further underscored the need for superintendents to engage with, and communicate to, stakeholders about the evolution of public education (Björk et al., 2014; Curry & Wolf, 2017; Honig & Rainey, 2015).

Research further suggested superintendents' capacity to build trust among all constituents relies on their ability to adapt and share a vision on how to achieve the desired student outcomes in a way that fosters relationships and is less power driven and authoritative (Hornung & Yoder,

2014; Petersen et al., 2011). Bredeson et al. (2011) stressed the need for principals from large and small districts to build trust with their professional staff and stakeholders to help leverage resources and achieve the district's goals. Cetin and Kinik (2016) emphasized a shared purpose among critical stakeholders can lead to sustainable and effective school efforts if agreed-upon processes are adopted.

The Emerging Barriers for K-12 Superintendents

The superintendent's evolution required their leadership to adapt to a continually changing environment to impact student achievement (Lewis et al., 2011). Kowalski and Brunner (2011) reported that, as superintendents' roles evolved and adapted to the changing conditions, the transformation of roles lacked support from internal and external stakeholders. As a perceived teacher–scholar in the early 20th century, superintendents had to protect themselves from influential business and civic leaders who attempted to control their school districts. To avoid being perceived as a manager or politician, superintendents delegated the school district's business administration to board members or subordinates (Honig & Rainey, 2015).

The first challenge superintendents faced dates back to the early 1800s, when the position was considered clerical and informal (Björk et al., 2014). As the superintendent role advanced from a teacher–scholar to a manager, there were concerns that the traditional position of a superintendent might not be able to administer large school districts because of the perceived lack of skills and knowledge (Kowalski & Brunner, 2011). Björk et al. (2014) stated the problems were considered economic and political, and administrators were unprepared to address these two challenges. Abshier et al. (2011) shared superintendents' survival is contingent upon their effective district resources management.

Following the Great Depression and scarcity of resources, the role of a superintendent advanced to a more democratic leader, becoming an astute political strategist focused on addressing economic needs in education (Björk et al., 2018). However, criticism remained from individuals who wished to restore democracy in school districts. During this time, superintendents' everyday problems were economic and political (Björk et al., 2018; Kowalski & Brunner, 2011). The growing dissatisfaction with public education ignited reform efforts and interest in superintendents behaving as social scientists who used data on students' demographics, socioeconomic status, and other characteristics to address problems influencing learning outcomes (Björk et al., 2014). As superintendents engaged in data-driven decision making, there was a need to communicate the results to internal and external stakeholders. Thus, the superintendent's role evolved into a communicator, navigating peoples' philosophical differences and political disagreements. Meanwhile, the superintendent was perceived as the figure responsible for school improvement, which alone can be highly intimidating (Björk et al., 2018; Kowalski & Brunner, 2011). Even established superintendents were not immune to criticism in their various formative stages (Björk et al., 2018).

The AASA provides national standards that guide superintendents' preparation, licensing, and employment (Björk et al., 2018). The AASA reported superintendents identified the following as the most significant challenges: (a) providing instructional leadership, (b) assessing and testing learner outcomes, (c) demanding improved curriculum and instruction, and (d) coping with changing curriculum priorities (Björk et al., 2018). The following variables further inflated the challenges superintendents from both rural and urban school districts faced when enacting their leadership strategies: "1) school district size, 2) organizational culture, 3) community characteristics and geographical location, 4) financial situation, and 5) the political

climate" (Bredeson et al., 2011, p. 19). Superintendents' barriers are numerous, time sensitive, and require adjusting to organizational and cultural realities, which is challenging (Bredeson et al., 2011; Lewis et al., 2011).

Kowalski and Brunner (2011) stated leadership strategy also poses a present-day challenge to superintendency and when dealing with the school board. Internal and external sources of control have continued to hinder superintendents' ability to impact reform initiatives and mandates, particularly when superintendents lack professional development opportunities (Spanneut et al., 2011). Drawing from the experiences of public officials, superintendents' influence is grounded on three principles: (a) they cannot accomplish anything solely on their authority, (b) their ability to bargain depends on their reputation, and (c) they must consider consequences of their power (Hill & Jochim, 2018). Hill and Jochim (2018) further suggested superintendents "are effective only to the degree that they can influence others" (p. 2).

Hill and Jochim (2018) suggested that to garner support from stakeholders with different perspectives, superintendents need to build coalitions to prevent alliances from forming against them. Björk et al. (2018) stressed superintendents must work with local officials, school board members, and teachers' unions to keep a working majority and secure allies on the board. Further, superintendents can stress the need for change and school improvement by delivering on their promises (Hill & Jochim, 2018).

Gray (2018) stressed the importance of coaching aspiring school leaders to develop instructional leadership skills necessary to behave as change agents who lead school change and continuous improvement. Thompson and France (2015) recommended that leaders form communities of practice, including students, teachers, district mentors, and district leaders, to share and collectively solve common issues or concerns. Committees work together toward a

theory of action that brokers resources for districts' access to inform their practice (Gray, 2018; Thompson & France, 2015).

The Evolution of the Principal Leadership Role

A profound look at the principal role and its evolution since the early 1600s depicted a multifaceted and challenging position (Curry & Wolf, 2017; Pellicer et al., 1981). Pellicer et al. (1981) revealed the need for the principal role originated out of necessity to establish elementary schools in communities with 50 families or grammar schools where there were 100 families or more, limiting access to public education for underpopulated regions. Under those circumstances, the role was first defined as a head teacher, headmaster, provost, or principal. However, the principal title was not assigned until 1838 (Pellicer et al., 1981).

Akin to the superintendent's emerging role, the principal role was also not initially considered instrumental nor granted authority in the management of instruction (Björk et al., 2018; Pellicer et al., 1981). For this reason, teachers had sole authority over their classroom and instruction. At the same time, principals managed access to and managed the schools' daily operations, supplies, equipment, and communication with stakeholders. Pellicer et al. (1981) stated principals' perceived lack of authority resulted in split assignments, where principals managed the school and taught a full schedule. Björk et al. (2014) and Pellicer et al. (1981) inferred principals served as liaisons between teachers and the board of education in their limited role, which eventually led to the prototype of the superintendent role in 1837 in Buffalo, New York, and Louisville, Kentucky.

Pellicer et al. (1981) described the 1900s and preparation for the 21st century as a time when superintendents and the board of education acknowledged principals' need for authority to manage their schools. However, as principals obtained power, they became more complacent

with the status quo, leaving it to teachers to continue managing their classrooms, curriculum, and instruction. Not compelled to assume leadership over students' instruction and learning needs, principals prioritized their tenure and the welfare of their positions (Pellicer et al., 1981).

Pellicer et al. (1981) suggested that by 1915, principals were believed knowledgeable, confident, and capable of leading, organizing, and managing their schools' operations. However, the position remained constrained to the status quo, with limited input in schools' instruction, teachers' preparation, and recruitment. During this time, the role, referred to as a male principal, suggested only males were competent in the administration of schools. There was a misperception only male principals could command an audience, gain staff support, and achieve better results (Pellicer et al., 1981).

The principal's role did not strengthen until 1921 with the National Association of Elementary School Principals' formation. It stressed the importance of principals undertaking a leadership role and moving away from a purely managerial function to the active supervision of curriculum and instruction (Pellicer et al., 1981). Guerra et al. (2017) disclosed that by the late 1900s and following the No Child Left Behind Legislation of 2001, pressure to improve student achievement and a strong emphasis on state testing set an expectation for principals to develop as instructional leaders.

As the world prepared for the 21st century and experimented with education reform, the principal role was even more demanding in its charge to be innovative and transformational (Jamal, 2014). Jamal (2014) and Ross and Cozzens (2016) underscored principals' need to impact school management's organizational structure, staff empowerment, and, ultimately, demand greater accountability. Viewed as transformational leaders of the 21st century, principals' high visibility and accountability required they gain the managerial and

transformational leadership competencies needed to drive educational reform, which was not always feasible (Klocko & Justis, 2019; Liu et al., 2016; Ross & Cozzens, 2016). Liu et al. (2016) stated that an expectation is achieved only through effective leadership modeling the engagement behaviors that propel teachers to engage with principals and raise their commitment and dedication to increase student achievements. Honig and Rainey (2015) and Jamal (2014) described educational leadership as more than a strategy. It is a commitment to transforming the current principal role by having principals and teachers adopt a shared vision that helps meet school objectives.

Principals Effect Change

The principal role, like the superintendent's, has undergone significant transformations. Today's principal role is more complex than ever before, with their responsibilities and workload increasing over time (Derrington & Campbell, 2015; Jamal, 2014). Although district leaders establish goals for student learning and achievement, principals are responsible for meeting the district office's essential goals, the goals of their respective schools, and increasing student learning and academic improvement (Thompson & France, 2015). Jamal (2014) shared the shift and appreciation for the role granted principals the authority to reform their schools and their management, but it came with a greater demand for accountability. As a result, principals currently oversee schools' functioning by enforcing standards with a greater appreciation for transparency and accountability.

As primary change agents for improving the quality of teaching, increasing student achievement and considering teacher satisfaction, retention, and school climate, principals are required to problem solve everyday problems (Goldring et al., 2018; Honig & Rainey, 2015; Jamal, 2014). Derrington and Campbell (2015) emphasized a principal's role is significant in

effecting change in the quality of instruction through supervision and evaluation of teachers to raise student achievement. According to Connelly and Schooley (2013), the National Association of Elementary School Principals and the National Association of Secondary School Principals measure principal leadership through well-defined and executed school improvement plans. Above all, there is a higher demand for accountability and a need to define principal effectiveness through the adoption of a principal framework consisting of six domains: "(1) professional growth and learning, (2) student growth and achievement, (3) school planning and progress, (4) school culture, (5) professional qualities and instructional leadership, and (6) stakeholder support and engagement" (Clifford & Ross, 2012, p. 12).

Effect Change by Leading Teaching and Instruction

Research suggests principals need to positively impact schools' climate, culture, policies, procedures, and teachers' professional development to be effective instructional leaders (Derrington & Campbell, 2015; Klocko & Justis, 2019). As transformational leaders, principals must stimulate a culture promoting collaboration, resulting in improved student achievement (Derrington & Campbell, 2015; Liu et al., 2016; Ross & Cozzens, 2016). However, Liu et al. (2016) and Ross and Cozzens (2016) suggested principals develop relationships and collaborate in the management of the schools with school faculty, staff, students, parents, and the community to improve students' teaching and learning and teachers' performance.

For example, according to Supovitz et al. (2019), fostering positive relationships with teachers is conducive to increased teacher satisfaction. Positive school culture is linked to student success and higher achievement (Goldring et al., 2018). Students succeed when teachers are motivated to collaborate, take risks, and improve work practices. Thus, principals' need to

promote working conditions that offer teachers time for instruction and reflection, fused with high-quality professional development, is evident (Goldring et al., 2018; Honig & Rainey, 2015).

Mestry (2017) declared principals play a pivotal role in leading the shift of practice, from delivering instruction to their supervision and support of teachers and affording them opportunities to learn and gain new knowledge, skills, and practical experience. However, to positively affect teaching and student learning, principals must first address the criticism that they are inadequately prepared and lack the skills to lead (Derrington & Campbell, 2015; Mestry, 2017). Principals' perceived negligence toward classroom observations, homogenous assessments, and student learning outcomes obstructs their ability to promote a culture of intellect, inquiry, and debate and stimulate teachers' learning and innovation (Derrington & Campbell, 2015; Mestry, 2017; Ross & Cozzens, 2016). To promote and support teachers' learning, principals must first dedicate time to learn and understand the states' mandates of instruction and rubrics to conduct valuable classroom observations (Derrington & Campbell, 2015). Mestry (2017) suggested principals tend to overlook curriculum, instruction, and professional development necessary to intensify their practical experience due to time constraints and administrative tasks.

Challenges With Effecting Change

It can be argued having too many priorities essentially means neglecting them all (Haxton & O'Day, 2015). Districts and school principals manage tensions of navigating multiple priorities while not losing sight of the policies, practices, and procedures. These priorities must be adjusted continuously to meet students' needs in real time so that change can happen simultaneously. Superintendent Hanson (2015, as cited in Haxton & O'Day, 2015) of the Fresno Unified School District stated principals tend to focus on what happens "before the comma" (p.

56) while superintendents focus on what happens "after the comma" (p. 56). Consequently, superintendents' and principals' work "hinges on building staff capacity to manage the tension 'before' and 'after' the comma" (p. 56).

Principals face three undeniable challenges as they attempt to improve their school's performance, teaching, and student learning (Derrington & Campbell, 2015). First, principals lack consensus on their daily tasks and how this shapes them as instructional leaders. Second, gaps in professional development exist, and principals still require coordination. Lastly, principals are not afforded time to engage with teachers and students (Derrington & Campbell, 2015; Fink & Silverman, 2014; Mestry, 2017). Ross and Cozzen (2016) affirmed principals have time constraints, but their low tolerance for risk prevents them from making use of the human capital available.

Principals are conditioned to believe they must assume total responsibility for their leadership and maintain employee satisfaction to improve schools' effectiveness (Ross & Cozzens, 2016). Huggins et al. (2017) stated fear of dealing with the aftermath of mistakes inhibits principals from delegating power to other school leaders. Their failure to distribute leadership impacts principals' ability to navigate day-to-day work, accountability pressures, and time to effectively engage with teachers, administrators, staff, students, parents, and the community (Fink & Silverman, 2014; Huggins et al., 2017; Jamal, 2014).

Huggins et al. (2017) shared principals are perceived as leadership capacity builders. However, not all principals are willing to rely on other leaders to boost their schools' capacities. Even with positional power to effect change, principals' limited job experiences hinder their ability to foster internal leadership and build individual and organizational capacity (Huggins et al., 2017; Mestry, 2017). In like manner, Goldring et al. (2018), Huggins et al. (2017), and

Mestry (2017) stated the limited research available suggested principals lack the skills to develop and foster leadership in their schools that help create organizational conditions to fulfill a capacity builder's role.

Although principals have limitations, just like superintendents, they also have a historical awareness of local, social, political, and cultural contexts (Klocko & Justis, 2019). Liu et al. (2016) suggested principals' understanding of variables that can impact their leadership and student outcomes, such as the school's geographical location and size, demographics of the school and student body, and size of the student body, are equally important. Klocko and Justis (2019) warned that failure to understand their local context precludes principals from building trust among their community, adding greater scrutiny to their role.

The ineffective implementation of best practices is the consequence of principals not operating in optimal conditions (Redding et al., 2017). Thompson and France (2015) suggested some variables can influence principals' leadership models. In the case of principals of suburban school districts, the study found students' participation in the free or reduced lunch program and schools' local context impacted their leadership. For others, it was the district's size and not having access to the same resources as large districts that hindered them from demonstrating effective leadership (Klocko & Justis, 2019). At times, the lack of resources even required principals to also serve as the superintendent or teach if necessary. The primary variable is principals' ability to have a vision, values, and passion for effecting leadership and decision making (Jamal, 2014).

Professional Learning

Clifford and Ross (2012) and Derrington and Campbell (2015) declared principals must first acknowledge their limitations, perceptions, contributions, and apprehensions to effect

change. A well-executed school improvement plan is also essential for principals' leadership. Implementing a school improvement plan requires training focused on developing instructional leadership to deliver quality instruction (Clifford & Ross, 2012). Second, principals need a shared understanding of quality instruction. Principals' training must encompass learning of standards, calibrating observations, protocols for learning walks, information and data collection from the classroom, and tools informing these practices. More paramount is the need for principals to adapt to and interpret new policies that respond to the complexities of effecting change processes (Derrington & Campbell, 2015).

Fink and Silverman (2014) advised the district office has a responsibility to ensure principals' success as instructional leaders. As a result, the University of Washington's Center for Educational Leadership, in partnership with schools, developed a principal support framework. The framework centers on principals' shared vision of everyday practices and leadership standards and clarifies what should be principals' utmost priorities. The framework and a clear consensus of practice can impact principal recruitment, professional development offerings, and evaluation (Clifford & Ross, 2012; Fink & Silverman, 2014).

Principal Evaluation

Connelly and Schooley (2013) described how the National Association of Elementary School Principals and the National Association of Secondary School Principals found it essential to rethink principal evaluations. Although teaching is a priority, principal leadership trails second in addressing the needs of the lowest-performing schools. In addition, the evaluation of principals at a district and state level reflects little regard for standards or practices. These evaluations were also not conducive to improving principals' performance and leadership (Clifford & Ross, 2012). Guerra et al. (2017) and Ross and Cozzens (2016) suggested

principalship engages with and promotes professional learning communities among teachers, impacting student achievement.

According to Connelly and Schooley (2013), although there is limited research on principal evaluation, the National Association of Elementary School Principals and the National Association of Secondary School Principals suggest evaluating principals' practice is more important than results. As effective principals, they must work toward meeting multiple measures of performance. In turn, principals should receive timely, accurate, and valid feedback conducive to performance improvement on multiple performance measures. Derrington and Campbell (2015) suggested data-informed feedback allows principals to build their capacity and preparation for future years. Clifford and Ross (2012) and Guerra et al. (2017) concurred evaluations should be created by and for principals to address and provide systemic support, like the need for professional development. These evaluations should inform the recruitment of new principals and the recognition and advancement of principals who meet and exceed multiple performance measures.

Clifford and Ross (2012) gave prominence to the efficient use of evaluations and the accuracy and validity of data to provide a reliable assessment of principals' performance. The consistent use of evaluations offers district offices a holistic description of principal practices and can differentiate the level of work by grade level and local contexts, leading to a fair assessment of principals' roles, responsibilities, and student outcomes. Further, evaluations should differentiate results based on principals' years of service and job-specific responsibilities (Clifford & Ross, 2012; Supovitz et al., 2019).

Leadership Supports

Honig and Rainey (2015) reported district offices have historically struggled to achieve their district goals because they have failed to support principals in reforming their school sites. Suggesting districts' productive engagement with school sites leads to improved instruction and learning. However, in their current state, districts require a complete redesign to ensure districts and schools' practices operate in sync with "performance alignment" (Honig & Rainey, 2015, p. 1). Therefore, the recommendation for K–12 leaders is to scrutinize performance at a district and school level to ensure all decisions align with the district's goals and students' best interests.

Honig and Rainey (2015) presented the principal supervisors' role as newly adopted and prioritized in developing principals as instructional leaders and organizational capacity builders. It was a role created by districts dedicated to improving principals' performance. Ultimately, districts seek to increase principals' knowledge and skills to meet established expectations (Fink & Silverman, 2014; Honig & Rainey, 2015). Hence, there is a great need to induce principals to "transform schools into system-thinking organizations" (Celoria & Roberson, 2015, p. 86). Principal supervisors, formerly known as associate superintendents, are essential in principals' growth as instructional leaders and in adopting a teaching and learning approach to build principals' competencies (Celoria & Roberson, 2015). Thus, superintendents must redirect their attention from compliance mandates to aiding principals' preparation to excel as instructional leaders (Honig & Rainey, 2019).

