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A Mixed Methods Inquiry into the Decision-Making of California's Principals During Local Control

> By Adrienne Ortega-Magallanes

Claremont Graduate University

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Approval of the Dissertation Committee

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Adrienne Krysta Ortega-Magallanes as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in Education. Concentration in Educational Policy, Evaluation, and Reform.

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Abstract

A Mixed Methods Inquiry into the Decision-Making of California's Principals During Local Control by Adrienne Ortega-Magallanes

Claremont Graduate University: 2023

The 2013 implementation of the Local Control Funding Formula and Local Control Accountability Plan in California granted school districts the opportunity to create their own expense plans based on student needs, with the aim of returning decision-making to those closest to students. Within subsidiarity is the belief that those at the least centralized decision-making level should have the dignity and freedom to decisions that affect the problem at its source, in this case, how to improve student achievement. It is argued here that principals, who have a strong indirect link to student achievement, are the least centralized. To explore the ways in which local control influences school site principals' decision-making and the perception they have of their decision-making authority, this explanatory mixed methods approach employed a survey and follow-up interviews to further interpret the survey results through the lens of Complex Adaptive Systems (CAS).

For principals to be empowered within a decentralized framework outlined by LCFF, particular conditions must exist. Therefore, during the survey and the interviews, questions were asked of school site principals to elicit information about their perceptions of the following five themes within their district, which can be indicators of success with decentralized educational agencies:

1) systems or structures that are stable (Hanushek et al., 2013; Smylie & Wenzel, 2003; Cha, 2016; Sharpe, 1996),

2) clearly defined responsibilities (Wößmann, 2003; Cha, 2016),

3) principal leadership (Bryk et al., 1999),

4) distributive leadership and local decision-making (Smylie & Wenzel, 2003; Bryk et al., 1999; Falch and Fischer, 2012) guided by frameworks, targets, and accountability (Cavallo et al., 2016; Clark, 2009; Wößmann, 2003),

5) and building the capacity of the community (Bryk et al., 1999; Muta, 2000; Sharpe, 1996).

The survey respondents consisted of 37 school site administrators serving in small, medium, or large unified school districts, while the interview respondents consisted of a subsample of the survey participants, totaling 11 site principals and two district-office administrators to provide context for the systems in which the principals worked. The survey, interview, LCAP document analysis, and LCAP meeting information were integrated into a joint display to draw out additional insights.

Based on the findings, there are six recommendations that impact practices regarding the LCFF. 1) LEAs should support local-decision making and distributive leadership practices; 2) external influences should be strategically and consistently managed; 3) create formalized structures to obtain external resources to support individual school sites' goals; 4) develop and offer professional development to principals that cover state laws, board policies, and regulations that can affect school planning and budgeting decisions; 5) establish clear feedback mechanisms to ensure that connections between district staff, including the superintendent, enable the reciprocation of information which facilitates improvements; and 6) principals should be actively engaged in developing the LCAP.

Dedication

" In these times, more than ever before, our hope is that education will offer an aid to better the condition of the world." - Maria Montessori, 1946

Most importantly, I must express my deep gratitude towards my family, who have been a constant source of love and support throughout this journey. I especially want to thank my husband, Randy, who went above and beyond by taking on extra responsibilities with our children and household, allowing me the time and space to focus on my work. Moreover, your support and belief in me during times of uncertainty and self-doubt were invaluable. I am deeply grateful to you.

To my mother, whose unwavering commitment to education has been an inspiration to me throughout my life, I am grateful for the emphasis you have placed on learning, reflection, and self-improvement. Your support has been a constant source of strength for me. I will always be grateful.

I am thankful for my children—Julien, Gabe, and Nate who understood when I could not give them the time they needed while I was going to school, researching, and writing. I hope you see the value and importance of continuing your own educational journeys, not just for personal growth and success but also for the impact you can have on your community and society as a whole.

I wish to thank my friends—Karen, Misti, and Olivia for actively encouraging me. It's essential to have friends who support and inspire us to keep going, as you all have done. Having people who believe in you can make all the difference.

Reflecting on how you all have positively impacted my life, I am filled with a sense of deep gratitude. It is to my family and friends that I dedicate this body of work.

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I am also appreciative of Dr. Carl Cohn, whose class on Urban School Reform and Politics inspired me to focus on this research. Your class was insightful and thought-provoking. I appreciate how you challenged us to think critically and deeply about the issues facing urban schools.

I would like to take this opportunity to express my heartfelt gratitude to my mentor and friend of over 20 years, Kris Kolling. Your support, guidance, and encouragement have been instrumental in shaping my personal and professional growth. Your knowledge and experience have been extremely valuable and I have learned so much from you.

To my former students and former and current peers, thank you for the lessons you have taught me; your curiosity and resilience have been a constant source of inspiration, and it has been an honor to be a part of your journey.

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I must also acknowledge my participants, who were generous with their time in completing the survey and sharing their experiences despite the demands of leading schools during the extraordinary events of the worldwide Covid-19 pandemic.