Goldring et al. (2018) defined the focus of principal supervisors' five core competencies as (a) instructional leadership, (b) reducing the span of control, (c) training and development of principals' capacity, (d) training of new supervisors, and (e) strengthening support of principals from the central office. In addition, many principal supervisors' responsibilities are managing

budgets, compliance with states' accountability, completing school improvement plans, and ensuring individual educational plans are up to date. Therefore, districts must deliver on the conditions essential to principals' effectiveness by offering principal supervisors the same circumstances to support principals' growth (Fink & Silverman, 2014; Goldring et al., 2018; Honig & Rainey, 2019; Huggins et al., 2017). These conditions entail principal supervisors having the time to model the behaviors, practices, and conversations essential to sustaining principals' engagement and commitment to continuous learning and improvement (Honig & Rainey, 2019).

Theoretical Framework

Grounded on a continuous improvement framework (CIF)—which stemmed from Kaizen ideology, originated in Japan, and is used in the field of management—this study focused on principals' and district leaders' willingness to adopt an improvement mindset with the necessary support (Singh & Singh, 2015; Yen-Tsang et al., 2012). Lahy and Found (2015) stated the CIF is foundational in an organization's management, emphasizing total quality management. The CIF suggests that for organizations to excel, improvement must be continuous and increase over time with active involvement from its employees (Singh & Singh, 2015; Yen-Tsang et al., 2012). This framework is appropriate for how principals and supervisors support superintendents and the central office in progressively improving practices that improve students' learning outcomes and inform instruction while embracing accountability (Baumann & Brennan, 2017).

Kruse (2001) accentuated districts' need to establish teams that help create structures and systems needed to effect change. Although teams alone cannot effect change, this change can only happen when districts are open to reevaluating their vision and mission statements with a strong emphasis on student learning and achievement. Haxton and O'Day (2015) highlighted a

district's journey in adopting an equity and access agenda informed by school improvement. The study highlighted the complexities a district must navigate as it adopts a continuous improvement mindset. Districts must first demonstrate a willingness to revisit the district's infrastructure to promote staff's continued use of data, ask questions, and make decisions to address the district's priorities.

A continuous improvement approach to improving students' learning requires in-depth systematic change. A study of the Fresno Unified School District heightened the need for districts to address four compelling challenges: "(1) building staff capacity to use data in an ongoing review process, (2) creating a culture of continuous improvement, (3) improving classroom instruction, and (4) improving students' academic performance" (Haxton & O'Day, 2017, p. 57). Yen-Tsang et al. (2012) stated that when principals engage in continuous feedback cycles with active engagement from staff, they equip themselves and the districts to meet the district's long-term goals in an ever-changing environment. The CIF significantly supports the idea that districts encourage staff involvement to influence systems, performance, and constant change.

An educational system driven by policies founded on the CIF calls for accountability models to inform school leaders' decision making that positively impacts student learning (Baumann & Brennan, 2017). The CIF promotes using data and accountability indicators to inform district and school leaders on teachers' performance and students' achievement. Leaders' use of multiple measures helps evaluate academic achievement and growth in mathematics and English language arts, graduation rates, English learner proficiency, and one added indicator of their choice (Baumann & Brennan, 2017; Hough et al., 2018).

The CIF supports the idea school staff must display attitudes and behaviors that support constant change for principals to affect a culture driven by positive change and improvement. Organizational effectiveness is deeply rooted in employees' views, behaviors, values, and beliefs. Therefore, employee engagement helps advance the behavioral aspect of continuous improvement (Robert et al., 2000; Yen-Tsang et al., 2012). However, Robert et al. (2000) inferred staff could expect compensation for their willingness and ability to learn and display the district and school leaders' competencies. Nevertheless, staff must be willing to learn and improve their performance at an individual and collective level if a district intends to meet its established performance goals.

The CIF proposes a district's most valuable asset is its people and self-reliance. Its success is subject to staff accepting change might not be rapid, happens in small increments, and requires staff's willingness to innovate (Robert et al., 2000; Yen-Tsang et al., 2012). When district and school leaders foster a culture of teamwork and learning, staff generate new ideas and knowledge, leading to innovative mindsets. Staff self-efficacy and willingness to contribute to the organization's improvement are imperative (Yen-Tsang et al., 2012). Robert et al. (2000) introduced vertical collectivism, which encouraged individuals to view themselves as part of a team. The CIF reminds principals that people heavily influence systems, and their involvement is critical to district and school success. Staff is more willing to partake in the learning process and engage openly in the long-term strategic plan when there is no reprimand from their leaders for making mistakes (Yen-Tsang et al., 2012).

Criticism

Lahy and Found (2015) stressed that adopting a CIF is not an easy task and can create confusion at times. They also inferred authors like Imai (1986), Singh and Singh (2013), and

Bhuiyan and Baghel (2005) questioned whether a scientific theory exists to guide the research. The ambiguity and abstractness of the CIF further support the criticism. On the other hand, authors like Marin-Garcia et al. (2008), Bacdayan (2001), and Grütter et al. (2002) viewed this theory as a weapon that instills competitiveness among districts. Employees are considered essential in improving and helping districts adopt behaviors, processes, and routines that help implement, sustain, and improve the districts' and schools' operations. Nevertheless, the question remains if the goal is to improve old practices or adopt new ideas and procedures (Lahy & Found, 2015).

Conclusion

Superintendency and principalship are significant undertakings that require unification. The challenges both superintendents and principals faced through the evolution of their functional roles were paramount. The literature and research review suggested superintendents' and principals' experiences, knowledge, understanding of the organization, and ability to address the needs of staff, faculty, students, and the community contributed to their success in reforming education.

This literature review highlighted the importance of principal and district partnership and stewardship. District and school leaders face pressure to navigate their multifaceted roles and meet student needs. Forces call for superintendents to engage other school leaders and faculty in effectively managing schools. Principals' efficacy in leading teachers and staff and adopting appropriate instructional methods and curriculum is fundamental to student success. Further, it requires school leaders to develop their staff's capacity to assume leadership and the risks of disseminating leadership roles and tasks to others (Huggins et al., 2017). Although all roles and responsibilities are of utmost importance, principals like superintendents must engage internal

and external stakeholders to reform education. Under those circumstances, a progressive and proactive leadership approach to improving student learning outcomes can benefit from a CIF.

CHAPTER 3: METHODOLOGY

Adopting a philosophy of continuous improvement is a complex process requiring a deep understanding from superintendents and school site principals on how to effect organizational change that positively impacts student outcomes. Unfortunately, district leaders are not always prepared or equipped to rapidly assess gaps that surface in early childhood and intensify as students progress through school. As a result, although schools, staff, and educators are positioned to reduce students' barriers, they cannot always do so (Dueppen & Hughes, 2018). Hence, there is a need to develop district leaders' knowledge of cultivating a work environment that encourages a culture of improvement (Liu et al., 2016; Supovitz et al., 2019). This approach is essential because "those unable to change themselves cannot change what goes on around them" (Revans, 1998, p. 85). Thus, leaders must consider continuous improvement practices and procedures that guarantee student success. This chapter provides an overview of the research questions, inquiry approach, methodology, methods, description of participants, data collection, data analysis, trustworthiness, ethical considerations, threats to credibility, limitations of the project, and a chapter summary.

Research Questions

The purpose of this study was to use an established continuous improvement framework (CIF) to understand and describe improvement practices and their impact in one school district to serve as a blueprint for districts that wish to implement a continuous improvement method. This study sought to answer the following questions:

1. How does the superintendent move continuous improvement from policy/theory to practice and action?

- 2. How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?
- 3. Using a continuous improvement framework (CIF), what prominent drivers do district leaders identify as the most crucial to sustaining continuous improvement practices?

Inquiry Approach

A qualitative inquiry approach was appropriate in studying leadership among superintendents and school site principals. The goal was to encapsulate leaders' knowledge, systems, structures, practices, and procedures that impact student achievement positively. This qualitative analysis constructed meaning from participants' views, experiences, and contributions during the study and the historical events that informed their leadership practices (Baxter & Jack, 2008; Merriam, 2002; Yazan, 2015). This qualitative research study was fitting because it intended to examine participants' experiences in real-time. The study aimed to assess the phenomenon from the lens of K–12 leaders in their particular contexts (Baxter & Jack, 2008; Merriam, 2002). Unfortunately, the ongoing COVID-19 global pandemic restrictions did not allow in-person observations of leaders in their work environments. Thus, interviews were conducted via Zoom, which allowed for face-to-face engagement. In addition, district artifacts were examined.

Bhattacharya (2009) and Merriam (2002) suggested a qualitative study's flexible design strategy is appropriate in studying and understanding district and school site leaderships' continuous improvement mindset and decision-making behavior, providing a blueprint of their methods and outcomes for other districts to consider. Stake (1995) stated, "Experiential researchers work face-to-face with the activity, with the problems, with the expectations and ambiguities and contradictions – sometimes immersed in them" (p. 62). A qualitative inquiry offered a thoughtful but adaptable approach to the study's design that allowed for continuous

assessment of the research questions and responses during the study's duration (Bhattacharya, 2009; Yazan, 2015).

Epistemological Commitment

Per Stake (1995) and Merriam (1998), the epistemological commitment was to describe K–12 leadership and construct meaning from leaders' contributions who are proponents of a continuous improvement approach to achieving student outcomes. This qualitative descriptive study brings forth the phenomenon's essence by constructing the meaning of various leadership perspectives in one school district, acknowledging the truth is relative to the participant's own experiences (Baxter & Jack, 2008; Magilvy et al., 2009; Yazan, 2015). Therefore, the phenomenon of leadership at a district and school site level was worth studying and required competency in analyzing and making meaning of participants' interpretation of their professional circumstances (Baxter & Jack, 2008; Cresswell, 2013; Merriam, 2002; Yazan, 2015).

Creswell (2013) suggested a qualitative approach allows for observing participants' nonverbal behaviors and interpreting their relay of events and professional and individual experiences. It helped create the cultural norms that influenced K–12 leadership and districts' continuous improvement. The study's constructivism approach aligned with Merriam's (1998) perspective that peoples' knowledge and reality are constructed by interacting with the world around them (Yazan, 2015). Although observations of participants in their work environment and individuality were limited to Zoom interviews, they remained neutral.

The capacity to explore and interpret multiple behaviors, practices, and structures that portray the culture required to continuously improve student outcomes was a priority in this study (Coghlan & Brannick, 2019). The study of one school district was convenient, given its small sample size. This qualitative analysis allowed for a clear description and analysis of one

district's leadership, climate and culture, mindset, and continuous improvement practices (Magilvy & Thomas, 2009). This qualitative study documents and describes how one district's leadership negotiated practices, procedures, and use of student data to promote a culture of continuous improvement in their natural setting (Magilvy & Thomas, 2009; Merriam & Tisdell, 2016).

Methodology

The phenomenon in question was the study of K–12 leaders' ability to influence their district and school sites to adopt a continuous improvement mindset. A basic qualitative study is recommended to understand effective educational practices, strategies, and techniques (Merriam & Tisdell, 2016; Worthington, 2013). Merriam and Tisdell (2016) stated, "since all qualitative research is interpretive, and 'generic' doesn't convey a clear meaning, we have come to prefer labeling this type of study a *basic qualitative study*" (p. 24). Thus, this study aimed to make meaning of the best practices among administrators from one exemplary school district, helping apply a strategy focused "on understanding the dynamics present within single settings" (Eisenhardt, 1989, p. 534). Through a qualitative study of their leadership, I assessed the tensions around leading continuous improvement among district and school site leaders that contribute to positive change.

K–12 leaders' behaviors and practices were not entirely captured because I did not conduct observations. However, one K–12 district's leadership and continuous improvement were worth studying and documenting (Bhattacharya, 2009). Furthermore, the priority was to capture as many real-time perspectives as possible from district and school site leaders at one school district and provide an embedded view of leadership committed to continuous improvement (Merriam, 2002).

Assessing leadership at a district and school site level, even through Zoom, helped draw inferences while recognizing basic qualitative research can be a never-ending process (Merriam & Tisdell, 2016). Edwards (1998) stated a theory could emerge when describing a phenomenon. In conducting the study, patterns in participating district and school site leaders' narratives were identified to deduce if a new or adapted theory of practice emerged from the research and findings. Through an in-depth analysis of K–12 leaders from one school district in California, their collective reflections and individuality were carefully assessed. Edwards (1998) suggested a new theory of practice might surface and evolve by conducting well-sustained observations, which were limited to Zoom interviews in this study.

Cognizant that the district and school site leaders' consent to conduct research and interviews did not grant me the right to share my views, I did not suggest a problem existed unless implied by participants (Bhattacharya, 2009). The fact-finding process of how K–12 leaders enacted continuous improvement strategies to improve schools and student outcomes effectively is described in detail for K–12 leaders interested in promoting a continuous improvement culture. Findings from the study revealed strategies, policies, practices, cultural challenges, and opportunities district leaders and school site principals experienced when promoting a continuous improvement mindset and were factors districts should consider when addressing the needs of students and their organization (Coghlan & Brannick, 2019; Dueppen & Hughes, 2018).

As illustrated in Figure 1 in Chapter 2, the Kaizen cycle of continuous improvement facilitated the assessment of employees' engagement in one district. The study examined how leaders identified problems, provided feedback, offered solutions, tested and analyzed results at various stages, standardized solutions for successful outcomes, and repeated the seven

continuous improvement steps (Daniel, 2020). The use of systemic research can produce actionable evaluation findings that contribute to achieving better outcomes in a reasonable amount of time (Dueppen & Hughes, 2018; Gallagher et al., 2019). Applying a CIF provided an understanding of how continuous improvement applies to K–12 leadership practices that impact school improvement and student achievement. The CIF is also appropriate for organizations that struggle to implement improvement practices, procedures, and interventions. Researchers using the CIF can evaluate processes while identifying effective strategies appropriate across multiple settings, including one K–12 district and school sites (Dueppen & Hughes, 2018; Redding et al., 2017). Using the CIF helped district and school site leaders share their knowledge of how improved practices and procedures can lead to positive organizational change.

Methods

With approval from the institutional review board at the University of the Pacific, I quickly began identifying potential school districts in a reputational sample of school districts with leaders known for engaging in continuous improvement practices. The priority recruitment targets were leaders from school districts that were part of an organization or professional network focusing on increasing student achievement through an improvement method. The name of the organization and professional network was omitted to protect the identity of the participating school district. I selected one school district, completed an application required by the school district to conduct the study, and submitted it for approval. It took approximately 30 days for the district to review my application, which essentially was a summary of the study. The district reviewed and approved my application on August 9, 2021, 1 month later.

Following approval of the application and before moving forward, the district superintendent had to demonstrate a willingness to participate and grant access to district and

school site leaders and archival data and sources. Therefore, the superintendent's executive assistant was the first point of contact to assist in scheduling an interview with the superintendent. I made the first contact via email (see Appendix A), with an attachment of the informed consent document (see Appendix B) for the superintendent's review and signature. The email was informal, having been introduced via email by the director who processed the application for the study. Once the superintendent's executive assistant confirmed the superintendent's availability and returned the superintendent's signed informed consent document, I sent the superintendent an introductory email (see Appendix C). Then, I conducted a semistructured interview (see Appendix D). Initially, the superintendent requested the district's chief academic officer join him for the interview. However, on the day of the interview, the chief academic officer could not join the interview, and the superintendent proceeded without her. During the superintendent's interview, he provided permission via a video conferencing platform to access district leaders, principals, and data after confirming receipt of the signed informed consent document.

I followed a similar process to gain insight from over 85 district and school site leaders. First, I sent an email inviting district leaders (see Appendix E) and school site leaders (see Appendix F) to participate in the study. The email also included the informed consent document for signature and an invitation to participate in a semistructured interview (see Appendix G) conducted via a video conferencing platform. I asked participants about their educational background, credentials, certifications, years of experience, years of service at their district, roles and responsibilities, definition and application of continuous improvement strategies, support systems, and possible barriers. Participants' participation and response to open-ended interview questions helped discern the district and school dynamics that might facilitate or hinder the study

(Coghlan & Brannick, 2019). For example, the open-ended interview questions inquired about professional development received and practitioners' areas of need, confidence, and ability to apply a continuous improvement mindset to improve school performance and student outcomes (Eisenhardt, 1989). In addition, the open-ended surveys asked how and why questions to understand better the process and reasons for K–12 leaders' actions and to probe during the interview (Yazan, 2015; Yin, 2002).

This study used multiple data collection methods: (a) knowledge, open-ended, qualitative web-based interviews conducted via a video conferencing platform; (b) the review of standard district and school protocols, business processes, policies, and district-related publications; and (c) archival and state data and sources. Multiple data collection methods allowed for triangulation that strengthened the study, addressing the problem statement (Eisenhardt, 1989). In collaboration with one district administrator, these data collection methods were gathered to capture strategic interventions for other K–12 leaders to consider (Coghlan & Brannick, 2019). A dissertation, PowerPoint presentations, a publication on the district's professional development efforts, and accountability framework samples were provided by one school administrator and remain anonymous to safeguard the district's identity. The research and sources used to inform the development of internal policies and procedures and the district's guiding principles were referenced and cited accordingly.

The analysis of interview responses and recommendations made by interviewees helped identify the importance of another critical participant—an instructional superintendent (district administrator)—to identify emerging themes, formulate clarifying questions, and request supporting documents and resources. The continued COVID-19 global pandemic restrictions prohibited in-person interviews or engagement. Thus, observing leaders in their respective work

settings was not feasible. Limited observations occurred while conducting semistructured interviews organized via a video conferencing platform. All respondents were willing to make themselves available to participate in an interview conducted via a video conferencing platform and were asked to grant permission for audio recording. The recordings will be destroyed 3 years after the study concludes. Every interview ended with a request for documents or any materials that would corroborate the study.

Conducting interviews via a video conferencing platform helped me to note participants' input and reactions on notebooks and capture gaps in the interviewees' responses that were later assessed. The joint collection of data and analysis afforded an advantage in the analysis and flexible data collection (Eisenhardt, 1989). Shenton (2004) stressed the importance of researchers capturing their reflections. Thus, I made a concerted effort to capture my immediate impressions when conducting interviews to identify commonalities, themes, or patterns that could further construct the research and study. Following interviews conducted via a video conferencing platform, I immediately reviewed all field notes and recordings to determine progress with the research, findings, and analysis (Eisenhardt, 1989).

Retrieving information from the California Department of Education (2021) was of the utmost importance to determine any improvement in student outcomes. Accessing available archival sources, business processes and procedures, accountability frameworks, databases, and anonymized data and research on student outcomes was essential to validate the study's findings. Establishing strong communication with one leader, in particular, was fundamental to accessing archival sources. This communication allowed me to assess organizational infrastructures that demonstrated a continuous improvement culture aimed at increasing student outcomes. All data gathering methods were intended to evaluate district and school leaders' improvement practices

and the use of procedures and interventions to meet student outcomes. Braun and Clark's (2006) six phases of thematic analysis: "1. familiarizing yourself with your data, 2. generating initial codes, 3. searching for themes, 4. reviewing themes, 5. defining and naming themes, and 6. producing the report" (p. 87) guided the data collection through interviews and artifacts that helped provide a profound thematic description of dominant themes that surfaced through an inductive approach. I encrypted all data collected, stored it in a secure cloud server, and will dispose of it 3 years following the study's completion.