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Chapter 1: Introduction

Problem Statement

In 2013 California experienced an about-face in the way the state funded education. In legislation enacted that year, California changed how it allocated funds to Local Education Agencies (LEAs) and began providing explicit financial support for underperforming student groups. Districts and charter schools now receive funding through base, supplemental, and concentration grants, amounts which are dependent on the prevalence of identified student groups; replacing the complicated system of revenue limits, block grants, and the 50-plus categorical programs which were restricted funds for particular subgroups of students (CDE, 2023). LEAs have gained increased control over spending and accountability systems through the passage of Senate Bill 97 School Finance: Local Control Funding Formula (2013). The adoption of this bill allows LEAs to design spending plans to support student success through increased flexibility and accountability. The law grants school districts the power to create their expense plans outlining the annual goals of the LEA and the specific actions that will be taken to achieve them. For the past 50 years, school funding in the State of California had consisted of more than a dozen separate funding sources and top-down directives from the state. Now funding is targeted to districts with the most significant student needs and this has led to improvements in student outcomes, such as test scores, however the precise mechanism for these increases has not been explored (Johnson, et al., 2018). Local control funding and planning aim to return the control of finance and decision-making to those who are closest to the students through the principle of subsidiarity. At the time of the bill's enactment, California's former Governor Brown stated that higher or more remote levels of government, like the state, should render assistance to the local school districts, but always respect their primary jurisdiction and the

dignity and freedom of teachers and students (Brown, 2013). Funding, planning, and spending have been decentralized to the district level in order to improve service to students, however not enough is known about the principal's role in those decisions and how much autonomy principals have in this new model. School leaders do not make decisions in isolation, but rather as a part of a complex system. In order for LEAs to accomplish their ultimate goal, which is to provide educational excellence and opportunities for students to succeed, school site leaders should understand their role in local control. LEAs should support principals in decision-making and provide opportunities for site leaders to be actively involved in LCAP development.

Significance of the Study

Local control can have positive effects on student achievement when frameworks, targets, accountability measures, and local control are in place (Cavallo et al., 2016; Clark, 2009; Wößmann, 2003). The tenet behind the LCFF, which is subsidiarity, moves decision-making closer to the students. School site principals and staff at each school site should be the primary decision-makers around the operations of their school. Much of the current research available for the LCFF related to decision-making is on the superintendency or comprehensive analyses of whether shifts in funding have resulted in improvements in achievement measures. However, little information has been acquired about principal decision-making in the context of subsidiarity and how principals perceive the intended shift. This area continues to demand exploration as principals are closer to students and instruction than superintendents and have the second most significant effect on student learning (Leithwood et al., 2004). The findings of this study deepen our understanding of how principals perceive their ability to make decisions that are unique to their school sites. This research is situated in complex adaptive systems (CAS) as a conceptual framework, as policies affecting school systems are complex and challenging to study

since these systems have intricate interactions inside and outside the organization. It is not possible to tell a single story about complex conditions (Cilliers, 1998). Human action and social interaction are nonlinear; therefore, it is meaningless to look for simple causal relationships between action and outcome (Stacey, 2010). Using CAS, along with traditional research methods, sheds some light on the dynamics of decentralization and principal experiences. This study added to the research currently underway in the area of the LCFF.

Purpose of the Study

This mixed methods study aimed to understand how site administrators see themselves in relation to and within the context of the LCFF and the principles of subsidiarity in a complex system. An explanatory sequential design was used, involving the collection of survey data followed by an interview as a means to further describe and analyze the results from the survey (Creswell & Plano, 2011). In the first phase, the quantitative phase of the study, a survey instrument was used to collect data from elementary and secondary school site principals in California school districts to understand in what ways local control influences site administrators' decision-making. The second phase of the study, the qualitative phase, was conducted as a way to further explore principal perspectives and experiences in making decisions in the local control context. Semi-structured interviews were conducted with school site principals, with the rationale to gain further elaboration of the initial quantitative results through thick description (Creswell & Plano, 2011). The third phase of the study was an integration of the survey means.

The LCFF is based on the notion of subsidiarity, which gives decision-making control to those closest to the issues to be resolved. In the policy's current implementation, most often, this is considered to be the school district or LEA; however, those closest to students, such as

principals and teachers, have the most significant effect on student achievement (Sebastian et al., 2017). If the goal of the LCFF is to effectively address achievement gaps for students, including low-income, English Learners, or foster youth, then research on the LCFF has an obligation to acquire an understanding of decision-making at the ground level. Based on the literature review of subsidiarity and decentralization, aside from teachers, school site personnel are the level closest to the students. According to Sebastian et al. (2017), principals have an indirect link to achievement via teachers, with principals being pivotal in the involvement of teachers in decision-making, influencing school climate, learning, and, ultimately, student achievement; this is second only to classroom instruction (Leithwood et al., 2004; Wahlstrom et al., 2010). The gap in the literature that this study attempted to address was understanding site administrators' place and their sense-making in this funding system, the influence of the current policy on their decision-making processes and procedures, how they collaborate on and communicate decisions made, and what if any new programs and systems have emerged as a consequence of decentralization. This study expanded the burgeoning area of research into decentralization and principals' decision-making roles in California's LCFF.

Research Questions

This research aimed to answer the following questions:

1. To what degree has local control by virtue of the LCFF, through the agency of subsidiarity or decentralization, reached the school site?

2. How have site principals taken part in the decentralization of decision-making as a result of the LCFF? Does participation vary between elementary and secondary levels, length of experience as a principal, or size of district?

3. To what extent are principals' decision-making processes pre-LCFF similar to or differing from the post-LCFF context? Do those similarities or differences in decision-making processes vary between elementary and secondary levels, length of experience as a principal, or size of district?

4. What can we learn by using features of CAS—connectedness/hierarchies, feedback loops, emergence, and self-organization, to frame the experiences of school site principals via local control?

Hypothesis

Based on past literature and the framework used for this research, this inquiry posits that factors such as size of the LEA, the experience of the principal, the presence of feedback mechanisms and systems, as well as formal and informal interactions among the LEAs members are important elements in the decision-making experience of these principals. Subsidiarity and capacity will play a crucial role in driving transformation brought about by the LCFF. Furthermore, the literature review suggests that decentralization down to the school-level and involvement of principals in district-level decision-making is limited.

Implications for Research, Policy, and Practice

The LCFF and the LCAP are bold courses of action to give back the control of funding and decision-making to the individuals who are nearest to the students. By recognizing this, the principle of subsidiarity can be a tool for success. This study aimed to illuminate the degree to which principals play a central role in defining the best local practices in order to provide opportunities for the attainment of a world-class education for California's students. This research attempted to delve into the school finance reform policy and the role of school site leaders in a decentralized organization within the context of the LCFF and subsidiarity.