Description of Participants

Taking into consideration statewide organizations, county offices of education, academic preparation programs, and education nonprofit organizations, I identified one school district engaged in continuous improvement practices. I considered the entire state of California when selecting a district. I gave priority to a reputational sample of districts recognized at a state level for engaging in continuous improvement, from which one district was chosen to study its leadership and practices. Fortunately, leaders from the first target school district responded; thus, there was no need to approach other districts. I extended an invitation to district leaders and school site principals to participate in the study as outlined in the methods section following approval of the application to conduct the study on August 9, 2021. I used email for direct contact with district leaders and principals. Upon prospective participants expressing interest in participating in the study and receipt and signature of an informed consent document, I arranged the interviews. Unfortunately, the COVID-19 global pandemic hindered travel. Thus, I coordinated interviews via video conferencing platforms due to state and county restrictions barring in-person meetings and gatherings.

I assessed district and school site leaders' knowledge, practices, and behaviors, cultivating an improvement mindset among district and school employees and leading to increased student learning and outcomes. I concentrated efforts on exploring district and school site leadership and improvement practices. In addition, the study reviewed how district leaders and school site principals apply continuous improvement lessons aimed at improving students' outcomes in their school district.

My goal was to accurately depict leadership that can transform staff's mindsets to embrace the principles of continuous improvement. Hence, the priority in interviewing high-level administrators with the authority to transform district cultures was the superintendent, three school site principals, and three district leaders directly responsible for impacting student outcomes. District leaders invited to participate in the interview were assistant superintendents, the chief academic officer, and other executive directors. Although I had hoped to interview three principals, only two agreed to participate in the study. In addition, the selected superintendent expressed his commitment to participate and grant access to staff and materials. Only full-time district and school site administrators were invited to participate in the study. No distinction was made by gender, race, or age in the recruitment of participants.

Data Collection

As Yin (2002) recommended, a protocol similar to a case study was adopted to initiate data collection upon participants signing the informed consent document. I followed Braun and Clark's (2006) six phases of thematic analysis, previously referenced as the protocol for this study. The study considered the intended audience, access to data sources, timeline, and any assistance that required supporting the collection of data artifacts or transcribing interviews (Merriam, 2002; Yazan, 2015). To help transcribe interviews, I used Zoom and NVivo

transcription features to safeguard participants' data, identity, and study. I attached an informed consent document to all emails and scheduled an interview within 1 week of receiving an encouraging response. I sent a reminder to nonrespondents. I also offered incentives to prospective participants for their involvement and recruitment of additional participants for the study.

As recommended by Yin (2002), I considered "multiple sources of evidence" (Yazan, 2015, p. 142). I selected the most willing and available participants for an interview via video conferencing immediately following their confirmation. Interviews ranged from 45 minutes to 1 hour, and I made efforts to conduct all interviews within 1 week of receiving the signed informed consent form. Apart from two participants who verbally consented to be recorded and signed a consent release form following their interview, the remaining participants signed the form before participating in their interview. I recorded all interviews and have a signed release on file. Toward the end of the interview, I encouraged participants to make available any artifacts, policies, procedures, or data aligned to their continuous improvement. The sample documents provided by one participant consisted of standard protocols, early warning systems, distance learning dashboards, Title I funding guidelines and the local control funding formula, and a publication from a local postsecondary institution on the district's use of the School Plan for Student Achievement (SPSA) as a mode of improvement. The inclusion and consideration of these documents complement participants' verbal and written contributions to the study (Yazan, 2015). I collected data and documents 1 month after they signed the informed consent document. I also ensured my Collaborative Institutional Training Initiative certification remained active throughout the data collection process (see Appendix H).

As interviews transpired, one participant emailed documents and samples of the district's continuous improvement strategies. Data collection took place over 2 months. The data set was extensive but meticulously examined in real time. Any questions posed by participants about their participation and collection of data were addressed during the interview to help advance the study. As a result, emerging trends in leadership and the essential collaboration to promote a culture of continuous improvement could be shared to enhance the work of K–12 practitioners.

Data Analysis

In accordance with the CIF and Braun and Clark's (2006) six phases of thematic analysis, I followed a roadmap of the data collection process to help launch the study and investigative protocol and timeframe. However, the process was nimble and adapted according to the COVID-19 global pandemic events and limitations (Merriam, 1998; Yazan, 2015). In Phase 1 of the thematic analysis, the collection of qualitative data using observational field notes from individual interviews, note taking, recordings, and interview transcriptions supported the study of patterns of practices, procedures, and barriers that impacted the superintendents' and school site principals' ability to enact continuous improvement (Dueppen & Hughes, 2018). During each interview, I noted general observations on a piece of paper or notebook, paying close attention to participants' gestures, expressions, and tone of voice. I also took general and speedy notes to capture initial themes and ideas, taking note of a heavier emphasis on specific topics, the manner in which a statement was made, and corresponding mannerisms. Following each interview, I downloaded the transcriptions and immediately reviewed and cross referenced them to the actual recording. Each transcript took approximately 2–3 days to review, and one transcription took almost 1 week to ensure I accurately captured the depth of the statements. The goal was to familiarize myself with the data by repeatedly reviewing and notating the transcriptions as

arguments and themes emerged (Braun & Clark, 2006). Document and data analysis intended to provide an in-depth interpretation of emerging themes and standard continuous improvement practices. I also offered an all-inclusive depiction and analysis of the K–12 school system (Merriam & Tisdell, 2016).

Ratajczy et al. (2016) and Braun and Clark (2006) recommend text be precoded into potential themes. I underlined keywords and phrases in the first read of the transcriptions and noted asterisks in key sections. These underlined sections accounted for key topics, pressing questions, statements that required clarification, and compelling quotes to include in the study to increase trustworthiness. As part of the coding process, I used pseudonyms for participants' names, the district, and easily identifiable postsecondary institutions. The study's focal point was not only identifying similar angles that contributed to K–12 leadership and continuous improvement, but also pronounced outlying factors. The use of Microsoft Excel helped take inventory of the 98 themes exposed from the multiple reviews of transcriptions that were later cross referenced and expanded upon.

As the analysis of the recordings and transcriptions intensified, the analysis process transitioned to Phase 3 of the thematic analysis, where I intentionally looked for similarities and differences in themes and participants' experiences, beliefs, and continuous improvement efforts. I assessed frequencies and the sequence of stated actions, behaviors, and experiences with accuracy and in detail, and with repeated reviews of the transcripts. The goal was to synthesize codes to formulate categories to help meet the study's outcomes. However, as I continuously reviewed notes taken during the interview and interview transcriptions, I recognized the need to review emerging themes and recode and recategorize as more information surfaced as more interviews were conducted, which was Phase 4 of thematic analysis (Braun & Clark, 2006;

Saldaña, 2016). This phase culminated with the development of a thematic mind map to help refine the coding of preliminary themes (Braun & Clark, 2006). The use of a mind map helped organize interpretations and ideas of emergent themes and shift subthemes as the analysis evolved.

As described, I chronologically and topically organized qualitative data captured through source documents, interviews, and data to allow for easy retrieval of data (Merriam & Tisdell, 2016). All data collected via transcribed interviews, field notes, webcast observations, and recordings were stored and filed by date and in chronological order. After scrutinizing all edited materials, I discarded any redundancies. The study then transitioned to Phase 5 of the thematic analysis, condensing the 98 preliminary themes and finding a unified description of each pertinent to participants' knowledge, roles, practices, gaps, and strengths. The refined themes offered clear explanations for how all the data and findings fit together (Braun & Clark, 2006; Merriam & Tisdell, 2016). Defining codes, categories, and organization was of the utmost importance as themes, and standard variables were identified in the transcriptions (Ratajczy et al., 2016).

Describing district and school leadership's influence on practitioners' actions required coding. The goal was to describe the process and assess participants' views and experiences of their work, professional development, roles, responsibilities, behaviors, policies, and procedures that impacted their roles, site performance, and student outcomes. An inductive approach helped apply a systematic approach to analyzing, condensing, and summarizing raw data, district and school site leaders' work processes, factors that affected these processes, and environmental conditions contributing to student success (Merriam & Tisdell, 2016; Thomas, 2006).

Participants' voices guided the development of the study, identified themes, and contributed to the findings later discussed in Chapter 5.

Additionally, once I had thoroughly reviewed and corrected transcriptions, they were forwarded to participants for their review and feedback to avoid omitting information or neglecting critical interpretation. As Stakes (1995) suggested, 98 precoding categories were constructed and interpreted to take a more intentional approach to analytical and descriptive coding. I kept a running coding list and shortened it as more particular themes were identified (Merriam & Tisdell, 2016; Saldaña, 2016). I reviewed each transcript a minimum of 3–4 times and color coded excerpts of the narrative. I also used the document's margins to make comments throughout the transcriptions. Finally, as Yazan (2015) suggested and concluding with Phase 6 of Braun and Clark's (2006) thematic analysis, having categorized and subcategorized all data, I completed the preliminary data analysis by dissecting the transcriptions and extracting supporting commentary. In some cases, block quotations were necessary to accurately capture the profound experiences and sentiments participants shared and offer rich context to the study.

I used NVivo and Microsoft Excel to collect and analyze qualitative interview transcriptions. Effective use of NVivo's transcription feature allowed for the professional, condensed, quality narrative used for data mining. Using NVivo's transcription relieved me of excessive, unnecessary, manual corrections, allowing me to dedicate more time to seamless reading exercises, identification of themes, and drawing conclusions. In addition, the use of NVivo helped manage data and themes emerging from the webcast interview transcriptions (Hilal & Alabri, 2013). Nevertheless, I used only the NVivo transcription feature, not the analytics. The data analysis and evaluation of the study were meant to assess how district and

school leaders' data-informed actions demonstrated a commitment to continuous improvement. Revans (1998) stated, "There can be no learning without action and no (sober and deliberate) action without learning" (p. 83). Thus, this study provided an explicit rendition of the findings. However, the goal was for the reader to construct the meaning of the realities depicted in the study (Yazan, 2015).

Trustworthiness

In congruence with introducing the study and invitational emails to the superintendent, school site leaders, and district administrators, interview recordings and transcriptions, artifacts, findings, and time commitment helped safeguard the study's credibility (Yazan, 2015). The review, consideration, and data collection and analysis procedures followed Braun and Clarke's (2006) six phases of thematic analysis. Further, the importance of capturing detailed data from interviews depicts facts that guarantee the study's legitimacy (Shenton, 2004). Finally, I advised participants in the study they were at liberty to withdraw from the study at any time. Except for the chief academic officer, whose schedule prohibited her from participating in the interview with the superintendent, no other participants opted out of the study.

Following Yin's (2018) recommendation, I considered triangulation, feedback loops, and multiple sources of information as evidence in the classification of patterns in the data. I conducted data triangulation to analyze six interviews, test, validate the concepts' stability, and corroborate findings. I cross referenced recording transcriptions several times to ensure all information was captured and transcription errors were corrected. Any limitations in the interview process were compensated with the use of data artifacts (Shenton, 2004). Data generated from various data collection methods helped interpret culture, practices, attitudes, and

behaviors among study participants, along with supports and challenges to continuous improvement.

Furthermore, the intent was to conduct a study that would offer a broad range of perspectives from various participants compared to one another. Data were double checked to guarantee viewpoints and experiences were captured and compared within the group of participants and publications for triangulation (Shenton, 2004). As Shenton suggested, I ensured study credibility by engaging in prolonged interaction with participants, reconnecting whenever appropriate to share their transcriptions for review, clarify their statements, or seek guidance on accessing data artifacts and resources. For example, one participant conducted an in-depth review of the transcription, color coded the omissions, and added clarifying statements. Another participant used this opportunity to share district artifacts to inform the study further.

I consolidated and interpreted study participant information (Merriam, 1998; Yazan, 2015). Yazan (2015) and Shenton (2004) suggested researchers engage in member checking. This added check in created a balanced approach that helped further develop the study's design. The consistent study analysis was essential to guarantee its trustworthiness. I documented the procedures followed in conducting the interviews via webcast, data collection, transcription, analysis, and timeline in detail. The priority was to ensure future similar studies could implement a similar protocol and yield and confirm similar findings (Shenton, 2004). The ability to gather data from multiple sources and corroborate their findings increases readers' confidence in the study as an accurate depiction of facts and events (Shenton, 2004; Yazan, 2015; Yin, 2018).

Ethical Considerations

I was aware of my moral responsibility to avoid unethical actions such as passing judgment or leaping to action. The epistemological commitment to the study permeates throughout the basic qualitative study, from the beginning of defining the study's problem through the study's conclusion and the final draft of the dissertation (Merriam, 1998; Yazan, 2015). As a change agent, I was mindful of the politics involved with the study and the participants' inability to speak openly with honesty and transparency. At times, the sponsor granting permission for the study might have been the source of the problem (Coghlan & Brannick, 2019). I made a conscientious effort to maintain an objective perspective and only document participants' views as close to the facts as possible (Crotty, 1998; Yazan, 2015). At all times, I made a concerted effort to capture participants' experiences with precision.

The capacity to apply triangulation among its various data collection methods did not rely on my perception or interpretation. Instead, it was informed by the study participants' experiences, attitudes, and behaviors to ensure objectivity and "reduce the effect of investigator bias" (Shenton, 2004, p. 72). To avoid bias in coding respondents' data, all study participants accessed their interview transcription for their review and input. All interviews via Zoom were conducted seamlessly and paced in the 60-minute allotted time. I used a unimodal design for the interview questions to ensure all study participants understood the questionnaire in the same manner (Cobanoglu & Cobanoglu, 2003).

I offered a monetary incentive to every study participant who committed to an interview via a video conferencing platform, plus follow-up inquiries. I delivered these incentives via \$25 Amazon e-gift cards in a timely fashion following the completion of their interview. The

incentive was reasonable compensation for participation but not significant enough for respondents to bring forth biased results.

Credibility

To safeguard the credibility of the data, I avoided "asking leading questions, activating response sets, setting up situations with strong demand characteristics, or selective recording responses" (Edwards, 1998, p. 18). As suggested by Yazan (2015), the study aimed to provide a rich and "embedded" (p. 140) depiction of policies, practices, procedures, behaviors, experiences, and perceptions of K–12 leaders' ability to promote a continuous improvement mindset. I created a robust research design to ensure the study captured authentic practitioners' beliefs, thoughts, experiences, and knowledge. The inability to capture sufficient data and knowledge from previous studies and theories could contradict the study's design logic. Therefore, I evaluated my skills and expertise in interpreting the data collected to ensure they were assessed effectively and help defend the study's credibility (Yazan, 2015).

Yin (2002) recommended a basic qualitative study design maximize construct, internal credibility, and external credibility to ensure the research's quality. The goal was to objectively discover the facts of the context under investigation while constructing new knowledge from the findings (Stake, 1995; Yazan, 2015; Yin, 2002). Thus, there was a need to gather and interpret with objectivity as many facts, evidence, personal and professional perspectives, and experiences to construct new knowledge for K–12 leaders who wish to pursue a continuous improvement mindset. The objective was to make meaning of the multiple perspectives and experiences through their lens. The study's credibility depended on establishing the proper protocols in semistructured interviewing and data collection (Merriam, 2002; Yazan, 2015).

Limitations

This exploratory study focused on one district and school site leaders' leadership experiences. Although not all K–12 practitioners in California were represented, the study still brought to light the commonalities in the perceptions, beliefs, and actions among a group of K–12 leaders. Even when a basic qualitative analysis is a standard qualitative research methodology, it is the most challenged. Its protocols are perceived to lack structure and definition, questioning its legitimacy and transparency, which I addressed by creating and following Braun and Clarke's (2006) six phases to conducting a thematic analysis for the study (Ratajczyk et al., 2016; Yazan, 2015; Yin, 2002). One limitation of this exploratory quality study was the amount of time it required to data mine and interpret emerging themes for six participants. However, I would have welcomed more representation from principals and instructional superintendents. The variables among K–12 leaders were worthy of analysis and cross tabulation (Merriam, 1998; Yazan, 2015).

The study of one district's leadership might not be significant enough to meet transferability standards. Nonetheless, this study provided detailed contextual information that clearly described to the reader how the study was conducted, the phenomena studied, and how these phenomena compare to other studies. Finally, I addressed the limitation of transferability by providing a detailed, well-written, and easy-to-read narrative (Ratajczyk et al., 2016; Shenton, 2004).

My 20 years of professional and leadership experiences partnering with K–12 school districts and school site leaders, plus any biases I might have developed over time, were also limitations. As an administrator in higher education, my views and beliefs of how K–12 operates and its leadership could have hindered my ability to remain objective during interviews and

engagement with participants if left unchecked. I was mindful of my biases to ensure they did not interfere with the study. Failure to moderate my biases could have resulted in a selective interpretation of data and analysis that would have failed to communicate with transparency the study participants' actual experiences, behaviors, and practices.

The COVID-19 global pandemic was an inevitable barrier for this study. Lack of physical interactions hindered my ability to conduct thorough observations in real time.

Although in-person observations were the goal, I opted not to pursue observations of groups via Zoom, conducting only web-based interviews. Conducting observations via Zoom would have restricted the evaluation of actual nonverbal behaviors and reactions during conversations and staff meetings. Further, observing participant group interactions via a virtual platform could have negatively impacted my ability to maintain confidentiality and build trust.

Chapter Summary

Chapter 3 introduced this basic qualitative study intended to examine district and school site administrators' leadership, knowledge, experiences, behaviors, and impact on school improvement and student outcomes. This study followed the CIF to conduct a well-structured, basic qualitative study that allowed for an actionable evaluation of findings that contributed to achieving better results and possibly leading to a new way of practice. This well-defined study relied on effective semistructured interviews and data collection to identify common themes using open and analytical coding to generate the most significant findings (Merriam, 2002; Yazan, 2015).

CHAPTER 4: FINDINGS

This chapter presents an in-depth basic qualitative thematic analysis of one K–12 unified school district (BG Unified) currently engaged in the practice of continuous improvement. A pseudonym was used to protect the identity of the participating K–12 district. However, it was important for me to accurately and with clarity capture the voices and experiences of the district's superintendent, district leaders, instructional superintendent, and site principals through web-based interviews conducted between July and August of 2021. In addition, the chapter provides an introduction of the K–12 unified school district and governance body, a comprehensive description of the study participants, and the five prominent themes that emerged from the findings and addressed the following three overarching research questions:

- 1. How does the superintendent move continuous improvement from policy/theory to practice and action?
- 2. How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?
- 3. Using a continuous improvement framework (CIF), what prominent drivers do district leaders identify as the most crucial to sustaining continuous improvement practices?

Through the lens of continuous improvement, this study sought to assess how the superintendent, district leaders, assistant superintendent, and school site principals demonstrated competencies, behaviors, and practices that promoted improvement at a district and school site level. Singh and Singh (2015) and Yen-Tsang et al. (2012) declared an organization's success is contingent on employees adopting a continuous improvement mindset and engagement.

Therefore, I carefully and critically analyzed participants' interviews and shared experiences to determine if the superintendent, district leaders, and school site principals engaged in practices and exhibited behaviors that contributed to the district's advancement and improvement. From

this analysis, four themes emerged: (a) transformational governance, (b) capacity building, (c) accountability, and (d) limitations of transactional governance, which will be discussed in greater detail in this chapter. This chapter also includes a discussion of outlier findings worthy of considering.

Introduction of the K-12 Unified School District and Governance Body

Having learned of the superintendent's trajectory designing and applying a continuous improvement plan and supporting tools in his various leadership roles as an administrator in K–12, the idea of studying his leadership as the head of a K–12 unified school district was ever more intriguing. In addition, my prior knowledge of the superintendent's efforts in other districts, experience, and commitment to improvement science prompted me to prioritize my outreach to this particular district. Thus, I was excited to begin the interview process when the district approved my request to conduct my study at BG Unified. I was further encouraged when two district administrators, the superintendent, two principals, and one instructional superintendent accepted my invitation to partake in the study. The participation of these six leaders provided thoughtful and transparent insight into the application of continuous improvement from the lens of cabinet, district, and school site leaders. In addition, several of them voiced the complexity of their roles and competing priorities were the intricacies of engaging in continuous improvement.

The participants' acceptance to participate in the study came with a great sense of responsibility to actively listen, capture, protect their confidentiality, and respectfully transmit the authenticity in their responses. Although ethnicity was not formally collected during the interview process, to protect the identity and confidentiality of study participants, the participants appeared to be ethnically diverse. Although age was not a variable collected, participants' age

appeared to be in the late 30s and older. Only two female administrators responded and agreed to participate while the remaining four participants were males.

BG Unified is a public K–12 unified school district located in the Northern region of the San Joaquin Valley in California. According to the California Department of Education (2021), BG Unified has over 45,000 students with over 80 elementary, middle, high school, charter, and academy schools. The student population demographics in the district consist of: (a) over 40% Hispanic/Latino students, (b) over 14% African American students, (c) over 16% Asian American and White students, (d) nearly 20% English learners, (e) approximately 70% free and reduced lunch participants, and (f) more than 60 spoken languages.

Student demographic data was relevant and essential when I considered the impact the district's continuous improvement plan and practices could have on the educational outcomes of a diverse student body. Most notable and relevant was data from the California Department of Education's (2021) college/career indicator, which revealed there had been a steady increase in the number of students considered prepared and a decline in the number of students considered not prepared since the arrival of the superintendent interviewed in this study. Hence, I was interested and impatient in studying, analyzing, learning, and sharing the experiences of one superintendent whose tenure at BG Unified had now exceeded the 3-year average and whose professional background represented the K–12 and postsecondary school systems. Participant perspectives offered insight into the past, present, and future district-wide practices and how these contributed to the advancement of continuous improvement. More significant was capturing daily struggles district leaders and principals faced, overcame, or continue to experience when applying an improvement plan. The district referred to continuous improvement as improvement science, which means, "The methodology that disciplines inquiries

to improve practice. Undergirding it is an epistemology of what we need to know to improve practice and how we may come to know it" (Carnegie Foundation for the Advancement of Teaching, n.d., Improvement Science section). Therefore, both terms are used interchangeably throughout the chapter.

Description of Study Participants

The COVID-19 global pandemic restrictions did not allow me to conduct in-person interviews, which hindered my ability to observe and analyze participants' nonverbal behaviors as thoroughly as I would have desired. Table 1 provides participant demographic details collected during a 60-minute interview conducted via the Zoom platform. I outreached to 85 district and school site administrators to recruit a minimum of five participants, with seven responding and one district administrator accepting and later becoming unresponsive to my emails. A total of six participants participated, consisting of the district superintendent, three district leaders, and two school site middle school principals.

Table 1
Participant Demographics

Pseudonym	Gender	Years in position	Hired under current superintendency	Highest degree completed	Total years with the district
Estrada	F	6	No	Doctorate	21
Delgadillo	F	8–9	No	Masters	20
Garcia	M	5	No	Doctorate	9
Newman	M	1	No	Doctorate	About 10
Plascencia	M	4	N/A	Doctorate	4
Santa Cruz	M	4	Yes	Masters	4

Note. Pseudonyms were used to maintain confidentiality of participant identities.

Participants are further described in the following sections according to their work setting, behaviors, contributions during the interview, tenure at the district, and knowledge and

understanding of continuous improvement. A description of these important factors helps consider the impact of the participants' approach, formal or informal, on the district's agenda and continuous improvement practices.

Dr. Plascencia, Superintendent

At the time of the interview, Dr. Plascencia served as the district superintendent. Before serving as the chief executive at BG Unified, Dr. Plascencia served as an associate superintendent, an administrator, and a teacher in his early professional life. As the district's chief executive for the past 4 years and the person ultimately responsible for leading and implementing a continuous improvement plan, having a clear picture of his persona helped me understand the kind of leader he was. Dr. Plascencia joined the interview from his district office. Even when there were a couple of interruptions, the superintendent politely paused the interview, quickly reengaged, and picked up where he had left off in his responses. The thoroughness of Dr. Plascencia's answers conveyed his commitment, passion, and confidence for social justice and improvement science.

Dr. Plascencia spoke passionately about his background working with school districts. He stated:

I had been a teacher myself, and so, I had a lot of interest in figuring out how to help school districts use research and use data to challenge the policies and the procedures, and the practices, the habits, the traditions that school districts are engaged in that limit opportunities for students.

A board was mounted on his wall with printouts of a dashboard and charts that could have suggested his commitment to using data and metrics. Also, he spoke of his frustration with leaders not seeing the "value of research practice" to challenge their own work to benefit students, which led him to seek a chief executive position. Ultimately, his inability to find ways

for his work with districts to actualize in a new way of doing work led him to pursue a career in K-12.

Dr. Estrada, Principal

At the time of the interview, Dr. Estrada was a middle school principal who had been with the district for 21 years. She showed a basic understanding of continuous improvement by referencing the *think*, *reflect*, *act*, and *think*, *plan*, *study*, *do* methods. However, she kept referring to Paulo Freire, a critical pedagogue and not necessarily the driving theorist for continuous improvement. Nevertheless, she was very pleasant, smiled a lot during the interview, was energetic, and enthusiastically answered my questions. Although she seemed worried, she was not answering the questions thoroughly.

Ms. Delgadillo, Instructional Superintendent

At the time of the interview, Ms. Delgadillo was an instructional superintendent. She apologized for arriving a few minutes late and had not signed the informed consent form. However, she gave verbal consent to proceed with the interview and signed the informed consent following the interview. Ms. Delgadillo was very formal, composed, and thorough in her answers.

Instructional superintendents were not part of my initial solicitation for district leader participants, including Ms. Delgadillo. However, I sent an invitation to participate in the study to the instructional superintendents following several recommendations from other participants who indicated instructional superintendents as district leaders played a significant role in enacting principles of continuous improvement. Therefore, given those recommendations, I thought omitting an instructional superintendent's voice would have been an injustice to the study.

Ms. Delgadillo was confident, articulate, and methodical when responding to the interview questions. She also described continuous improvement as a process of deep questioning of one problem through an interaction of *plan, do, study, and act* cycles. Finally, she explained how her role was intended to interact closely with principals to ensure the application of continuous improvement principles.

Mr. Santa Cruz, District Administrator

Mr. Santa Cruz was a district administrator who stated it was crucial to provide leaders a safety net to learn from their failures. In addition, Mr. Santa Cruz had an extensive background and understanding of continuous improvement, evidenced by his methodical and philosophical responses to the interview questions. Mr. Santa Cruz believed leaders need to see the system to improve outcomes. Furthermore, Mr. Santa Cruz was prepared to support the study by providing access to artifacts of the district's documented commitment to continuous improvement.

Dr. Newman, Principal

At the time of the interview, Dr. Newman was a middle school principal who had been with the district for about 10 years, with 6 years as an assistant principal. However, he had only been a principal for 1 year, going on 2 years. Although new as a leader at a school site level, Dr. Newman was clear and descriptive of the district's improvement efforts. Continuous improvement was not new to Dr. Newman. He indicated he was "fairly involved" in continuous improvement training prior to being a principal. Dr. Newman understood that continuous improvement was "an ongoing cycle of learning" and required teacher support.

Dr. Garcia, District Administrator

At the time of the interview, Dr. Garcia had been a long-standing administrator at BG Unified for the past 9 years and had been in his position as a district administrator for the past 5

years. The first to accept the invitation to participate in the study, Dr. Garcia described continuous improvement as a process that relies on metrics to assess implementation and improvement. Dr. Garcia was high energy and excited to share the district's approach to continuous improvement. He stressed the importance of setting goals and accountability to "define progress."

Having provided an in-depth overview of the participants' persona and experiences, their response to the three research questions unveiled the following themes described in detail: (a) transformational governance, (b) capacity building, (c) accountability, (d) limitations of transactional governance, and (e) outlier findings.

Theme 1: Transformational Governance

Dr. Plascencia first suggested transformational governance as a prominent factor in a superintendent moving continuous improvement from policy or theory, to practice and action and as a paramount driver to sustaining continuous improvement. My assessment of participants' responses described transformational governance as high impact and time intensive, with the need to transcend the simple use of language. As the chief executive leader of a district, Dr. Plascencia attested that improvement that aims to penetrate, transform, and change the conditions of a school district the size of BG Unified requires leaders' commitment to apply the principles of improvement science with fidelity. However, this level of commitment and transformation can be a challenge for a district because "improvement science and continuous improvement is not a body of work that produces results in that short amount of time," explained Dr. Plascencia. In addition, Dr. Plascencia contended, it is not easy to transform school district conditions from "a high poverty, low performing school district to a high poverty, high

performing school district." Participants asserted the transformation of a district is a lengthy and complex process.

Participants echoed this kind of transformation required stability in leadership at the superintendent and a board of education level, unknown at BG Unified until the arrival of Dr. Plascencia. Ms. Delgadillo added that stability at a superintendent, assistant superintendent, and the principal level was "critical for continuous improvement to be sustainable and to be effective." According to Ms. Delgadillo, every time there is a change in leadership, new learning occurs, and the learning cycle starts over again. From participants' responses, it was evident that stability in leadership was paramount to their ability to embed and sustain improvement and engage in transformative governance.

Dr. Plascencia explained that the kind of transformation BG Unified sought had only been accomplished by model school districts such as Long Beach and Garden Grove, which had stable governing boards. However, he warned stability alone was not enough to transform a school district. Transformation required commitment and a shift in mindset from leadership at a board of education and cabinet level. More notably, all participants, to some degree, expressed the level of transformation expected required patience. Participants agreed that school and district leaders lacked patience and sought gratification by engaging in practices that produced immediate results.

Dr. Plascencia professed that the power of culture in a complex organization like BG Unified could make things difficult, even for a superintendent, if not enough respect is given to the organization's culture. He confessed the culture at BG Unified had made it challenging for continuous improvement to penetrate mindsets. As a leader, he needed to demonstrate "a great deal of humility, a great deal of introspection and reflection, and a great deal of respect to the

current organization's culture." Therefore, Dr. Plascencia felt compelled to document BG Unified's cultural artifacts and monitor their change over time.

Mr. Santa Cruz, Dr. Garcia, and Dr. Plascencia identified "This, too, shall pass" as a cultural artifact at BG Unified. The frequent turnover in superintendents created a culture where staff became accustomed to instability; thus, it was difficult for improvement to penetrate the system. In addition, for some staff, changes at a leadership level were inevitable; thus, staff did not always embrace the changes brought forth by new leaders. Be that as it may, Dr. Plascencia argued stability alone was not enough for continuous improvement to penetrate the system. From his perspective, the most significant driver was the superintendent's ability to demonstrate competencies in continuous improvement.

Leader Competencies

When executing Carnegie's six principles of improvement science, it was not enough to just speak the language of continuous improvement. Dr. Plascencia emphasized that the kind of transformation continuous improvement created can only happen if leaders understand and display the competencies of improvement science and its application. He himself felt he had acquired the competencies to enact improvement, but that level of preparation does not come easy. For example, at BG Unified, leaders were expected to apply the six principles of improvement science from the Carnegie Foundation, which the district adapted to the following nine principles in order of sequence: (1) needs assessment, (2) causal system analyses, (3) research practice calibration, (4) improvement aim, (5) change idea, (6) change idea prediction, (7) measurable outcomes, (8) coherence check, and (9) plan-do-study-act (PDSA; Carnegie Foundation for the Advancement of Teaching, n.d.). Dr. Plascencia asserted:

I feel like I have gained and can demonstrate the competencies around continuous improvement. I can demonstrate to you that I can take a set of data and unpack it in a

way that leads or that goes through each of those nine principles that I've mentioned leading up to the adoption of a change idea all the way up to PDSA cycles, that constantly challenge, whether you're the change that you have introduced to the system, is one that requires further adaptation, some adoption or full abandonment of that change idea.

Even when Dr. Plascencia made every effort to inculcate the principles of improvement science, he maintained that having competencies to train and direct staff will not shift mindset if you do not respect the power of workplace culture in an urban school district like BG Unified. As stated previously, participants agreed the culture at BG Unified was used for quick implementation and immediate results. For example, Dr. Newman confessed the improvement process could be frustrating for principals because, at times, it felt like it was "constantly staying in that root problem space and never getting to, like, the actual action." Nevertheless, Dr. Plascencia warned the process cannot be rushed, and "continuous improvement does not produce quick results of the type that can be transformative."

Ms. Delgadillo acknowledged it was Dr. Plascencia who brought the "explicit terms of continuous improvement or cycles of continuous improvement." Although familiar with cycles of data review, she admitted "the intentional principles of continuous improvement were never explicitly lifted" as they had been since the arrival of Dr. Plascencia. Dr. Garcia concurred with Ms. Delgadillo, prior to Dr. Plascencia's arrival and his ambitious agenda, "we did not review, not even close" the amount of data, progress, and outcomes they do today.

Shared Values

Participants called attention to the importance of shared values and a "common why" and their influence on district-wide transformative governance and improvement. Dr. Plascencia stated his reason for leading with transformative governance was the "interest in bringing to life, how I interpret, how I define equity, access, and social justice." At BG Unified, shared values, a

common why, and language are all a work in progress. Dr. Garcia suggested the district had to be willing to adapt language as necessary to advance improvement and provide "positive behavior intervention and support" as manifested in the district's mission and guiding statements. Dr. Garcia stated, "Common language is huge!"

Drs. Newman and Estrada maintained even when shared values and common language were essential, good leadership was paramount to bridging theory and practices. Accordingly, leaders must be able to reformulate the superintendent's message to "fit the culture and the community." Dr. Newman agreed and stated the district spent a considerable amount of time teaching the theory of improvement science. Still, that time alone was insufficient to build a common language and understanding. It behooves leaders to implement and model practices expected of principals and staff. More importantly, participants believed a different frame of mind happens when people come together to cocreate, creating cohesion. More importantly, they have an awareness of what they are working toward or their "common why."

Shift in Mindset

District leaders' mindsets had to change to embrace the changes brought forth by Dr. Plascencia's transformative governance. Dr. Garcia believed that to shift the mindset of leaders and others in the district, values had to be "really ingrained into the fabric of the organization." For example, Dr. Garcia shared that although the former superintendent's slogan was "united for equity committed to excellence," it was purely a marketing strategy or a very nice brochure. The slogan did not reflect an actual change in practices or improvement. Participants admitted that although they had a general understanding of continuous improvement, staff never used data and metrics with fidelity as they do today.

Participants made known Dr. Plascencia's arrival not only shifted the district's message to the broad community, but also changed their "mechanistic procedural mindset." The superintendent described the culture in the district as lacking introspection, deep thinking, and the tendency to seek quick results through *solutionitis*, which by definition means "the tendency to jump quickly on a solution before fully understanding the actual problem to be solved" (Carnegie Foundation for the Advancement of Teaching, n.d., Solutionitis section). Although Dr. Plascencia understood continuous improvement and could demonstrate its benefits, he knew it was pivotal first to respect the existing culture. He was conscious about this needed respect and shared:

Asking staff members who have been in their roles for many, many years to just adopt the new mindset, you can understand why it's easier for people just to adopt the language of continuous improvement and act as if they're committed and act as if they're disciplined in their work around continuous improvement, but that alone is going to take a long time.

To Dr. Newman, the process could feel forced if the process was not directly tied to a specific need, especially for teachers. He described the current mindset as follows, "if I can't use it right now in a way that is going to impact my teaching and learning, then I don't want to do it." In addition, he stressed that staff, particularly teachers, could be resistant to working through the process if they do not see the immediate benefit to their work.

The Benefit of Partnerships

Dr. Plascencia and participants agreed transformational governance was not an agenda a district could undertake without establishing partnerships with foundations, nonprofits, and postsecondary institutions. Participants asserted that, although Dr. Plascencia was pivotal in introducing a new frame of mind and training district leaders, quintessential partnerships were instrumental to building internal capacity for improvement science. Dr. Plascencia described the district's partnership with the Carnegie Foundation as paramount to ensuring the district's

improvement design aligned with the definitions of improvement science and bringing forth transformational changes that penetrated the system. Ms. Delgadillo concurred the research by Anthony Burke from the Carnegie Foundation was, and continues to be, instrumental to "see the system, to know where you're going, and to know what part of the system needs correction or needs improvement."

Equally important were partnerships established with the California Office to Reform Education (CORE), which had helped build the capacity of cabinet members and instructional superintendents as principal supervisors. Partnering with California's two public postsecondary systems had been favorable to BG Unified, advancing continuous improvement. At the time of the study, the University of California system was assisting the district with the use of data systems providing leaders and counselors data in real time and with transparency. A partnership with a regional California State University supported the district in its review of its 3rd year of continuous improvement. It helped assess whether Dr. Plascencia's change idea was penetrating the system.

For principals Drs. Estrada and Newman, institutional partnerships were critical; however, the partnership that mattered most was with teachers. Dr. Newman declared that "genuine teacher collaboration and planning" is what impacts curriculum, teaching, and the classroom. Both principals stressed the importance of having a "relationship" with teachers because nothing moved at a school site level without the support of teachers. Their perspective derived from a sense that this collaboration could quickly address real-time necessities. However, they warned that having an adversarial relationship with teachers could stall any district-led initiative. If teachers were not on board with the district, "you get pushed back for the sake of pushback," said Dr. Newman. Nevertheless, although the superintendent had made

efforts to shift the culture at BG Unified, there continued to be a salient need for staff's capacity building to engage in continuous improvement practices.

Theme 2: Capacity Building

The theory of improvement science has been widely taught among principals and district leaders, including assistant superintendents. In spite of principals' and district leaders' knowledge of improvement science, Dr. Plascencia had been challenged by the capacity gaps, having to prioritize leaders' capacity building if he was to move continuous improvement from policy or theory to practice and action and as an essential driver to sustain continuous improvement. The first level was capacity building, ensuring leaders understand continuous improvement.