Decisions made by principals are not made independently but rather as a part of a complex system. The CAS framework is used as a lens, to allow for a more in-depth exploration of how agents within a school system collaborate to fulfill the LCFF policy of decentralization.

This dissertation is organized as follows—It will begin with a literature review in Chapter Two, which summarizes the previous research in the areas of California School Finance, the Local Control Funding Formula (LCFF), Subsidiarity and its analogs, and conclude with a review of principal leadership and capacity building. The framework of the research, Complex Adaptive Systems (CAS), will provide a conceptual structure that guides the research, and examples in the field of education will briefly be explored. Next, in Chapter Three, the methodology section will describe what was done to complete the research, including data collection. Chapter Four discusses and interprets the data in three phases—the survey and interviews and, in a final phase, the integration of the findings. Finally, results and implications are shared in Chapter Five, along with suggestions for future research.

Chapter 2: Review of the Literature

This literature review presents the doctrine of subsidiarity, which guided the pioneering reforms to California's school funding system. First, there will be a brief overview of the history of California's school funding system, along with an explanation of the LCFF. Then, there will be an examination of subsidiarity, its origin, and respective terms appearing in the literature. One term, in particular, decentralization, will be investigated as it relates to school systems in international and national research. Next, principal leadership and its link to student achievement are considered, as well as capacity building and professional development. To conclude, a summary of the connections between the LCFF, subsidiarity, and a review of the literature research will be provided.

"Reform is not a discrete occurrence or an isolated event.

It is embedded in a broader organizational and political environment."

(Elmore & McLaughlin, 1981, p. 155)

A Brief History of School Finance in California

For the better part of the past century, California has funded its education system through complicated and varied structural forms. Before the 1970s, schools received the majority of funding through property taxes, resulting in disparities throughout the state. Throughout the 1970s, a variety of Senate Bills (SB) and Assembly Bills (AB) were passed as a means to establish revenue limits for public schools. SB 90 (1972) marked a significant turn in the state's school finance system by establishing a cap on the funding each district could receive. This legislation was the beginning of the evolution from local to state control of school finance (Elmore & McLaughlin, 1981).

In 1978, California enacted Proposition 13, which limited the tax rate for real estate, including homes, businesses, and farms (California Tax Data, 2018). This reform gave state lawmakers the responsibility for allocating tax revenues to LEAs (Chu & Uhler, 2016). The resulting centralized distribution deeply affected school funding by eliminating about 60% of school revenues, creating a shift away from local school financing, and placing a burden on state-level resources (Elmore & McLaughlin, 1981). Proposition 13 reduced course offerings in schools (Catterall & Brizendine, 1985), and increased LEAs reliance on politically vulnerable categorial programs or supplemental grants (Timar, 1994). Although Proposition 13 may have moved California toward greater financial equalization, with decision-making shifted to the state level, new inequities were created. One such example of funding inequity was the diversified distributions of desegregation aid, not solely based on a LEAs concentration of minority students, but rather the politicization of funding, where districts with better-mobilized coalitions had more legislative power than their suburban or rural counterparts (Timar, 1994). Proposition 13 also forced California's schools to compete for funding with other community services such as police, fire, libraries, and other government entities (Elmore & McLaughlin, 1981).

By the 1980s, most states, including California, were facing financial difficulties due to a national period of recession. At this time, California was funding two-thirds of every LEA budget, with this stream of funding becoming increasingly vulnerable to fluctuations in state and income tax revenue (Elmore & McLaughlin, 1981). Over time, federal and state categorical aid, initiated to target specific populations in the 1960s, had grown to more than 80 separate programs (Elmore & McLaughlin, 1981). In the following 50 years, these specific funding streams had become 1/3 of all educational spending, and as complex and restrictive as they were, they were not benefiting those that needed assistance (Bersin et al., 2008). There had been

numerous attempts at an assortment of ways to fund California's education programs, from AB 8 (1978), which established a formula to divide property taxes among cities, counties, and school districts, to AB 1428 (1984) the California State Lottery education finance (Bersin et al., 2008). This legislation, AB 1428 (1984), guaranteed a minimum of 34% of lottery receipts to be distributed to schools, colleges, and universities as supplemental funding, while Proposition 98 (1988), a constitutional amendment, guaranteed a minimum funding level from state and property taxes by way of a complicated formula (Bersin et al., 2008). Throughout the 90s and 00s, attempts were made to determine an adequate base funding amount to enable schools to meet specific criteria, such as SB 712 (2003), the Quality Education Model, signed into law by Governor Schwarzenegger (2003-2011). By the early 2010s, the system of disjointed and separate funding streams changed. The new system brought into play the notion of equity, where those who are in need are given what they require to be successful, versus policies and operations of the past that were based on equality—treating everyone the same (Mann, 2014).

The Local Control Funding Formula

The LCFF (AB 97 and SB 91), signed into law by Governor Jerry Brown in 2013, provided an alternative way to fund LEAs. This law offered a base grant for all students and a weighted system for additional supplemental and concentration grants for unduplicated counts of students falling into the category of English Learners, low-income, or foster youth. Full implementation was achieved in the 2018-2019 Budget Act, which was earlier than anticipated (CDE, 2023). Student funding ranges anywhere from a low of \$9,132 per pupil to a high of \$18,795 per pupil based on factors such as grade level and the percent of unduplicated counts within the LEA (CDE, 2023). The new formula was constructed on the principles of simplicity, transparency, equity, and flexibility, and is a shift from one of compliance and regulation to a focus on student needs and achievement (Humphrey & Koppich, 2014). The state has now entrusted educational decision-making and spending to LEAs. All LEAs are required to develop blueprints called Local Control Accountability Plans (LCAPs), which are three-year plans to describe their mission and vision for student success. These plans also describe goals, actions, services, and expenditures to support student outcomes established by the state and the LEA. It is a brief narration of how the LEA plans to achieve its mission and vision, including what impact the current financing will have on students.

Alongside the LCAP, California developed the School Dashboard to provide information about how LEAs are meeting the needs of California's students (CDE, 2022b). California's accountability and improvement system is based on multiple measures that reflect how LEAs are meeting the needs of their students, and these performance measures are reported through the Dashboard. There are eleven measures of school success reflected in the Dashboard. Six measures include academic performance, chronic absenteeism, college/career readiness, English Learner progress, high school graduation rates, and suspension rates (CDE, 2022a). These measures allow for comparisons across schools and districts. Local measures, of which there are five, are based on information collected by the LEA or COE and include basic conditions of the district such as teacher assignment, building safety, the implementation of academic standards, school climate surveys, parent involvement, and engagement, and access to courses (CDE, 2022a). As of 2019, California was the first state in the country to use multiple measures to determine school success by using a more comprehensive range of information on student outcomes (Public Advocates, 2019).

In a report on California's system of support for the LCFF, Humphrey and O'Day (2019) surveyed county superintendents between October 2017 and January 2019 and found that nearly

all county superintendents in the study (n=46) viewed the shift in local districts from compliance to empowerment as a positive change and were optimistic in being able to support LEAs within their county. However, in a study of 14 LEAs where district and site leadership were interviewed, researchers found that LEAs had experienced less than adequate support to address various challenges (Humphrey & O'Day, 2019). In other LCFF research, Koppich (2019) surveyed and interviewed 267 school principals and assistant principals serving in this role for at least two years and found that they agreed that the LCFF is leading to greater alignment among school goals, strategies, and resource allocations, along with increasing spending flexibility, even though the majority of resource allocation decisions continued to be made at the LEA level. When school sites did have discretionary resources, the amounts were relatively small (Koppich, 2019). When asked, 79% of principals working in larger districts (enrollments of 10,000 students or more) agreed or strongly agreed they had more flexibility in spending than those in small districts (<2,000 students), where only 56% agreed or strongly agreed they had more flexibility in spending (Koppich, 2019).

Johnson and Tanner's (2018) study of this new funding system was one of the first to provide evidence of the LCFF's impact on student outcomes. The researchers looked at per-pupil revenue, high school graduation rates, and student achievement for each grade level and various courses. The research design that Johnson and Tanner used included simulated instrumental variables, an examination of the baseline percentage of students with high needs, the district's base grant allotment, and the pupil need formula by which funding was allocated. Their design took into consideration the multi-year phase-in timeline of the LCFF and identified cohorts of students born between 1990 and 2000. Ultimately, the researchers found that per pupil, for a \$1000 increase in revenue, there was a 5.3% increase in high school graduation rate when

controlling for variables such as teacher quality, statewide changes in economic conditions, and other school-level factors (Johnson & Tanner, 2018). There was also an increase of 6.1 percentage points in graduation for children from low-income families and groups of students who typically underperform, including foster youth and children who were homeless (Johnson & Tanner, 2018). Concerning academic achievement, there were average gains in mathematics and reading, with more significant effects for children from low-income families. Overall, Johnson and Tanner's (2018) findings indicate that a decentralized funding system targeted at students' needs has the potential to make a difference in student outcomes in the long-term. However, this study did not investigate principal leadership, which has been demonstrated to be a link to student achievement (Sebastian et al., 2017). Although Johnson and Tanner's study focused solely on the increased spending and its correlation to measures of achievement, how the LCFF money is spent is often at the discretion of LEA leadership. Funding, planning, and spending have been decentralized to the district level to improve student services; however, little is known about the principal's role in those decisions and how much autonomy principals have in this new model. This study will look at how principals fit into the LCFF to support the learning climate, which has an impact on student growth (Sebastian et al., 2017).

The LCFF was constructed on the principles of equity, flexibility, simplicity, and transparency (Humphrey & Koppich, 2014), and although initial results indicate positive student outcomes (Johnson & Tanner, 2018), the majority of resource allocations are made at the LEA level (Koppich, 2019) which could be the antithesis of subsidiarity; that which matters most should be handled by the least centralized yet competent authority (Zimmermann, 2014). The distribution decisions of the LCFF monies are made by LEAs, and although site principals agree there is more flexibility in spending, the amount of funding available with which to make

decisions is quite small (Koppich, 2019). County Offices of Education (COEs) are responsible for approving the LCAPs and supporting LEAs, and although resolute in their support, they may not have the capacity to support LEAs that are struggling (Humphrey & O'Day, 2019). By way of the principles of subsidiarity, the LCFF is an avenue to give back control of funding and decision-making to the individuals nearest to the students, which would be school site principals and staff.

Subsidiarity and Its Analogs

In this section, subsidiarity and its analogs, such as decentralization, autonomy, or sitebased management, will be defined and then explored internationally and nationally, concluding with subsidiarity's connection to the LCFF. According to Dr. Carl Cohn, former Long Beach Unified School District Superintendent and a former California State Board of Education Member, the LCFF began with respect at the local level, creating a thought partnership to ultimately benefit students (Personal Communication, August 25, 2016). The organizing tenet of the LCFF is subsidiarity, where that which matters most should be handled by the smallest, lowest, or least centralized authority (Zimmermann, 2014). Described as a principle of governance, subsidiarity has been a practice that is well-known, respected, and carefully studied, and although recorded in text for well over 400 years, it is a tenet most often ignored in the working world (Deem et al., 2015). As described previously, California school finance had become a complex system of categorical funding and top-down requirements. The LCFF, based on subsidiarity, differs from this practice in that governance and decision-making should occur within proximity to the individual. In the Catholic tradition, subsidiarity is an alternative to centralization, and bureaucratization, believed to deprive citizens of responsibility to themselves (Zimmerman, 2014). By way of subsidiarity, individuals, families, and social units are

empowered to be active participants in policy production and implementation (Colombo, 2008). Modern interpretations of subsidiarity include the assumption that when tasks cannot be efficiently performed at a local level, a more centralized authority will complete them (Carozza, 2003).