Understanding Continuous Improvement

Capacity building was a notable element in the superintendent carrying out principles of improvement science. Participants agreed a deep-rooted understanding is vital before being asked to introduce the process of improvement science at their school sites. The continuous improvement process was a never-ending, reflective process that required identifying a problem, its root cause, and really understanding what was happening before taking action, says Dr.

Newman. For Ms. Delgadillo, improvement science was about "seeing the system" and identifying an aspect you want to improve through deep questioning, a change idea, and various iterations of a plan through PDSA cycles. Similarly, Mr. Santa Cruz described improvement science as "the study of processes and practices, with the goal of improving long-standing outcomes" and assessing results to learn from them continuously. Dr. Garcia agreed and shared it was a process that required analysis of metrics for refinements and improvements, assessing

what was and was not working. Finally, Dr. Newman described continuous improvement as "an ongoing cycle of learning."

Cycle of Learning

Although it was evident all participants had a thorough understanding of improvement science, they agreed there was still a need for leaders' capacity building. Some leaders perceived the cycle of inquiry and learning as time consuming and frustrating, taking anywhere from 18 months to 2 years. Although the process can be rewarding when improvement principles are embraced and applied, there are still those who struggle and those for whom the process is challenging and require added support or clear direction.

All participants contended that data literacy was integral to the district's improvement and a priority. They underscored that Dr. Plascencia strongly encouraged the use of data and metrics to inform improvement science and practice upon his arrival. However, Mr. Santa Cruz warned BG Unified missed an opportunity to build in the scaffolding of leaders because the superintendent's theory of implementation was too heavy on data. Rather than building capacity and confidence in leaders' use of data, some still required directives on how to solve their problems.

Participants agreed Dr. Plascencia took an intentional approach to staff capacity building and continuous improvement but had to act quickly and with a sense of urgency. Dr. Newman shared that 2-hour training sessions on the district's nine steps of improvement science were not enough to build capacity among school site leaders. He offered several recommendations. First, he recommended that improvement science training be applied to things leaders already know and do. Otherwise, the training is "a really big frustration point." Secondly, holding the cycle of inquiry in small groups ensures that learning is "fairly fast" and more effective when a small

group speaks the same language and has a common problem. Thirdly, in the case of teachers, he suggested marrying the improvement cycle to teachers' actual needs. He recommended gaining the teachers' buy in, which is imperative to executing continuous improvement. Finally, participants agreed that before leaders embrace continuous improvement, the district must first address the fear it inflicts on those still uncomfortable with the process.

Psychological Safety

As BG Unified increased leaders' capacity, the use of data and continuous improvement heightened staff stress, particularly when not all staff were equipped to execute the district's vision and mandate for continuous improvement cycles. Dr. Garcia acknowledged that principals initially resisted not being accustomed to using data with fidelity. The resistance was partly due to staff receiving an overwhelming amount of information and not feeling data literate. "The learning curve was extremely steep," said Dr. Garcia.

Although principals were first trained by the superintendent and later by their instructional superintendents, they expressed uneasiness when asked to return to their school sites and train their staff. Participants conveyed a feeling of unpreparedness when asked to build their staff's capacity following only a 2-hour training. Both principals voiced they felt vulnerable and lacked the confidence to train their staff on a process they themselves did not fully comprehend. With "a million other things" on their minds, principals pushed back, neither comfortable nor experts on the topic of continuous improvement, at times disengaged in their own professional learning. Dr. Newman stated, "It wasn't our initiative to start with." Dr. Garcia offered one recommendation to address principals' discomfort and resistance—to listen to principals' feedback when designing their professional learning. He suggested a differentiated

approach to principal training could help address individual learning styles (e.g., visuals, pictures, graphs, and charts).

As the unit tasked with improving system processes, the district office was charged with ensuring leaders had the capacity to assess their "lived experience" in the district. These enhanced processes aimed to help leaders make concrete decisions and, if they fail, learn from their failure. One sample district training shared by Mr. Santa Cruz described how the training started with guiding principles encouraging staff to be present, eliminating any distractions. Participants were asked to be mindful of each other's perspectives and not make assumptions about others' intentions and the district. Most of all, leaders were encouraged to trust each other, trust the process, and maintain confidentiality. Creating a safety net for leaders to apply their knowledge and understanding of continuous improvement without the fear of failure allowed them to embrace the accountability set in place by the district.

Theme 3: Accountability

Recognizing he was not in a position to oversee principals directly, Dr. Plascencia established accountability measures to assess how principals interpreted and implemented the principles of improvement science at their school sites, which is another overarching driver to sustaining continuous improvement. The accountability measures explicitly described principals' preparation and how they were held accountable for applying improvement principles to their school site goals and everyday work.

The Need for Instructional Superintendents

Among the leaders at the central office, instructional superintendents were the first to be trained personally by Dr. Plascencia to oversee and hold principals accountable for engaging in continuous improvement. In most districts, the role of a principal supervisor was referred to as

the associate or assistant superintendent of instruction (Honig & Rainey, 2015). At BG Unified, principal supervisors were referred to instructional superintendents accountable for principals' performance.

Participants agreed the role of the instructional superintendent was and continues to be pivotal in developing principals' understanding of the superintendent's vision for continuous improvement and its implementation. Dr. Plascencia described continuous improvement as a reflective process that required time; however, given the many gaps it had, participants contended the district was rushed to implementation. Even so, Dr. Plascencia indicated that he did not take this initiative lightly and recognized the importance of first building capacity among district leaders and principals.

The role of instructional superintendents is essential in the continuous improvement process because they collectively oversee 75 principals in the district. Dr. Plascencia described instructional superintendents as "the units of change in advancing this work." The instructional superintendents' significance was to serve as the "direct bosses" and convene principals for training on continuous improvement. Participants agreed the heavy lifting of training principals on the cycle of continuous improvement came from the instructional superintendents. Mr. Santa Cruz disclosed it was an 18-month to 2-year investment in instructional superintendents' study of improvement science to prepare them to train principals. The instructional superintendent described her role, sharing:

We take note of supervision during unstructured time, such as recesses and or lunches. We certainly, of course, take note of the classroom environment when we're walking through classrooms to see how classroom management affects student and student output, which, of course, then will affect student outcomes on academic assessments. So that's, generally speaking, our role. In addition, we just do every day, coaching, with regards to leadership decisions, so leadership decisions could be equated to anything and everything that helps a school to run smoothly. And of course, all of that has a direct impact on how we continuously improve because many of our school site goals may have a language arts

goal and mathematics goal and a climate goal. And so, everything we do on a day-to-day basis and how we support, coach, and provide feedback for our principals will, of course, be data points for them to monitoring their goals set forth in their [School Plan for Student Achievement].

A partnership with the CORE Districts (2017) helped build the capacity of the cabinet members and instructional superintendents as principal supervisors. CORE worked with schools and the district to improve student achievement through meaningful collaboration. For example, through its capability-building programs, CORE Districts (2017) coaches engaged with participants to apply the principle of improvement science and the process of testing the adopted change idea. In addition, a partnership with CORE made certain capacity building for instructional superintendents took a calibrated and standardized approach, said Dr. Garcia.

Change Idea

The superintendent acknowledged he could not supervise principals' day-to-day work. Hence, the oversight of principals typically falls under the leadership of the chief academic officer and the instructional superintendents. Instructional superintendents were tasked with enforcing the district's accountability measures.

One accountability measure, "change idea," as Dr. Plascencia describes, was the use of the School Plan for Student Achievement (SPSA) as a compliance document. According to the California Department of Education (2021), the SPSA "serves as the organizer for an individual school's improvement process" (p. 3). Dr. Plascencia described the SPSA as "a living document embedded with principles of continuous improvement," which was continuously being reviewed. All participants agreed it was incumbent upon principals to develop their school site's SPSA and demonstrate principals' competence in its development.

For Dr. Plascencia, the SPSA was "the vehicle for me to verify and have conversations about whether or not this philosophy is penetrating deep enough." The school site council

advised principals on the development and revisions to SPSA, which was reviewed by the board and approved centrally through the business office. The council also monitored how the SPSA was implemented and its effectiveness. Without direct oversight of principals, Dr. Plascencia had a summary of all the SPSAs and their declared improvement goals and changes.

The SPSA, as a living document, was intended for principals to work through the principles of improvement science, said Dr. Plascencia. These principles introduced a causal system analysis, created a problem statement, and potentially arrived at a root cause through the use of a fishbone diagram. Participants referenced having to complete fishbone exercises as part of their training and were encouraged to complete them with their teams to complete a root cause analysis. From the process, principals drew a change idea to introduce to their school sites while performing PDSA cycles to "check and balance" whether the change idea improved student outcomes. For Dr. Plascencia, the SPSA helped him assess whether the quality of the SPSA demonstrated principals' acquired competencies.

Mr. Santa Cruz agreed with Dr. Plascencia and added the Local Control Accountability Plan (LCAP), like the SPSA, was "inherently built for continuous improvement." Further, he suggested operationalizing these two documents, requiring the district and school sites to review student data and outline what action plans would address the needs of students and demonstrate progress. Ultimately, these two living documents built the infrastructure for monitoring student outcomes and how schools were meeting the needs of students through a "needs assessment that is viable and durable."

As described by Mr. Santa Cruz and supported by an internal artifact he provided, BG Unified moved away from merely providing school site leaders readings for intervention.

Instead, they adopted a new way to explain revisions to the SPSA, where all recommendations

and related expenses were tied directly to a student outcome. As new members join the school council, they are provided training on the SPSA and receive training every 2 years. Prerecorded webinars were also available. Additionally, the district also went through a mid-year review to inform one-stop decision making and any updates to the SPSA to help deepen the level of support during its development process. To facilitate the development of the SPSA, principals created a business process outlining the process, which considered the COVID-19 global pandemic and existing cultural artifacts. A partnership with a regional California State University supported the district in reviewing its 3rd year of continuous improvement. It helped assess whether Dr. Plascencia's change idea was penetrating the system. Further, principals documented the development and improvement of a higher-quality SPSA and continuous improvement.

Professional Development

Participants agreed there were "a bunch" of 2-hour trainings on the nine steps of improvement science to hold principals accountable in the learning and application of continuous improvement. In theory, they agreed the district's approach to training school site principals made sense. However, Dr. Newman said the training process for some principals was both challenging and frustrating, given the length it took for principals to be trained in 2-hour increments. Dr. Newman went on to say, "I felt it was something we had to do rather than something we wanted to do, or there was, I think, at that point, a little bit of burnout on it." On the other hand, Mr. Santa Cruz stated that although the central office saw the training of principals roll out, district leaders could have benefited from the same level of training the principals received. Thus, district and school site leaders' perspectives on the level and intentionality of the training differed.

District leaders, the superintendent included, agreed principals' compliance derived from this notion of "thou shalt do this, willingly or not." So, leaders complied with training because it was perceived as a district mandate, not necessarily because there was buy-in from principals.

Dr. Newman said the principal's role was to take learnings and mandates from the district and train staff, teachers included. As a principal, his concern with these two priorities was, "How do I marry them, and how do I honor both sides?" It was a challenging task, he added.

Dr. Newman suggested the district take a centralized approach when training teachers where everyone convenes for a day to work in space with one another. He presumed the district might have discontinued the practice of convening groups all day and instead relied on principals to do the training themselves due to funding. However, he said he liked all-day convenings because "the learning was impactful, it was real," and offered time and dedication without interruptions, something they rarely had at a school site.

Data Literacy

The accountability measures adopted by BG Unified involved a tremendous amount of data, interpretation, and analysis, requiring leaders' competency in data literacy. Dr. Plascencia admitted he pursued the superintendency to be in a position to "direct staff and translate research into new practices, policies, and procedures, new ways of doing the work." He wanted to use data to create new policies, practices, and procedures that would yield greater opportunities for students. Participants agreed there was a heavy focus at BG Unified on the use of data to make informed decision making.

The system lacked "automaticity" in leaders applying their training, said Mr. Santa Cruz. Additionally, he underscored the need to build intelligence for leaders, not only to access the language or vocabulary but also to have "the ability of thinking things through on their terms."

There was a need for leaders to conduct root cause analysis and execute a "change idea." To accomplish this, he emphasized the need to offer leaders "differentiated support." Participants concurred leaders generally had a "very technical understanding" of improvement science. Thus, there was an increased awareness to use data and professional learning to increase data literacy, said Dr. Garcia.

The district adopted an early identification intervention system and dashboards to display and assess student outcomes in real time and help inform practitioners' practice. Participants and artifacts provided by Mr. Santa Cruz described the early identification intervention system as a set of indicators on concrete student outcomes that helped district and school site leaders measure and monitor growth or progress toward achieving specific target goals. The indicators allowed leaders to mine data by student name and need. The district research-based indicators were influenced by the Balfanz attendance behavior coursework model, or "the use of attendance, behavior and coursework metrics" (Che et al., 2015, p. 4). The attendance behavior coursework model recommended using statistical methods to assess trends, suggesting attendance was correlated to students' academic performance in later years.

Participants agreed some limitations hindered the enactment of continuous improvement.

Barriers had to be overcome for continuous improvement to penetrate the system. To start,

participants declared their everyday responsibilities were a constant obstacle.

Theme 4: Limitations to Transformational Governance

Participants agreed transformational governance was one prominent driver for continuous improvement; however, it was often interrupted by their everyday transactional governance. As Dr. Newman described, "Priorities are always the day-to-day operations or the things that are popping up." Both principals agreed every school has its own identity, and their uniqueness

consumes most of their time. As Dr. Newman described, every school has a unique distinction that requires time and a considerable amount of work, distracting principals from continuous improvement. Principals' engagement with students, parents and the broader community was among those distractions. One recommendation from Dr. Newman was to integrate continuous improvement to support the identity of their respective schools and real-time practices, or "the micro stuff."

Dr. Plascencia acknowledged transactional governance was easier for leaders because most of their day-to-day inquiries and complaints could be resolved quickly, providing a sense of accomplishment. Further, he indicated transformational work required buy in from leaders and patience. He professed that a leader must be "impatiently patient at the pace at which one will see a deep enough penetration of this work to pierce through the culture of an organization that you inherit."

Participants generally agreed the kind of transformation the Carnegie Foundation promotes and the superintendent seeks cannot be rushed. Instead, it requires time, mainly when it requires a shift in mindset, a notable driver for continuous improvement. For example, Dixon and Palmer (2020) shared, "In order to lead the transformation of their organizations into ones that are capable of continuous improvement, executive leaders must challenge the conventional ways of thinking, behaving, and working" (p. 2). Contrary to research suggesting transformational change takes 3–5 years, Dr. Garcia said the change was happening at "light speed" at BG Unified.

The district's fast-paced approach appeared contradictory to Dr. Plascencia's statement that "continuous improvement does not produce quick results of the type that can be transformative." Participants admitted that even when some leaders were prepared to begin the

discussion on change, they were not necessarily ready to start the process. It was easier for some leaders to "simply adopt the vernacular of this work" than acquire the competencies to put the "theory into practice," declared Dr. Plascencia. Mr. Santa Cruz believed the superintendent could have addressed the disconnect between theory and practice by making sure improvement science did not reside at a school site level only. He proposed the need to build capacity for central office staff who "never received the same boost of technical learning" as principals.

The COVID-19 Global Pandemic

It is apparent from participant responses that the COVID-19 global pandemic placed a hold on the continuous cycles of improvement leaders had engaged in since the arrival of Dr. Plascencia. They agreed that, at first, there was momentum with in-person training. However, once principal meetings went virtual, leaders could not "advance the work with the same level of discipline" as when they met and collaborated in the same space with one another. Furthermore, priorities shifted to address the instructional needs of students.

Outlier Findings—Shared Philosophies

Although the influence of a district's school board of education was not originally a consideration for this study, and it does not answer a research question, its effect on a district and its superintendency was underscored by Dr. Plascencia. Dr. Plascencia spoke about his relationship with, and support from, the school board of education. He believed he was responsible for being a reflective leader and leading with a great sense of humility and introspection as he navigated his obligation to the school board while transforming the district and its culture. He professed that "the power of culture can be so strong that you refuse to see how the work that you have been engaged in is producing the results that you claim to try to be changing," which also applies to a school board of education.

School Board

One thing became clear in conducting the study at BG Unified, which was the superintendent's pressures were substantial, triggering the need to act quickly. His first challenge was his term not aligning with the term of his school board of education members. He described how the board of education was generally elected for 4-year terms. As a result, its members operated with a sense of urgency to produce quick results before the next election cycle. As a superintendent, he needed to comply with his school board members' expectations, who in turn must meet the needs of their constituents if they are to be reelected. Although Dr. Plascencia understood the pressures of elected officials and complied, the rush to produce outcomes typically produced transactional results, with not enough time devoted to work that took root and penetrated the system.

Dr. Plascencia also described how these elected officials had careers outside the board of education and were not always familiar with continuous improvement or understood transformational governance was slow to produce results. This lack of understanding must be addressed, said Dr. Plascencia. He believed that only when a superintendent and his school board of education share philosophies can they commit to doing the work differently. As described by Dr. Plascencia, "A superintendent's role needs to understand the more deeply seated norms and behaviors of an organization that is producing results that you are not content with." Therefore, it is up to a superintendent and board members to figure out how to balance the term-related pressures that call for transactional governance. Although it is important work, it is not transformative. Finally, he admitted:

What I need from our board is to understand that there is a way in which you can balance those two forms of governance. Both are very valid. Both are very genuine. But I'm hopeful that the behaviors of our board members aren't so inclined to the transactional

type of governance that they don't understand, or they don't want to talk about more transformative governance work that I think continuous improvement demands.

To support the school board members, Dr. Plascencia partnered with CORE to build a shared understanding and capacity building on the principles of improvement science.

Summary

The depth of information collected from six K–12 district and school site leaders from one urban school district through 60-minute interviews conducted via Zoom provided great insight into the district's enactment of continuous improvement. The interviews consisted of 11 questions aimed to capture the experiences and perceptions of one superintendent as the champion of continuous improvement, and district and school site leaders as implementers of improvement practices. Their responses, shared experiences, and perceptions helped answer three research questions. From the collection and analysis of data, four themes emerged: (a) transformational governance, (b) capacity building, (c) accountability, and (d) limitations of transactional governance. Participants' different experiences revealed the distinctive challenges each faced as they learned and implemented continuous improvement. The analysis of the superintendent's unique outlook of continuous improvement from the lens of the chief executive brought light to the importance of shared philosophies among a superintendent and school board of education as an outlier finding.

The thematic analysis of the district's continuous improvement efforts and findings will be further discussed in Chapter 5. Finally, the merge of the literature review in Chapter 2, the methodology in Chapter 3, and the thematic analysis and findings of Chapter 4 will yield a set of recommendations discussed in Chapter 5. These recommendations were intended to help inform research and the practice of continuous improvement in K–12 school districts.

CHAPTER 5: DISCUSSION

"Upending the old ways isn't easy, especially in school districts comfortable with the status quo."

—Amy Saltzman, The Wallace Foundation

This basic qualitative study explored how one district's leadership enacted continuous improvement to improve the policies, practices, and behaviors that lead to districtwide improvement and student outcomes. As an administrator at a postsecondary institution charged with establishing partnerships with K–12 schools and supporting their improvement, I was particularly interested in transmitting the journey, experiences, and understanding of leaders in one district employing continuous improvement. Therefore, I sought to describe the adopted behaviors, policies, and practices that materialized from continuous improvement. Additionally, the concept of continuous improvement in K–12 education is still relatively new; thus, it requires further exploration. As follows, this study explored the following three research questions:

- 1. How does the superintendent move continuous improvement from policy/theory to practice and action?
- 2. How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?
- 3. Using a continuous improvement framework (CIF), what prominent drivers do district leaders identify as the most crucial to sustaining continuous improvement practices?

Findings that emerged from the study supported and expanded upon existing literature on continuous improvement in K–12 education. This chapter presents the study's findings, implications, and recommendations to K–12 leaders and expands research on the intricacies of continuous improvement in education.

As a practitioner in higher education immersed in K–12 work, I am intrigued by the functionality of K–12 from the lens of chief executives, district leaders, and school site leaders. As Kotter (1995) attested, even when leadership and management are used interchangeably, they serve two different functions and are not the same thing. New to education, the CIF offered education leaders a disciplined approach to improving internal practices and procedures, never losing sight of the importance of the employee voice. Deming's (1986) plan, do, study, act (PDSA) cycle referenced continuously by study participants is a model to improve the quality of service, learning, and change management. This model offers practitioners guidance on how to declare their problem statement, change ideas, and make predictions on their anticipated outcomes, later assessing and learning from what worked and did not (Donnelly & Kirk, 2015). However, from the participants' lens, what is most compelling about the PDSA model is ensuring it is sustainable once improvement from a change idea is determined and their engagement in PDSA is worth their time.

The limited literature on continuous improvement in K–12 was also a motivating factor as a practitioner serving K–12 districts. The goal was to understand the improvement efforts undertaken by K–12 leaders to help inform how, as a practitioner in higher education, our service models could also improve to provide the most effective services to K–12 district partners. The seven steps of continuous improvement, the district's adopted six principles of improvement science, and participants' experiences suggest the need to take the PDSA model to a more profound level. The four overarching stages of plan, do, study, act, continuous improvement, and the district's adopted six principles of improvement allow for a more prescriptive approach to the essential steps an organization and its employees must follow to ensure continuous improvement penetrates the system. Van Assen (2021) suggested a positive correlation between

an improvement method and employees' professional development when employees have a strong commitment and adherence to the continuous improvement method. Participants might agree that professional development was instrumental in the district advancing continuous improvement.

The intersectionality between the PDSA, improvement science, and continuous improvement method can offer districts a prescriptive roadmap to improvement that permeates the system and is sustainable. Figure 2 is an adapted interpretation of the CIF informed by participants' understanding of improvement methods and the guiding artifacts impacting the internal shifts in practices, policies, strategies, or, as one principal described, the "day to day" tasks that do not always transcend to transformative practices.



Figure 2. Plan-do-study-act (PDSA): Seven steps of continuous improvement (Lodgaard et al., 2012), & the ARCHES ten essential drivers (n.d.).

Although not one improvement method was individually described in depth by participants, collectively, they referred to the PDSA method, specific aspects of improvement science, and continuous improvement. Although the essential collaboration drivers were not explicitly referenced, the participants' responses and emergent themes corroborated one or more of the drivers highlighted by ARCHES.

Research Question 1

Research Question 1 was: How does the superintendent move continuous improvement from policy/theory to practice and action?

Finding 1

Finding 1 was: Applying the principles of improvement science in K–12 requires leaders' commitment to transformative governance, a deep respect for the organization's culture, and lots of patience.

As I sought to examine how a superintendent moves continuous improvement from policy or theory, to practice and action, the superintendent's response to the interview questions provided the overarching theme of transformational governance. Although participants may not have classified their role as transformative, constantly engaging in transactional decision making, they described their roles and responsibilities as essential to meeting district and school site goals.

Principals agreed the demands of K–12 leaders are many, influencing their behaviors and their governance at a district and school site level. The impatience of their constituents compels them to produce results quickly, irrespective of whether the outcomes are impactful or sustainable. Encouraged by the behaviors and demands of their constituents, participants found it is easier to adopt and operate with a transactional mindset because it provided a sense of

achievement for short-lived decision making. This finding aligns with the literature that indicates leaders are often influenced by mandated or compliance-driven tasks that override transformative and sustainable improvement (Dueppen & Hughes, 2018; Larsen & Hunter, 2014). The participating superintendent might argue transactional tasks only address their constituents' solvable and immediate needs and not the innate gaps at a district and school site level, which require deeper analysis. On the other hand, participants' responses conveyed a deep sense of commitment and passion to serving and addressing students' and parents' daily needs. Nevertheless, before principals can successfully meet the demands of the school, staff, faculty, teachers, parents, and community, superintendents must first address principals' needs and preparation as school leaders and their all-time low job satisfaction (Goldring et al., 2018).

The analysis of participants' shared experiences revealed several prominent subthemes and findings to consider when employing the principles of improvement science through transformative governance, including the need to (a) assess the culture, (b) develop leaders' competencies, and (c) operate with common values to shift mindsets.

Respect the "power of culture." Participants acknowledged culture was powerful and an important artifact to consider and assess when implementing any strategy at a district level. The superintendent shared, "If you think about the power of the culture of a large, complex organization like an urban school district, it doesn't make a very big difference whether you're a superintendent or not." He implied that if the conditions are not suitable, an improvement plan cannot reach fruition, even with the superintendent's authority. Participants recognized that readiness and professional development are required before adopting an improvement plan. Supovitz et al. (2019) recommended superintendents adopt a distributed leadership approach that allows reciprocal interaction among district leaders, principals, and subordinates. Participants

professed improvement required a culture of trust, humility, collaboration, and authenticity. The superintendent emphasized improvement requires cooperation and support from the district's school board of education, cabinet, school site councils, and, more importantly, teachers. Principals repeatedly highlighted the importance of gaining teachers' support to achieve their site goals. As described by the principals, without teachers' support, nothing can get done.

Underscoring teachers must benefit from the strategy if they are to endorse it. Björk et al. (2018) affirmed superintendents alone cannot assess and address school-wide improvement.

Participants inferred the speed of implementation and the feeling of unpreparedness led some leaders to challenge or resist the district's continuous improvement approach. One participant said, "We're creatures of habit," which is why change, although constant, is hard to accept. Grissom et al. (2021) signaled a decline in principals' level of expertise, particularly in low-performing schools. Goldring et al. (2018) and Supovitz et al. (2019) suggested that, although this may be true, fostering leadership and creating a culture of improvement required principals to tap into their expertise. However, principals' expertise is embryonic and does not always lead to quick and reliable learning experiences for staff who are called to support them. Although familiar with continuous improvement, participants felt unprepared for the speed at which the district adopted an improvement plan and expected results. They expressed fear in training their staff and how they would be perceived if unable to address their staff's questions.

Significant barriers to effecting continuous improvement were leaders' fear of failure, lack of confidence and distrust in district leaders, and expectancy of leadership turnover, precluding some leaders from embracing the labor of continuous improvement. Participants agreed their instability in leadership had led some leaders to adopt a "This, too, shall pass" mindset. In addition, participants attested some leaders were awaiting turnover in the

superintendency, which led to their inaction in their learning and application of continuous improvement. The superintendent sustained, "One big lesson as superintendent is that one has to be impatiently patient at the pace at which one will see a deep enough penetration of this work to pierce through the culture of an organization that you inherit." For participants, the process conveyed a sense of impatience from the superintendent and pressure to implement their learning quickly. More significantly, there was a need as transformational leaders to stimulate a culture that promotes collaboration and learning (Derrington & Campbell, 2015; Liu et al., 2016; Ross & Cozzens, 2016).

Develop leaders' competencies before enacting change. Leaders in this study agreed that the Carnegie Foundation as an essential partner was pivotal in developing district and school site leaders' continuous improvement competencies. However, they did echo the continued need for professional development to address the data literacy gap and imbalanced learning curve. Hence, the districts' adoption and adaptation of the Carnegie Foundation's six principles of improvement science support leaders' development, understanding, and employment of the principles of improvement science. Nonetheless, the superintendent advised:

One of the reasons why continuous improvement doesn't penetrate an organization is because, all too often, leaders simply adopt the vernacular of this work. They become very fluent in the language around continuous improvement, but they themselves have not acquired the competencies of putting the theory into practice.

The superintendent stressed that endorsing an improvement approach to K–12 work requires persistence and a deep regard for the organization's culture. From his responses, it appeared the superintendent might not have been prepared for the challenges he would face in his district. He declared that continuous improvement required patience from constituents. More importantly, continuous improvement required patience from leaders not to be hasty in their decision making and learning, including the school board of education. From his lens, the school board of

education also needs to have a profound understanding of continuous improvement to foster patience for the expected results.

One competency leaders identified as a priority was engaging in continuous improvement cycles. Participants agreed an ambitious agenda like continuous improvement required leaders to understand how to access, assess, and interpret data to identify the root cause for a specific problem and change idea to solve the problem. However, they acknowledged the evident data literacy gap was a serious challenge to advancing the improvement process. Accordingly, participants recommended capitalizing on the district and partners' professional learning, technical support, research, and data. Rohanna (2017) suggested more compelling is leaders' ability to determine when to adapt, adopt, or completely abandon a change idea, resisting the urge for quick implementation and immediate results. Ross and Cozzens (2016) declared principals as transformational leaders must demonstrate the managerial and transformational leadership competencies to drive educational reform. For participants, being data literate was intimidating but essential to effective decision making on whether to adapt, adopt, or abandon their change ideas.

Operate with common values—"common why." Good leadership was paramount in bridging the district's cultural values and improvement methods. Participants declared a "common why" helped bring life and unity in the application of improvement science. It was important for them to know what they were working towards achieving and having the necessary support. Language on their shared understanding of continuous improvement was deemed paramount in connecting the theory of improvement to their everyday practice. Participants agreed that their superintendent's influence was integral to cultivating a new frame of mind by promoting inclusivity in fulfilling the overarching vision of improvement science. As an

effective leader, the superintendent ensured vision and guiding statements reflected a districtwide improvement mindset, reformulating language whenever necessary. As Datnow and Park (2018) and Dueppen and Hughes (2018) sustained, leaders can break barriers with a strong vision and change district values.

The interference of a mechanistic mindset. Participants emphasized a "mechanistic procedural mindset" existed in the participating school district, hindering leaders' endorsement and commitment to continuous improvement. They professed the needs of the school and community are too important to pull away from 2-hour professional development sessions. One principal provided the following example of how the conditions at her school compelled her to operate with a mechanistic mindset:

If my problem is the cafeteria is super loud, I mean, we don't use it now, but, you know, it's really loud. What can I do about that in the morning? I have nothing for my kids to do before school starts.

Participants admitted that although the superintendent's transformative governance, deep respect for the culture, commitment to developing leaders' competencies, and adopted values were transcendent to shifting mechanistic procedural mindsets, principals were not ready to behave as transformative leaders.

As noted by Datnow and Park (2018) and Dueppen and Hughes (2018), a transformational leader must break barriers with a strong vision and staff support. Again, participants expressed concern with the pace with how continuous improvement was introduced and they advised the pace in shifting leaders' mindsets is a gradual process. Their priority was to build knowledge and create confidence in applying the nine principles of improvement science but first underscored that significant learning had to occur. One participant stated, "I think our superintendent uses kind of an approach of training administrators, rather than really making sure

that administrators are comfortable with the process, and then mandating it." From participants' responses, it appeared that there was an assumption from the superintendent to learn quickly and take their learning to the school sites. Nevertheless, even with a general understanding of the PDSA cycle, leaders felt ill equipped when asked to apply the principles of improvement to their everyday work in their School Plan for Student Achievement (SPSA) or the Local Control Accountability Plan (LCAP). However, they recognized their learning had developed a new way of thinking by looking at data intently.

Continuous improvement is not an undertaking districts and leaders can take alone. The participating school district sought partnerships with organizations like the Carnegie Foundation, the California Office to Reform Education (CORE), postsecondary institutions, and organizations with the resources to offer the essential professional capacity building, research, and technical assistance that would support their continuous improvement. Collectively, these partnerships ensured the district's improvement approach aligned with the definition of improvement science and penetrated the system through effective leadership and data use. From the superintendent's responses, he recognized that he alone could not advance the implementation of an improvement plan. Improvement work would require the support of not only principals, but also teachers. The participants duly noted the influence of teachers, suggesting that if teachers do not see the added value of an initiative, they will stall its progress.

Another compelling factor in how a superintendent moves continuous improvement from policy or theory to practice and action is building capacity among district and school site leaders to carry out the principles of improvement effectively.

Finding 2

Finding 2 was: Building capacity builds leaders' confidence. As noted by participants, not all leaders were equipped with professional readiness or prepared to enact the district's ambitious continuous improvement plan. On the contrary, participants shared that some of their colleagues were waiting out the superintendency, expecting the historic turnover at the superintendent level to occur. Others feared their lack of learning being exposed. As Celoria and Roberson (2015) stressed, there is a great need for leaders to "transform schools into systemthinking organizations" (p. 86). Participants agreed that transformational improvement science could produce effective leadership and leaders with the competencies to implement the principle of improvement science with fidelity. Although the conspicuous gap in leaders' competencies to interpret improvement methods and data literacy was evident in participants' responses, they further declared there was still a need for internal capacity building. Leaders agreed that the overwhelming amount of data leaders are expected to review and analyze requires new thinking and knowledge, particularly in reviewing and analyzing indicators. Participants continuously mentioned the conflict their time constraints and competing priorities posed when attempting to apply the improvement principles.

Participants concurred the heavy emphasis on data literacy was overwhelming for some leaders. Mandinach and Gummer (2013) described data literacy as "the ability to understand and use data effectively to inform decisions. [Data literacy is] composed of a specific skill set and knowledge base that enables educators to transform data into information and ultimately into actionable knowledge" (p. 30). One participant stated one "big take away" was there was more awareness on the use of data at a district level; thus, there was a need for the district to address

leaders' data literacy. Ultimately, participants understood the benefits of data-informed decision making, but it was finding the time to analyze data they found challenging.

The confounding need for leaders' capacity building on the use of data suggests a district can miss an opportunity to build the scaffolding of leaders if unaddressed. Participants voiced those who struggled with the principles of improvement science could benefit from extensive day-long training at a district level rather than the sequence of 2-hour training. An intentional approach to professional development can facilitate the endorsement of all leaders and staff, teachers included. Further, participants suggested teachers must be engaged in and supportive of the cycle of learning. Without teacher buy in, it is difficult to get anything done, which is a challenge not only to principals, but also to a superintendent committed to improvement. Huggins et al. (2017) and Liu et al. (2016) described this level of engagement as a collective approach that engages school leaders and teachers in the school's decision-making process by having principals model behaviors expected of teachers and other school leaders. These modeled behaviors and actions, one participant agreed, were intended to establish a culture of collective leadership where staff leadership engagement takes on practices and supports to help principals achieve student success. However, one participant expressed district leaders could use the same level of training as principals to create automaticity in applying the principles of improvement.

Honig and Rainey (2015) and Jamal (2014) maintained the transformation of educational leadership required school site leaders and teachers to adopt a shared vision. Participants agreed this work involves confidence. It requires the need to ask many questions and present improvement science in a way that gains buy in from teachers, staff, parents, and the community at large. Leaders accredited the partnership with the Carnegie Foundation, CORE, their general understanding of the PDSA, and the role of the instructional superintendents as invaluable in

their interpretation and implementation of improvement science. This participating school district identified the Carnegie Foundation as a foundational partner in the district, adopting and adapting Carnegie's six principles of improvement science as the path to follow as the district embarked on a journey of continuous improvement. At the same time, the partnership with CORE was instrumental in developing the knowledge of the cabinet on how to execute the principles of improvement.

Permission to fail. Participants pronounced that leaders' psychological safety was a vital element to consider. Weiner et al. (2021) stated, "Organizational factors and specifically, differences in accountability, principal autonomy, professional culture, and teacher decisionmaking were all key in the degree of psychological safety exhibited" (p. 1). The study of participants suggested the speed at which the training was implemented left leaders feeling vulnerable, underprepared, and inadequate in building capacity among other leaders. More importantly, participants voiced leaders feared failure and being exposed as unknowledgeable. Participants contended it was crucial to creating a psychological safety net for leaders to learn at their pace, from their mistakes, and make decisions without the fear of repercussions. At the district, the use of data further heightened leaders' anxieties. However, one participant affirmed data "allows you to look at the errors, and then that's how you get that you're continuously improving. Right. And so that allows, you know, it's in the mistakes that you get better." Participants' responses suggested even the participants who appeared experienced in the use of data were unprepared for the speed with which continuous improvement was employed and the overwhelming amount of data they were expected to apply.

Moreover, participants shared that not all leaders were equipped to engage in datainformed decision making quickly, creating a sense of uneasiness. The discomfort prompted by their inadequacies triggered resistance among some principals, who were left feeling vulnerable and overwhelmed at the amount of data they had to interpret. In addition, the perceived inadequacy of the training left principals feeling exposed before their staff as uninformed and incompetent. Furthermore, participants admitted they felt a sense of responsibility as leaders to be experts, precluding them from accepting or admitting failure. Weiner et al. (2021) stated that when psychological safety is present, a district can cultivate positive and collective learning among principals that leads to meaningful engagement and results in principals' professional improvement and student outcomes. They further suggested that not providing principals with a safety net would hinder leaders' ability to engage in difficult conversations that could improve the organization's policies, practices, and behaviors.

The role of the instructional superintendent was identified by participants as a leading factor in principals interpreting the superintendent's vision for continuous improvement and implementing it at the school site. In addition, the use of the SPSA as a change idea, the need to provide principals with professional development, and the extensive use of data were subthemes deemed crucial to principals' preparation and implementation of continuous improvement methods.

Research Question 2

Research Question 2 was: How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?

Finding 3

Finding 3 was: The gaps in data literacy call for the attention of instructional superintendents. The role of the instructional superintendent, commonly referred to as the assistant or associate superintendent of instruction, or as referenced by literature, principal

supervisor, was deemed pivotal by participants in embedding continuous improvement practices at the school site level (Honig & Rainey, 2015). Perceived by participants as the "units of change," instructional superintendents were considered fundamental in building capacity among principals, making certain principals display competencies in improvement science. For example, one principal described his learning of continuous improvement, sharing:

An ongoing cycle of learning. It's a process. It's a process about identifying a problem, working to find the underlying root causes of that problem, not necessarily just the problem itself. And really understanding those root causes prior to solution-seeking. So, really developing a deep understanding of the problem and then from that, building and understanding what's going on. Starting to then identify possible next steps in terms of action. But then, it's also a very reflective process. So, it's after implementing, gathering data, reflecting upon what that data says, and then really starting that cycle all over again. So, it's a process that should never stop. It's about refinements, about improvement. And that's the main idea behind it.