The origins of subsidiarity are rooted in philosophical, cultural, religious, and political traditions (Colombo, 2008). The Catholic tradition first argued by Pope Leo XIII in 1891, advised that the state or government should support lower social units but not embody them. This interpretation is committed to the notion that the human good is to grow and know one's potential through a hierarchy of associations. What smaller and lower social units can do should not be overtaken by higher societal groups (Follesdal, 2013). Reflecting on the writing of various Roman Catholic Popes, themes emerge over time regarding the belief of limiting the state's involvement in economic affairs, intending to promote the common good through each person's contribution and participation (Herbert, 2011). Within subsidiarity, individuals should have control through relationships, and a centralized bureaucracy should be replaced with the coordination of local efforts (Herbert, 2011).

Decentralization

In the literature, decentralization has been associated with the tradition of subsidiarity, expressly delegating tasks to the lowest level of governance capable of making decisions to benefit the group (Marshall, 2007) while emerging as a mechanism of enhanced efficiency, equity, democracy, and accountability (Bradshaw, 2003; Kellert et al., 2000). Decentralization has been found to lead to higher spending on social services, such as education, resulting in improved educational outcomes (Martinez-Vazquez et al., 2017), while increasing public responsiveness to local needs (Faguet, 2004). According to findings by both Tiebout (1956) and

Oates (1999), decentralization allows for considerable improvements in responsiveness to citizens' priorities. However, Drew and Grant (2017) argue that the term decentralization is a diluted view of subsidiarity, one that is removed from its foundational tenets. They contend that subsidiarity and decentralization are competing concepts, and accordingly, disagreements on the definitions of these two terms are not trivial. Subsidiarity is anchored in the notion that individuals are empowered to provide for themselves, take responsibility for others, and at the core, it is rooted in dignity and advancement of the common good. In contrast, decentralization is focused on the delegation or the transfer of tasks without the driving belief of dignity. They assert that subsidiarity and decentralization diverge when decentralization lacks a foundational origin in human dignity and empowerment. However, decentralization is the term used most often in the field of education.

Decentralization in International School Systems

The decentralization of school systems has occurred in various countries around the world. This next section will be a discussion of results stemming from the body of research on decentralization.

Negative Results in International Studies. Japan's education system is one example of an international study on decentralization. Japan has undergone periods of school system decentralization, resulting in struggles with capacity (Muta, 2000). During the 1800s, Japan's educational system was centralized; however, after World War II, when outsiders criticized the system, the government decentralized its system and then, subsequently, recentralized it in the 1950s and then again returned to decentralization in the 1990s (Muta, 2000). Within the periods of decentralization, there was a need for school-site principals to carry out the non-traditional tasks of school administration, such as budgeting or hiring. Japan's struggles with

decentralization were related to principals' lack of experience or lack of capacity to carry out these non-traditional tasks, leading principals to rely heavily on direction from the centralized system (Muta, 2000). For a decentralized system to work well, according to Muta (2000), additional training or professional development in various non-traditional tasks was needed, including the encouragement to take diverse paths leading to creativity and experimentation.

Decentralization also arose in the Korean education system, causing tension between central and local administrative bodies (Cha, 2016). The contention related to the degree to which the country's educational outcomes should be unified while maintaining a local educational decision-making body. According to Cha (2016), significant conflicts were identified in Korea's decentralization endeavor, including ambiguous controls between the centralized authority and local administration, little focus on conflict prevention, and minimal coordination of actions and goals. For decentralization to be successful, ambiguity must be eliminated, and who is to be the decision-making authority must be clarified (Cha, 2016); in other words, the responsibilities of the local educational decision-making body and those at the higher levels must clearly be defined.

Mixed Results in International Studies. As previously stated, research on decentralization in school systems often produces mixed outcome results. In the 1990s, more specifically between 1992 and 1994, empirical research found that decentralization in Argentinian secondary schools raised overall student achievement on the country's standardized test by 1.2 standard deviations (Galiani & Schargrodksy, 2002). However, the authors of this study recognized that decentralization's advantages might be weakened when employed in severely mismanaged areas or those with higher fiscal deficits (Galiani & Schargrodksy, 2002). To analyze school achievement and autonomy, a term that Hanushek et al. (2013) use as a

synonym for decentralization, panel data from the Program for International Student Assessment (PISA) were used. This data covered 42 countries and four waves of testing over ten years. The study's dataset contained over one million 15-year-old participants from low and high-income countries. In addition, principal self-reports on the level of responsibility for various decision-making opportunities, such as course content, textbook choices, and teacher hiring, were reviewed. By way of their analysis, Hanushek et al. (2013) found that school autonomy resulted in positive effects in developed countries and adverse effects in developing countries. Nations with strong institutions and high levels of capacity gained considerably from decentralization, while countries that lacked a stable structure and or had low levels of economic development were inevitably harmed by decentralized decision-making (Hanushek et al., 2013). As a result of these outcomes, the authors suggested that school autonomy does not make sense everywhere (Hanushek et al., 2013).

Evaluating decentralization in school systems can be difficult. Typically, factors such as an absence of baseline data, incomplete implementation of reform elements, the lag between application and changes in behavior, or resource allocation make empirical analysis challenging. In research for the World Bank on education decentralization in Latin America, Winkler and Gershberg (2000) inferred outcomes by looking at the characteristics of decentralization that were associated with high-performing schools, such as strong leadership, a qualified and committed staff, a focus on learning, and accountability for results. They noted that countries like Chile, which promoted reorganizing schools by municipality and the introduction of school choice, showed that decentralization had no effect on public school quality and did not lead to substantive changes in achievement (Winkler & Gershberg, 2000). Results in El Salvador, where rural areas were targeted, also did not lead to serious changes in achievement (Winkler &

Gershberg, 2000). In Minas Gerais, Brazil, school councils were established, school directors were locally elected, and resources were directly transferred to schools which increased attendance but not gains in achievement (Winkler & Gershberg, 2000). Based on the summarization of their research, they found that in order for decentralization to be successful:

- reliable information on the performance of schools and teachers should be readily available;
- school principals should have a significant degree of authority, given they have more capacity to monitor the school than political agencies are capable of;
- teaching should be organized in a way that promotes responsibility and accountability for performance;
- teachers must become the proponents and owners of efforts to improve teaching, including decisions regarding capacity building, via professional development (Winkler & Gershberg, 2000).

Positive Results in International Studies. As will be discussed in this section, when decision-making is decentralized to the school level, there can be a positive impact on student achievement. In Switzerland, where the subsidiarity principle was introduced into the constitution in 1848, they have one of the most decentralized school systems in the world. Their federal system provides near-complete autonomy for each of the 26 cantons (or member states), resulting in fundamentally different education systems in a tiny country (Hega, 2000). General government decentralization positively affected high school graduation in Switzerland, as decentralization was associated with higher educational attainment across levels (Barankay & Lockwood, 2007). Swiss schools, predominantly all public institutions, manifest as one of the best educational systems in the world (Hoffman & Schwartz, 2015). In the United Kingdom

(UK), positive effects on student achievement were found based on exam pass rates (Clark, 2009). Increased resources and the flexibility to utilize them, along with discretion in personnel matters and preference in organization structure, characterized school autonomy in the UK (Clark, 2009). While in Australia, subsidiarity and the devolution of centralized education in some states have given school councils and principals the power to make improvements alongside increasing the quality of teaching and decreasing the per capita cost of schooling (Moran, 2014).

Wößmann (2003) found that decentralized decision-making in several areas of school management was correlated with improved student achievement. Analysis using the Trends in International Mathematics and Science Study (TIMMS) scores across 39 countries found that a combination of institutional conditions, such as centralized exams, curricular and budgetary matters, independence in processes, and personnel decisions led to positive outcomes for students. This combination of external control mechanisms and school autonomy seemed to lead to higher achievement in math and science standardized test scores while not being contingent on the amount of funding provided (Wößmann, 2003).

Another study constructed on international test scores from the PISA and the TIMMS determined that decentralization of government expenditures, as defined as the percentage of sub-national government spending, was beneficial to student performance; despite differing levels of spending throughout the country (Falch & Fischer, 2012). While this example of positive decentralization results differs from the LCFF, which is predicated on an equity model of distribution to students throughout the state of California, it appears that the mere act of decentralizing funds and the local decision-making that occurred indicated a positive relationship to student outcomes, regardless of the amount of financial support.

Decentralization in School Systems in the United States

Negative Results in the United States. Like many countries discussed here, the United States (US) has also embarked on the decentralization of education policies with mostly mixed results. Wissler and Ida Ortiz (1986) describe two forms of US decentralization practices in their review of the education literature from the 1960s-1980s. One form used legislative enforcement, while the second type was internal in origin. Through the mechanism of legislation, laws have been passed requiring decentralization while increasing the overall participation in the process; these laws yielded limited change. The authors surmised that this outcome emerged because the decision-making power remained with those who held power prior to the legislation. For example, during the 1970s, in New York City and Los Angeles schools, the legislature passed laws restructuring the governance of public education, devolving centralized power. Although mechanisms for participation developed and participation in decision-making increased, in New York City, parents were not able to influence the schools in meaningful ways (Wissler & Ida Ortiz, 1986). In Los Angeles, after eight years of increased participation progress towards 61 defined decentralization goals, progress made was rated as only little to some. In this case, centralized decision-making systems remained established in the organization by the original decision-makers (Wissler & Ida Ortiz, 1986). The second form of decentralization the researchers discussed occurred through an internal decision-making process or what the authors termed administrative decentralization, permitting all levels of the organization to be a part of the process to decentralize (Wissler & Ida Ortiz, 1986). The authors found that administrative decentralization also produced little change as some levels of the organization were bypassed in decision-making to the exclusion of other levels. Principals in administratively decentralized systems were not consistently awarded site autonomy or budgetary control as the superintendent,

and the central office remained the essential decision-making apparatus (Wissler & Ida Ortiz, 1986). Based on Wissler & Ida Ortiz's (1986) review of the literature, the LCFF could be considered administrative decentralization, as LEA's top officials may continue to be the chief decision-making agents.

Mixed Results in the United States. The terms site-based management or school-based management (SBM) are used throughout the literature, particularly during the 1960s and 1970s. SBM is sometimes used interchangeably with decentralization, with the notion that SBM transfers the decision-making control from the state and the LEA to the school site. The concept behind SBM was that empowering staff would improve the educational practice (David, 1989). SBM required stakeholders to implement specific procedures and to understand their roles and responsibilities in the decision-making structure (Oswald, 1995). The evolution of SBM continued through the 1980s as a response to the social pressures of the previous decades; however, the literature indicated mixed results on student achievement, stemming from the method of analysis or the lack of information about the implementation of SBM processes (Wissler & Ida Ortiz, 1986). With SBM, teacher satisfaction was enhanced, and new instructional practices were implemented; however, certain aspects of SBM, notably lack of knowledge by participants in decision-making and communication skills and lack of knowledge about statutes, regulations, and union contracts, were barriers to success (Oswald, 1995). Although the research indicated that SBM provided greater control over operations at the site and increased teacher satisfaction (Myers & Stonehill, 1993), there was minimal focus or discussion about improved student outcomes or accountability.