As principal trainers, the instructional superintendents explained that they are the conveners and trainers of principals on the process of continuous improvement, among other things. She shared instructional superintendents are tasked with ensuring the principles of improvement are reflected on the SPSA and enacted by principals while also assessing principals' operational, instructional, and logistical management. Saltzman (2016) affirmed principal supervisors (i.e., instructional superintendents) are an integral part of the organization's oversight structure. For example, once trained by the superintendent, principals felt instructional superintendents did the heavy lifting for the participating district and were tasked with supporting principals in executing the principles of improvement science. Principals acknowledged the significance of the instructional superintendents' role as supervisors and support systems, particularly in the review of their data, classroom observations, and problem solving. At the district, instructional superintendents' ultimate charge was to build principals' competencies in the use of data to identify the gaps/problems and develop a course of action with metrics that help evaluate the effectiveness of the intervention. Gummer and Mandinach (2015) stated, "Despite a history of

federal accountability laws and fast-paced changes toward a data-driven society, training on data literacy skills are shown to be lacking depth and authentic application" (p. 233). Thus, as described by the instructional superintendent, their role was to ensure principals were working toward meeting their site goals by continuously reviewing and applying data as they worked on the SPSA. However, at the ground level, the instructional superintendent felt her role was to assess her school sites' entirety, starting with the front desk greeting.

The SPSA is a change idea. The district's change idea was to use the SPSA as a compliance document conducive to incorporating improvement science and allowing school sites to declare their change idea. The superintendent underscored that his inability to oversee principals directly made him dependent on the SPSA to hold principals accountable for executing a change idea. Collaboration and partnerships were contributory to principals successfully developing a change idea. Participants agreed that the efficacy of the SPSA as a change idea depended on relationships with teachers, staff, and parents. They stressed the importance of relationships to effect change at a site level. Thus, principals started by making the school council a collaborator in improving the schools. A commitment from school leaders and teachers allowed principals to develop innate leadership potential that helped institute a culture motivated by continuous and sustained improvement and achieve better results (Huggins et al., 2017; Liu et al., 2016). As an accountability measure, the participating district required principals to conduct root cause analyses to draft their SPSA and help formulate positive student outcomes. The SPSA served as the vehicle that allowed the superintendent to see if the philosophy of improvement science penetrated principals' competencies and the system. Similarly, the LCAP, as another living document, helped leaders monitor whether student needs were being met. Participants expressed that the problem remained with some principals lacking

the readiness and understanding to conduct a root cause analysis and identify and implement a course of action

Leaders ask for professional development. Leaders' professional learning was a primary need, driver, and influencer when employing continuous improvement, as implied by participants' responses to the interview questions. Thompson and France (2015) made principals responsible for meeting district goals, which was precisely why the district prioritized their professional development over other district leaders. Grissom et al. (2021) underscored the importance of principals' professional development by stating, "It is difficult to envision an investment in K–12 education with a higher ceiling on its potential return than improving school leadership" (p. 14). Hence, the superintendent's active role in developing principals and leaders in the district was invaluable, but not at the speed it occurred. During the interview, one participant described the pace of the district's professional development efforts as "light speed." Participants described the professional development efforts as overwhelming, confessing, "People [were] opting out mentally or waiting for things to pass." Participants admitted the district was still recovering from the fast-paced approach to training.

Participants said they were most receptive when convening, learning, and cocreating for extended periods. They agreed anything less than day-long training was inadequate and could leave leaders feeling unprepared to train others on the principles of improvement science.

However, the instructional superintendent offered the following depiction of how they provided professional development, sharing:

When we visit schools, we discuss their data to date. We walk classrooms and observe instruction to see if their instruction is in correspondence with their SPSA goals. We discuss the operational side of the house to see if it matches their instructional goals that they set forth.

Participants further emphasized the overall operation of the school site was equally impactful in meeting student outcomes, not just reviewing the SPSA.

Seeing the system through data. As described by one participant, "You've got to set goals that matches your system and what your system is telling you with regards to the needs of the system." The district adopted an early warning system to inform leaders' approach to school and student outcome improvement. The early warning system adopted by the district consisted of dashboards and indicators and was intended to compel practitioners to intervene when data suggested students were at risk (American Institutes for Research, 2013; Balfanz & Fox, 2011; Neild et al., 2007). Che et al. (2015) stated, "Early warning systems aggregate information from diverse data systems with the purpose of providing useful information earlier to education practitioners" (p. 3). Participants indicated the interpretation of data and research helped them engage in data-informed decision making that resulted in new policies, practices, procedures, and a new way of doing work. Che et al. (2015) stated:

Demographic characteristics of the students are generally included in early warning models and most commonly include, race, ethnicity, parental education levels, and economic disadvantage; they are often used as control variables to test the impact of variables that can be adjusted with behavioral or policy shifts. (p. 5)

One participant described the process as:

A deep questioning of the problems with regards to that one aspect and then to pick out that one particular problem, to come up with some change ideas and go through an iteration of the plan, do study act cycles to really improving that particular aspect of the problem in our system.

Another participant voiced that besides having a profound understanding of improvement science, leaders need to build intelligence and automaticity in applying the principles of improvement and deploying an action plan. From participants' responses, it is evident that the biggest struggle for principals was in the automaticity of applying the principle so improvement.

Participants' responses implied a need for leaders to evolve as critical thinkers beyond a technical understanding of their data. However, as Moore et al. (2017) cautioned, leaders are less willing to embrace data and accountability if perceived as a mandate.

Research Question 3

Research Question 3 was: Using a CIF, what prominent drivers do district leaders identify as the most crucial to sustaining continuous improvement practices?

Finding 4

Finding 4 was: Eight prominent drivers of continuous improvement. As referenced in Chapter 2, using the ARCHES the ten essential drivers (ARCHES, n.d.) as a framework helped answer the third research question of what prominent drivers district leaders identified as the most crucial to sustaining continuous improvement practices. In the thorough analysis of participants' interview transcription, the following eight main drivers surfaced from participants' responses to the interview questions.

Collective vision—"common why." Participants echoed that it is easier to embrace a plan when you know what you are working toward. Participants agreed adopting a common why for continuous improvement required strong leadership, brought forth by their newest superintendent. The superintendent professed that a district needs an effective leader with competencies to adopt a shared vision anchored on continuous improvement and endorsed by district leaders, principals, and the community at large, which results in systemic change (ARCHES, n.d.).

Common agenda—"improvement science." The superintendent's adoption of the Carnegie Foundation's six principles of improvement, adapted to nine by the district, was the standard plan for the district's improvement efforts. The superintendent referenced his

experience with other districts and stated those experiences propelled him to pursue a superintendency that would allow him to lead improvement at a district directly. Thus, establishing partnerships with organizations or institutions can support a district's improvement science efforts with data, technical assistance, research, and professional learning for district and school site leaders. In addition, a district understanding of the problem it seeks to address is helpful (ARCHES, n.d.). Nonetheless, participants voiced the district was not prepared for the fast-paced introduction and deployment of the improvement agenda.

Oversight structure—"instructional superintendents." Participants identified the role of instructional superintendents as principal supervisors as pivotal in principals' professional development and capacity building (Honig & Rainey, 2015). The instructional superintendent acknowledged her responsibility at the "microscopic level" is to support principals' development of goals based on student needs. Still, at a "macro level," they visit the schools, walk the classrooms, and assess whether instruction aligns with the SPSA goals. She refuted the notion that the school's operation has nothing to do with academics. She stated, "that's absolutely not correct," and that the operation of a school site (i.e., supervision, recess, lunch) and environment have everything to do with lowering chronic absenteeism and students showing up to school. She emphasized, "every day, coaching, every day, coaching." Tasked with the professional development of principals, instructional leaders' frequent engagement with school site leaders required they guaranteed principals' understanding and application of improvement science was reflected in their SPSA goals and overall improvement. Further, instructional superintendents provide capacity building and enforcement of accountability frameworks.

Reinforce initiative—"what works." Principles of improvement and heavy emphasis on data aim to help district and school site leaders assess the effectiveness of existing practices,

policies, and procedures. Thus, reinforcing the efforts and application of evidence-based practices is helpful. The instructional superintendent stressed the amount of coaching and feedback they provide principals to ensure they monitor the data points outlined in their SPSA. She noted that instructional superintendents could easily be distracted from their goals by the daily challenges of their high-poverty, high-need school district.

Common metrics—"dashboards and indicators." Participants referenced the district's use of data to develop internal dashboards and indicators as performance measures to monitor the district. School-wide outcomes are considered instrumental in leaders' ability to assess the system. The effective use and monitoring of data helped leaders evaluating trends over time (Easton et al., 2017). Most significant are partnerships that provide technical assistance when a district does not have access or the capacity to develop its own systems to assess outcomes in real time, as was the case with the participating district. However, participants would underscore the importance of creating automaticity in leaders use of data is of the utmost importance.

Evaluation efforts—"data literacy." The ability to analyze and see the system through the principles of improvement science and data allowed the district to evaluate change ideas and decide whether to adopt, adapt, or abandon them (Rohanna, 2017). However, participants would agree that it has not been a seamless process. A lot of learning took place to develop principals' data literacy and apply improvement principles to their everyday work. Further, considering external partnerships to support the evaluation of district-wide efforts and whether the adopted improvement methods have penetrated the system was essential. Additionally, K–12 leaders can be encouraged to use and analyze data to make data-informed decisions (ARCHES, n.d.).

Continuous communication. The importance of the district and school sites communicating with one another and interpreting each other's needs, progress, and outcomes is

of the essence to advancing a continuous improvement method. Participants echoed the need to prioritize communication between the district and schools site, each having a clear understanding of what is happening at both ends. Superintendents' informing their school board of education of the district-wide transformational, sometimes slow-moving efforts were fundamental to their endorsement and patience. Likewise, it was paramount to consistently and openly communicate to the broader community the impact of continuous improvement on student improvement to deepen their understanding (ARCHES, n.d.).

Professional learning—"capacity building." Improvement science requires districts spend considerable time developing leaders' competencies to ensure they understand the theory and its application. Grissom et al. (2021) emphasized principals must engage in "practices that encourage a school environment marked by trust, efficacy, teamwork, engagement with data, organizational learning, and continuous improvement" (p. 15). From participants' responses, the consensus was to prioritize principals' data literacy to employ the principles of improvement in the development of their SPSA.

Finding 5

Finding 5 was: Transactional tasks interrupt the advancement of improvement science. The fifth finding is an outlier and it is not necessarily answering any of the three research questions. However, it is a finding worth mentioning, given participants repeated reference to the daily interruptions that prohibit them from employing the principles of improvement with fidelity. The study revealed one pronounced barrier: the impact of transactional governance on the advancement of continuous improvement. First, participants' described the management of schools as laborious work and declared their everyday tasks distracted them from engaging in transformative decision making. Participants described the multitude and range of functions a

principal was responsible for: (a) overseeing instruction; (b) supervising unstructured time (i.e., recess and lunch); (c) walking through classrooms; (d) managing classrooms; and (e) engaging students, parents, and the community. Mestry (2017) asserted lacking resources and competing priorities hindered leaders' ability to prioritize school improvement and student outcomes. Still, one participant would argue the operation of a school also impacted student outcomes. The instructional superintendent stated:

I believe the misnomer is this belief that operations has nothing to do with academics, and that's absolutely not correct, because operations such as having a welcoming environment upon the very minute your first student steps foot onto your campus contributes to lowering a chronic absenteeism rate.

Although participants recognized day-to-day challenges could easily distract principals from their set goals, participants ultimately agreed transactional governance distracted leaders from fully immersing themselves in improvement science. As literature has suggested, expectations of the principal role remain challenging (Curry & Wolf, 2017; Honig & Rainey, 2015).

Implications for Action

Having approached this study from the lens of a higher education administrator and a K–12 service provider required, I managed my biases and expectation of participants with humility and deep regard for their experiences. It was an opportunity to understand the intricacies of the K–12 leader roles that supported or prohibited them from improving their policies, practices, and procedures, ultimately impacting student outcomes. Therefore, the primary driver for conducting the study was to understand:

- 1. How does the superintendent move continuous improvement from policy/theory to practice and action?
- 2. How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?

3. Using a continuous improvement framework (CIF), what prominent drivers do district leaders identify as the most crucial to sustaining continuous improvement practices?

The contributions of six participants ranging from the highest chief executive (i.e., superintendent) and district leaders and principals, offered great insight into the complexities of their leadership roles and the impact they had on the advancement of a district's continuous improvement. The analysis of their responses to the interview questionnaire affirmed the importance of developing superintendents to lead and principals to enact continuous improvement to build schools and increase student achievement. The study substantiated participants' experiences and contributions, affirming: (a) the significance of transformative leadership and (b) the importance of leaders who demonstrate competency and a profound understanding of their educational system and the results it produces.

Participants' responses suggested that educational reform heavily depends on the superintendent's role. Although the superintendent's role is critical in leading change that continuous improvement can offer, it is evident by the superintendent's experience that he alone cannot shift the culture and mindset of a district. He heavily emphasized that this change requires commitment from the school board of education and cabinet members to support an ambitious plan of improvement that challenges a district's traditional mechanistic mindset. Principals indicated that although responsible for implementing improvement practices, they are not always afforded the time to address the systemic issues in their schools because they are called to address the pressures from school board members and their constituents. The study afforded the perspective of an experienced superintendent with the competencies to execute an improvement plan and yet face many challenges. Thus, suggesting an inexperienced leader overwhelmed by many demands and responsibilities, including the application of improvement

science, can easily overlook the importance of assessing culture, building capacity, and establishing relationships and partnerships.

Recommendation 1: Assess Culture

The study's outcome, supported by the superintendent's statements, affirmed that before adopting and launching an improvement method, the district's culture must be assessed to acknowledge the existing mindset among school board members, district leaders, staff, students, and the community. In addition, an assessment can help identify prevailing behaviors for affording opportunities or posing barriers to transformative leaders. Although participants acknowledged the importance of improvement science, they too agreed that the district's culture was not ready for the superintendent's fast-paced implementation plan.

Improving the performance of a school district requires a commitment from leaders to lead with transformational governance while accepting improvement science is slow moving to produce tangible results. At their disposal, data are essential artifacts for K–12 leaders to analyze the system and its effects. School districts' investment in dashboards, indicators, or any other analytics, if used effectively, can help identify disparities in student outcomes or critical problems and inform a course of action. The challenge was not all leaders were prepared to access, review, and analyze the data to engage in data-informed decision making, said participants. Hence, in the case of the participating district, principals were prepared to wait and see if the superintendent exited the district before it was time to implement the principles of improvement. As Gummer and Mandinach (2015) inferred, the need to engage in data-driven decision making is a requirement that will be impressed upon with time in education.

The state's inability to create a unified, comprehensive data system for K-12 has led districts to develop their own internal systems or contract with viable partners (Public Policy

Institute of California, 2016). In 2019, California's legislature approved the establisment of a longitudinal data system to address the absence of a data system. In 2020–2021, Governor Newsom approved funding of the Cradle-to-Career data system and its blueprint was developed with the support of 200 individuals and 15 state agencies (Cradle-to-Career Data System Act, 2019). Once completed, the Cradle-to-Career system will "analyze data collected from multiple sources to shape policy and advance educational equity" (Cradle-to-Career Data System Act, 2019, For Advocates and Researchers section). Principals must be urged to access data available to evaluate student achievement trends, gaps, and failures and to inform and monitor school site improvement (Datnow & Park, 2018; Schildkamp & Datnow, 2020).

Recommendation 2: Train the Trainer

In the study, participants noted the disproportionality in district leaders' data literacy as a serious concern. The principles of improvement science cannot be applied without first assessing and developing leaders' competencies and confidence in using data. Principals explained that the depth of training received was insufficient to train others on the improvement principles. They stated feeling ill prepared to train their teams and needing more intentional training. K–12 leaders described themselves as experts and contributors to reforming K–12 education and policies. Therefore, principals felt the need to afford their staff the necessary professional development to ensure their contributions are researched, evidence based, and data informed. The first principle requires K–12 leaders to be proficient in data literacy. As Gummer and Mandinach (2015) described, data literacy is "the ability to transform information into actionable instructional knowledge and practices by collecting, analyzing, and interpreting all types of data" (p. 2).

Recommendation 3: Afford Psychological Safety

Leaders' lack of confidence in applying the principles of improvement must be addressed to create automaticity in the use of data. The heavy emphasis on data at a state and district level, in this case, prompted by the principles of improvement, cannot be disregarded by district and school site leaders. Although principals acknowledged their roles required constantly looking at data, participants questioned and found overwhelming the mandated use of data to drive improvement. Most significant, principals shared leaders were afraid of expressing their insecurities with the use of data and lack of data literacy, hindering their ability to seek the support necessary to develop their data literacy competencies. Deepening principals' understanding and application of data to lead transformative change warrants addressing their fear and disengagement. District leadership should concentrate on affording principals the psychological safety to express their professional development needs without the fear of judgment or repercussion.

Recommendation 4: Prioritize Data Literacy

To launch a continuous improvement method, districtwide efforts should assess leaders' data literacy. In addition, as suggested by participants, an assessment of leaders' data literacy can indicate the need for a differentiated professional development approach based on leaders' level of understanding and interpretation of data to make data-informed decisions. Finally, assessing a district's culture and leaders' data literacy could help district leadership prepare for when and how to launch a continuous improvement method, prioritizing leaders' capacity building in the following order: (1) school board of education, (2) cabinet members, (3) instructional superintendents, (4) principal supervisors, and (5) principals.

Of equal importance is principals' preparation and capitalizing on the role of instructional superintendents, known as principal supervisors, to support school site principals in developing the fundamental competencies in the application of improvement science. Instructional superintendents are tasked with overseeing principals' performance; therefore, they must be the first to learn improvement science. Principals must move beyond the rhetoric of the theory of improvement method to a profound understanding of improvement principles. As former principals, instructional superintendents are required to hold principals accountable for using data to inform school improvement, which is often perceived as a mandate (Moore et al., 2017).

Recommendation 5: The Impact of Teacher Unions

Participants described the role of teachers as essential to shifting culture, employees' mindset, and ensuring improvement science is endorsed and transformative practices that are slow moving penetrate the system. As described by principals, nothing gets done without their teachers' support. Therefore, teachers' influence in improving a school district must not be disregarded. Priority should be given to engaging teachers in the improvement plan of schools. A district requires teachers to pledge to support their agenda, particularly when it impacts curriculum and instruction. Teacher opposition or disengagement can result in teacher unions creating barriers or delays in the transformation of districts. For example, as elected officials, school board members must comply with the demands of their constituents to produce quick results and the demands of teacher unions. Unfortunately, the priorities of teacher unions do not always align with nor support the district's transformative improvement efforts. Leithwood et al. (2004) stated, "Leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school" (p. 5). Hence, this suggests the critical role teachers play in K–12.

The implications and recommendations outlined in this study are based on findings and an overall analysis of contributions afforded by six K–12 leaders. In 1988, the average years of principal experience was 10 years which dropped to 7 years by 2016 (Gummer & Mandinach, 2015). With the onboarding of less experienced principals, it is imperative to cultivate their learning of improvement science, so improvement practices are scaled broadly at school and district levels.

Recommendations for Future Research

Continuous improvement in K–12 still requires further investigation, particularly researching school districts that adopted continuous improvement methods that led to cultural shifts and increased student outcomes. Districts' enactment of continuous improvement can also serve as lessons learned for other districts to consider. The research on the influence and behaviors of teacher associations and how these promote or hinder continuous improvement in school districts is imperative. I suggest researching teachers' engagement in continuous improvement outside the classroom setting. Also, the term of an elected school board official, the pressures, and its implications on superintendents' ability to lead with transformational governance requires further research. Equally significant is researching evidence of school boards of education transformative governance and how their roles as elected officials have advanced continuous improvement in K–12, evidenced by increased student outcomes. Finally, a deeper analysis of principals' support to enact continuous improvement is of the utmost importance. The study suggests a great need for professional development in data literacy.

Summary

This basic qualitative study of one K–12 school district and the contributions of six study participants informed how leadership at one exemplary school district committed and enacted

Kaizen, which means changing for the better (Singh & Singh, 2009). The following three research questions guided the study: (a) How does the superintendent move continuous improvement from policy/theory to practice and action? (b) How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site? and (c) Using a CIF, what prominent drivers do district leaders identify as the most crucial to sustaining continuous improvement practices?

Singh and Singh (2009) described the process of continuous improvement as a way of work that strives for excellence, referred to as improvement science by the participating school district. The analysis of six 1-hour interviews and artifacts revealed four prominent themes: (a) transformational governance, (b) capacity building, (c) accountability, and (d) limitations of transactional governance. Additionally, I identified outlier findings and philosophies. Transformational governance was deemed pivotal to enacting a continuous improvement method. That governance comes with a tremendous amount of responsibility to lead with efficacy, display competencies honoring existing cultures, and steer leaders to adopt a new philosophy to do the work. The findings suggest affording leaders capacity building in the improvement method and data literacy can help shift mindsets. Instructional supervisors appointed as principal supervisors were paramount to training, supporting, and holding principals accountable for displaying continuous improvement behaviors and engaging in data-informed practices (Honig & Rainey, 2015). The study participants found the following eight drivers crucial to advancing a continuous improvement method: (a) collective vision, (b) common agenda, (c) oversight structure, (d) reinforce initiative efforts, (e) common metrics, (f) evaluation efforts, (g) continuous communication, and (h) professional learning (ARCHES, n.d.). Finally,

transactional governance was a noted barrier in advancing improvement at a school site level and must be addressed as part of principals' professional learning. The study was instrumental in identifying essential professional learning and supports K–12 leaders required to serve as transformative leaders, enacting the leadership, behaviors, policies, and practices that improve student achievement through continuous improvement.

Researcher's Reflection

Conducting a study at a K-12 district known for its commitment to continuous improvement was a humbling experience. As an administrator at a postsecondary institution for the past 16 years, former K-12 advisor, and former young professional in the private sector, continuous improvement has been informally expounded, but it was never formally introduced as an established framework. There is no doubt it is easier to pass judgment than to understand why leaders in K-12 struggle to engage in sustainable improvement practices that permeate the system enough to address disparities in student outcomes. Nevertheless, the findings were enlightening or a reminder not to be hasty in passing judgment on K-12 leaders' efforts to change students' conditions. Now, having a more profound understanding of the complexities of the K-12 leader role, I realize even mandates prove ineffective if there is little to no buy in in a leader's vision. Even a transformative leader cannot bring about improvement without the support of their school board of education, cabinet, principals, teachers, staff, and community at large. It is no longer sufficient for a superintendent to have a vision and strategy to bring about positive change in education and student outcomes. Improvement requires a commitment from leaders to be active and continuous learners and transparent about their need for professional learning. One important takeaway is the level of humility and vulnerability in the role of superintendents and principals, scrutinized internally and externally.

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APPENDIX A: CONFIRMATION EMAIL TO EXECUTIVE ASSISTANT

From: Orquídea Largo

Subject: Dissertation Research on Continuous Improvement in Practice: One K-12 District's

Leadership Journey

To: Exemplary Superintendent

Date: August 9, 2021

Dear XXXXX,

I sincerely hope you can assist me with scheduling an appointment with Superintendent XXXXX and XXXXX.

I appreciate your time and look forward to an opportunity to share my study with Superintendent XXXXX and XXXXX. Attached for Superintendent XXXXX and XXXXX's review is the abstract of the study and a copy of the **Informed Consent Document** for their signature before they participate in this worthwhile study.

Should you have any questions or need additional information, I can be reached at XXX-XXX-XXXX.

Sincerely,

Orquidea Largo

APPENDIX B: INFORMED CONSENT DOCUMENT

Research Title: Continuous Improvement in Practice: One K–12 District's Leadership Journey

Lead Researcher: Orquídea Largo, EdD Candidate

Faculty Advisor: Dr. Laura Hallberg

RESEARCH DESCRIPTION: You are invited to voluntarily participate in a basic qualitative research study conducted by Orquídea Largo, EdD candidate, a doctoral student working toward completing a dissertation in Educational and Organizational Leadership at the University of the Pacific. The purpose of this study is to use an established continuous improvement framework to understand and describe continuous improvement practices and their impact at one school district to serve as a blueprint to other districts who wish to implement continuous improvement practices.

This exploratory basic qualitative study focuses on identifying and describing the behaviors, practices, procedures, traditions, and cultures that exemplary K–12 leaders adopt to promote continuous improvement that positively impacts student achievement.

This study will gather data from multiple sources that include an open-ended interview, observations, and collection of data archives to understand the practices, behaviors, procedures, and culture that promote continuous improvement to increase student achievement. The findings of the research will be summarized in a doctoral dissertation following your participation in an interview about your understanding and contributions to a continuous improvement culture. Interviews will be conducted via Zoom, will last approximately 1–2 hours, and will be recorded for transcribing. All audio recordings, interview notes, and data artifacts will be filed in a secure and encrypted computer and cloud server and discarded after 3 years. There are *no alternative research procedures*, so your alternative is not to participate.

TIME INVOLVEMENT: Your participation will consist of an interview that should take about 90 minutes.

RISKS AND BENEFITS: There are no risks beyond what is experienced in daily activities associated with psychological risks and loss of confidentiality. The benefits that may reasonably be expected to result from this study are that your contribution will help inform districts on how an exemplary district effectively promotes continuous improvement practices that lead to student improvement. Your decision whether or not to participate in this study will not affect your employment or any other benefits to which you are entitled.

COMPENSATION: You will receive a \$25 Amazon gift card as payment for your participation.

PARTICIPANT'S RIGHTS: If you have read this form and have decided to participate in this research project, you understand that your participation is entirely voluntary, and your decision whether or not to participate will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to participate, you are free to discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled. You have the right to refuse to answer particular questions. The results of this research study may be presented at scientific or professional meetings or published in scientific journals. It is possible that we may decide that your participation in this research is not appropriate. If that happens, you will be dismissed from the study. In any event, we appreciate your willingness to participate in this research.

CONFIDENTIALITY: All information collected for the purposes of this research study will be identifier redacted, and your confidentiality will be maintained. Upon completion of the research study, all audio/video will be destroyed. All remaining data artifacts will be securely stored for 3 years following the completion of data collection, stored and encrypted in a cloud server. All tangible evidence will be shredded, and files deleted from all secured computer systems.

COLLECTION OF INFORMATION

- (a) No information that identifies you in this research study will be released without your separate consent. All identifiable information produced in this research study will be protected to the limits allowed by law. If any changes are made with the research study design or data, you will be informed or asked to provide consent.
- (b) No information that identifies you in this research study will be collected as part of the research, even if identifiers are removed, will not be used or distributed for future research studies, you will be informed or asked to provide consent.

NOTIFICATION OF RESEARCH RESULTS: The research findings and recommendations produced for the purpose of the dissertation research study can be made available to all participants upon request.

CONTACT INFORMATION:

Questions: If you have any questions, concerns, or complaints about this research, its procedures, risks, and benefits, contact the Lead Researcher at XXX-XXX-XXXX or at XXX@XXXXX.edu. You can also contact the Faculty Research Advisor, Dr. Laura Hallberg, at XXX@XXXXXX.edu or XXX-XXXX-XXXX.

Independent Contact: If you are not satisfied with how this study is being conducted, or if you have any concerns, complaints, or general questions about the research or your rights as a participant, please contact the Office of Research and Sponsored Programs to speak to someone independent of the research team at XXX-XXXX or XXX@XXXXX.edu.

at XXX-XXXX or by email at XXX@XXXXX.edu.
I hereby consent: (Indicate Yes or No)
 To be <i>audio/video</i> recorded during this study. YesNo For such <i>audio/video</i> records resulting from this study to be used by the researcher and professional transcriber and used to capture all information shared during the interview and to verify the information reported. YesNo
The extra copy of this signed and dated consent form is for you to keep.
Your signature below indicates that you have read and understand the information provided above, that you have been afforded the opportunity to ask, and have answered, any questions that you may have, that your participation is completely voluntary, that you understand that you may withdraw your consent and discontinue participation at any time without penalty or loss of benefits to which you are otherwise entitled, that you will receive a copy of this form, and that you are not waiving any legal claims, rights or remedies.
SIGNATURE DATE
Research Study Participant (Print Name):

Researcher Who Obtained Consent (Print Name):

Appointment Contact: If you need to change your appointment, please contact Orquídea Largo

University of the Pacific IRB2021-103 Approved on 6-24-2021

APPENDIX C: SUPERINTENDENT INTRODUCTORY EMAIL

From: Orquídea Largo

Subject: Dissertation Research of Continuous Improvement in Practice: One K-12 District's

Leadership Journey

To: Exemplary Superintendent

Date: TBD

Dear Superintendent XXXXX:

My name is Orquídea Largo, EdD candidate working toward completing a dissertation in Educational and Organizational Leadership at the University of the Pacific. The purpose of my email is to invite you to participate in a basic qualitative research study that seeks to explore how exemplary district leaders like yourself and school site principals together promote a culture of continuous improvement.

I recognize you are extremely busy; however, your participation in an interview and contributions will help inform districts on how an exemplary school district like [SCHOOL DISTRICT] effectively promotes continuous improvement practices that increase student outcomes. Your participation is entirely voluntary.

Also, I want to request your support to contact district leaders and school site principals and invite them to participate in this worthwhile study. Their participation will consist of an interview that should take about 60 minutes. With your permission, I would like to request an opportunity to observe staff meetings and the possibility of collecting some of your documented policies and procedures informed by your continuous improvement philosophy.

I sincerely hope you will consider participating in this worthwhile study. If you have any questions, concerns, or complaints about this research, its procedures, risks, and benefits, you can contact me as the Lead Researcher at XXX-XXXX or at XXX@XXXXXX.edu. You can also contact my Faculty Research Advisor, Dr. Laura Hallberg, at XXX@XXXXXX.edu or XXX-XXXX.

Thanks again for your consideration.

Sincerely,

Orquidea Largo

Cc. Dr. Laura Hallberg

APPENDIX D: SUPERINTENDENT INTERVIEW PROTOCOL

Superintendent XXXXX,

Thank you for taking time from your busy schedule to meet with me today.

If you do not mind, I would like to go over some housekeeping items:

- a. You have signed a consent release form authorizing us to audiotape today's conversation.
- b. For your information, only I, my faculty dissertation advisor and transcriber, will be privy to the recordings, which will be destroyed or deleted after they are transcribed. The interview and information will be held confidential in password protected files.
- c. Your participation is voluntary, and you may stop the interview at any time if you feel uncomfortable.
- d. The interview should last approximately 60 minutes.

Thank you for agreeing to participate.

Introduction

You were selected as one of California's exemplary K–12 leaders and someone who can offer a great deal on school improvement. My study focuses on the improvement practices of one school district's leadership. I am particularly interested in how a superintendent moves continuous improvement from policy/theory to practice and action? The findings from this study will be made available to districts interested in engaging in continuous improvement practices. The study will not attempt to evaluate your leadership practices but rather describe them for others to consider to increase student achievement.

Interviewee Background

How long have you been in your position?

How long have you been with the district?

Is this your first superintendency?

Prompt: If no, where else have you served as a superintendent?

What brought you to this district?

What is your highest degree?

What is your definition of continuous improvement?

If it is okay with you, I will proceed with the interview questions. There are only 10 questions, but I am likely to probe whenever necessary to capture as many details as possible.

Q1. How does the superintendent move continuous improvement from policy/theory to practice and action?

- 1. In your own words, what is your district's definition of continuous improvement? How would you describe the process?
- 2. What does a superintendent need to enact a continuous improvement agenda?
- 3. What do you consider the most challenging about adopting a continuous improvement theory of action? Why?

Q2. How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?

- 4. As a superintendent, how do you ensure improvement is continuous at a school site level? What accountability measures were adopted, if any? If no, why not? How do you know what is happening at the school site level?
- 5. How was the practice of continuous improvement first introduced to school site principals? What type of professional development was offered to principals to help them adopt a continuous improvement philosophy?

Q3. Using a continuous improvement (CI) framework, what prominent drivers do district leaders identify as the most crucial to sustaining CI practices?

- 6. Did the district adopt a specific continuous improvement framework to guide the continuous improvement process? If yes, which one and why? What drivers/factors do you think are crucial to effecting continuous improvement practices? Why?
- 7. How does the school board demonstrate its support of the district's continuous improvement agenda and policies?

That concludes our interview. Is there any other information you would like to offer?

I want to thank you again for taking the time for this interview. Should I have any questions, would it be okay for me to email you or schedule a follow-up meeting? Thank you for your time.

APPENDIX E: DISTRICT LEADER EMAIL

From: Orquídea Largo

Subject: Dissertation Research of Continuous Improvement in Practice: One K-12 District's

Leadership Journey

To: District Leader

Date: TBD

Dear XXXXX:

My name is Orquídea Largo, EdD candidate working toward completing a dissertation in Educational and Organizational Leadership at the University of the Pacific. The purpose of my email is to invite you to participate in a basic qualitative research study that seeks to explore how exemplary district leaders like yourself and school site principals together promote a culture of continuous improvement.

I recognize you are extremely busy; however, your participation in an interview and contributions will help inform districts on how an exemplary school district like XXXXX effectively promotes continuous improvement practices that increase student outcomes. The interview should take about 60 minutes.

Your participation is confidential and completely voluntary. Also enclosed for your review and signature is an Informed Consent Document should you wish to participate. In appreciation for your participation, you will receive a \$25 Amazon gift card.

I sincerely hope you will consider participating in this worthwhile study. If you have any questions, concerns, or complaints about this research, its procedures, risks, and benefits, you can contact me as the Lead Researcher at XXX-XXXX or at XXX@XXXXXX.edu. You can also contact my Faculty Research Advisor, Dr. Laura Hallberg, at XXX-XXXX or XXX@XXXXXX.edu.

Thanks again for your consideration.

Sincerely,

Orquidea Largo

Cc. Dr. Laura Hallberg

APPENDIX F: PRINCIPAL LEADER EMAIL

From: Orquídea Largo

Subject: Dissertation Research of Continuous Improvement in Practice: One K-12 District's

Leadership Journey

Date: TBD

Dear PRINCIPAL XXXXX:

My name is Orquídea Largo, EdD candidate and doctoral student working toward completing a dissertation in Educational and Organizational Leadership at the University of the Pacific. The purpose of my email is to invite you to participate in a basic qualitative research study that seeks to explore how exemplary district leaders like yourself and school site principals together promote a culture of continuous improvement.

I recognize you are extremely busy; however, your participation in a 60-minute interview and contributions will help inform districts on how an exemplary school district like XXXXX effectively promotes continuous improvement practices that increase student outcomes. Your participation is entirely voluntary.

Your participation is confidential and completely voluntary. Enclosed for your review and signature is an Informed Consent Document should you wish to participate. In appreciation for your participation, you will receive a \$25 Amazon gift card.

I sincerely hope you will consider participating in this worthwhile study. If you have any questions, concerns, or complaints about this research, its procedures, risks, and benefits, you can contact me as the Lead Researcher at XXX-XXXX or at XXX@XXXXX.edu. You can also contact my Faculty Research Advisor, Dr. Laura Hallberg, at XXX@XXXXX.edu or XXX-XXXX.

Thanks again for your consideration.

Sincerely,

Orquidea Largo

Cc. Dr. Laura Hallberg

Introductory Protocol

XXXXX.

Thank you for taking time from your busy schedule to meet with me today.

If you do not mind, I would like to go over some housekeeping items:

- e. You have signed a consent release form authorizing us to audiotape today's conversation.
- f. For your information, only I, my faculty dissertation advisor and transcriber, will be privy to the recordings, which will be destroyed or deleted after they are transcribed. The interview and information will be held confidential in password protected files.
- g. Your participation is voluntary, and you may stop the interview at any time if you feel uncomfortable.
- h. The interview should last approximately 60 minutes.

Thank you for agreeing to participate.

Introduction

You were selected as one of California's exemplary K–12 leaders and someone who can offer a great deal on school improvement. My study focuses on the improvement practices of one school district's leadership. I am particularly interested in how a superintendent moves continuous improvement from policy/theory to practice and action? The findings from this study will be made available to districts interested in engaging in continuous improvement practices. The study will not attempt to evaluate your leadership practices but rather describe them for others to consider to increase student achievement

Interviewee Background

How long have you been in your position?

How long have you been with the district?

Were you hired under this superintendency?

Prompt: If no, how long before this superintendent were you hired?

What is your highest degree?

What is your definition of continuous improvement?

If it is okay with you, I will proceed with the interview questions. There are only 11 questions, but I am likely to probe whenever necessary to capture as many details as possible.

Q1. How does the superintendent move continuous improvement from policy/theory to practice and action?

- 1. How would you describe the continuous improvement process enacted at the [DISTRICT/SCHOOL SITE] level? What are the priorities?
- 2. Please describe how your role as a [DISTRICT LEADER/PRINCIPAL] helps lead/effect change prompted by continuous improvement.
- 3. What challenges, if any, did your district face when adopting a district continuous improvement theory of action? Why?

Q2. How does the principal interpret the superintendent's vision for continuous improvement and implement it at the school site?

- 4. How was the practice of continuous improvement first introduced to school site principals? Did you feel prepared to enact the change?
- 5. Can you describe the strategies school site leaders adopt to ensure schools are adequately equipped for the continuous improvement work there?
- 6. What innovative practices have surfaced at a school site level?

Q3. Using a continuous improvement (CI) framework, what prominent drivers do district leaders identify as the most crucial to sustaining CI practices?

- 7. What continuous improvement policies and procedures were prioritized? Why?
- 8. Before the district adopted a continuous improvement framework, were you familiar with continuous improvement? What drivers/factors do you think are the most crucial to effecting continuous improvement practices? Why?

That concludes our interview. I want to thank you again for taking the time for this interview. Is there any other information you would like to share?

Should I have any questions, would it be okay for me to email you or schedule a follow-up meeting? Thank you for your time.

APPENDIX H: RESEARCHER CITI CERTIFICATION FORMS