Klein (2017) employed PISA data to analyze autonomy, defined as placing processes in the hands of those who know what their schools need. The number of disadvantaged students a

school services ultimately determines the degree of autonomy afforded to school sites (Klein, 2017). Schools in large cities in the US had less autonomy and tighter controls than schools in more rural or suburban areas. Large urban school districts, more likely to have struggling schools, were inclined to reduce freedom on pedagogical matters to avoid negative or punitive consequences from the state or federal governments since these schools were more likely to struggle with student achievement (Klein, 2017). This research indicated that autonomy was a reward for schools that have the least amount of student need rather than a strategy to improve low-performing schools (Klein, 2017).

Chicago Public Schools (CPS) have undergone varied reforms, including a six-year endeavor into decentralization, through the passage of the Chicago Schools Reform Act of 1988 (Luppescu et al., 2011). From 1988-1995, Local School Councils (LSC), comprised of parents, community members, and teachers, had the power to hire or dismiss the principal, allocate financial resources, and make decisions about curriculum and academic affairs (Luppescu et al., 2011). The reform strove to weaken centralized decision-making and promote site-based control by devolution of resources and authority to the school site (Bryk et al., 1999). Principals, whose tenure was removed, had become accountable to the LSCs and were given increased control over the physical building, the site budget, and personnel matters, including staff recruitment and hiring (Bryk et al., 1999). The decentralization reformers anticipated that collective responsibility for the school would emerge, creating a social resource to cultivate considerable change in teaching and learning. Initially, decentralization "came up short" in improving educational opportunities for children (Bryk et al., 1999). However, according to additional research by Bryk (as cited in Bryk, 1999), when a long-term value-added study measuring gains in student achievement at the elementary and middle school levels on the Iowa Test of Basic

Skills was conducted, the analyses established broad-based systemwide improvements in student learning; pointing to meaningful change (Bryk et al., 1999). The authors found common patterns among improving schools such as a) strong local governance elicited by an efficacious principal; b) local decision-making oriented on strengthening the connection between the school, parents, and community; c) a student-centered, safe, and orderly climate along with a sense of personalization and strong academics; d) an enhancement of the knowledge and skills of the teachers while improving their capacity to work collectively; and e) flourishing personal trust among all adults, aiming to advance the education and welfare of children. Despite some indication of promising student achievement growth, in 1995, the Illinois legislature passed additional reforms, essentially reversing the site-level decentralized decision-making practices, leading to an assortment of top-down, centrally designed initiatives to legitimize central control once again (Bryk et al., 1999). The mayor was given authority over the schools, the superintendent was removed, and the governance structure of schools was changed (Luppescu et al., 2011). Bryk et al. (1999) stated that decentralization at the magnitude of the CPS involved a complicated accountability relationship between the district office and school site, where the site was responsible for progress, and the district level was accountable for the effectiveness of its support efforts. What may have been the downfall to the success of decentralization during this time was the system's lack of capacity and, in some cases, resistance to change (Bryk et al., 1999).

Another chance at improving CPS occurred from 1995-2001 with the Chicago Annenberg Challenge or Chicago Annenberg Research Project (Smylie & Wenzel, 2003). CPSs were awarded a \$49.2 million grant to decentralize and take reform back to the school site to allow teachers, parents, and communities to rethink and restructure public schools in order to

improve student learning and achievement. When comparing grant recipients and the control group, after a five-year investment of millions of dollars, there were no statistical differences in achievement gain rates or improvements in areas such as self-efficacy, classroom behavior, or social competence (Smylie & Wenzel, 2003). Student outcomes in the Annenberg schools were much like those in the non-Annenberg schools (Smylie & Wenzel, 2003). Factors that researchers declared might explain the lack of effect on improvement included too few resources, broad goals or vague strategies, schools' lack of capacity, including weaknesses in human, material, and social resources, along with sources of disruption and a shortage of persistence (Smylie & Wenzel, 2003). Those schools within the study that were deemed stable or improved had focused on establishing multiple, mutually-reinforcing aspects of school organization and practice, such as classroom instruction and a professional community to support instructional improvement, rather than a single aspect of school organization. These schools that used complementary, reinforcing strategies were more effective at searching for, securing, and taking advantage of external resources and utilizing these resources efficiently and strategically while cultivating strong, distributive leadership (Smylie & Wenzel, 2003). Distributed leadership was identified as leadership tasks performed in a coordinated approach by multiple school members, including the principal, teachers, outside organizations, and parents who worked in partnership to a) sustain a vision for school development, b) engage others and promote coherence in initiatives, c) provide incentives and encouragement for staff to develop knowledge and skills, d) develop curriculum and assessments, e) monitor, provide encouragement, and hold staff accountable, f) obtain external resources for the school's initiatives, and g) manage external influences to support continued development (Smylie & Wenzel, 2003). Principals articulated a clear, coherent vision of strong instructional practice and high expectations. They promoted

competence and leadership among staff, bringing coherence to goals, strategies, and resources, parallel to establishing strong relationships with outside supports while protecting their school sites from external interference and distraction (Smylie & Wenzel, 2003). The authors identified the significance of inclusive, distributive, and visionary principal leadership as a common characteristic of school development. Unfortunately, statistics gathered during the last 20 years of reform in CPS are not helpful for understanding change over time because there have been confounding conditions making it challenging to determine outcomes (Luppescu et al., 2011). The standardized tests administered to students and staff changed, making it problematic to compare student performance and teacher learning long-term (Luppescu et al., 2011).

Decentralization and Equity

While decentralization has been shown to improve schooling outcomes, equity is necessary to support student achievement from learners with diverse backgrounds, abilities, and challenges. Equity in California means that resource distribution should be responsive to the diverse needs of students, with the aim of ensuring that all students benefit equally (CDE, 2022c). Through decentralization, schools rely more on local resources and institutional capacity, which vary across contexts and may have an impact on student achievement (Leer, 2016). By having increased institutional capacity, positive student outcomes are less related to the amount or number of resources but rather positive outcomes are related to resources that were more appropriately allocated (Elacqua et al., 2021). However, decentralization can have negative consequences, particularly with funding disparities, when there is no system to distribute funding equitably (Ylimaki et al., 2022). The LCFF attempt to reduce such disparities by shifting from compliance to focusing on student needs (Humphrey & Koppich, 2014). With the California Department of Education distributing funds equitably across the state based on unduplicated

counts of students to the LEAs, the site principals may experience equitable distribution differently.

Evaluation of Decentralization

Critics of research on decentralization often insist that there are too few quantitative evaluation studies measuring what they purport, or that the studies are not of sound quality (Ahmad et al., 2008). Hanushek et al. (2013) have remarked there is a smattering of rigorous studies supporting the claim that school autonomy leads to improved achievement, where rigorousness is defined as studies with randomized control, diff-in-diff, regression discontinuity, or other causal designs. The authors state that there is a multitude of issues when analyzing the effects of decentralization that must be taken into consideration, particularly concerning the low academic performance of students and the low levels of economic development in certain regions. As has been discussed, the context of decentralization is essential to its evaluation as a construct. Since there are rarely time-series data available, outcomes tend to be slow to change in response to intervention, or sometimes in other cases, external shocks such as fiscal crises, political changes, or natural disasters supersede decentralization in its influence on student outcomes, which makes decentralization challenging to measure (Winkler & Gershberg, 2000).

Summary of Subsidiarity and Decentralization

Sharpe (1996) looked at decentralization, or as it was coined in Australia, devolution of decision-making, where the aim was to be more responsive to local circumstances and needs. He stated that the success of devolution is often an "act of faith" and not based on empirical research. He found, like Cha (2016), there was ongoing tension between centralized and decentralized structures, observing that:

"Devolution...provides a window of opportunity through transforming leadership, better planning focused on real needs, professional collaboration, and focusing on teaching and learning as the prime school priority, for the achievement of better educational outcomes for all students. Devolution can only set the scene. It is the performance of the key actors which determines the results." (p. 7)

The most critical determinant of the quality of student learning, according to Sharpe (1996), appears to be variables directly related to learning, for instance, student characteristics, student-teacher interactions, teacher and teaching variables, school and classroom climate, and curriculum. Decentralization can be influenced by many other factors, such as

• political climate

- the type of change process adopted
- budget cuts
- the readiness of administration and staff
- and the appropriateness of the professional development available.

While never unidimensional, decentralization is influenced by resources, decision-making structures, goals, and relationships with all stakeholders (Sharpe, 1996).

Decentralization and local decision-making are multi-faceted and challenging phenomena to measure, and the impact of autonomy varies with other elements in a complex system. Some evidence on autonomy comes from cross-sectional analyses where the effects are not well identified, and independent forces such as political influences, economic setbacks, demanding parents, or dynamic schools are difficult to extract. While many aspects of schooling are decisions set at the national level, such as standards, assessments, accountability, or other rules and regulations, variations within cultures, governmental institutions, and political regimes make local control challenging to measure. However, decentralization in school systems may be beneficial when the responsibilities of the centralized authority and the local administration are clearly defined. Although decentralization has been demonstrated to raise achievement (Martinez-Vazquez et al., 2017; Clark, 2009; Barankay & Lockwood, 2007; Wößmann, 2003), researchers caution that it can worsen outcomes where there is a lack of technical capability (Galiani & Schargrodksy, 2002; Merrouche, 2007; Muta, 2000), or when systems have difficulty balancing top-down parameters and local autonomy and lines of accountability are blurred (Kubal, 2006). Principals in a decentralized system must understand their roles and responsibilities in the decision-making structure (Oswald, 1995). When school site principals have experience and training to build the capacity to carry out non-traditional tasks such as budgeting or hiring, decentralization has the potential to yield positive effects on student outcomes. As discussed here, how decentralization evolves is dependent upon numerous components in a complex system. This literature review will now turn to the role of school site principal leadership and capacity in relation to student achievement.

Principal Leadership

It could be argued, in terms of subsidiarity, that school site principals are at the level of least centralized authority. They have an indirect link to achievement via teachers by being pivotal agents in ensuring teachers' involvement in decision-making, thereby influencing school climate, learning, and, ultimately, student achievement (Sebastian et al., 2017). Principal leadership is second only to classroom instruction, among other school-related factors affecting student academic success (Levin & Bradley, 2019; Wahlstrom et al., 2010). Direct and indirect effects of leadership account for approximately a quarter of the total school effects on student learning (Leithwood et al., 2004). Principals play a significant role in retaining effective teachers

and ensuring success in the classroom (Levin & Bradley, 2019), while effective principals are associated with gains in student achievement (Sutcher et al., 2018). In a review of both largescale quantitative analysis and case studies, Leithwood et al. (2004) found that school leadership provides a critical difference in any educational reform initiative. Furthermore, they argue that there are two goals that make school leaders more effective: 1) providing a defensible set of directions and 2) influencing people to move in those directions (Leithwood et al., 2004).

Increased student achievement was associated with principals who had a school-wide vision, created a robust collegial learning environment, encouraged teacher growth and retention, were data-informed, and empowered staff to share in school decision-making (Sutcher et al., 2018). These conditions occur when principals have decision-making authority, the knowledge to make effective decisions, and are able to remain in tenure at a school site. Unfortunately, in the past few years, only 5% of principals received comprehensive preparation incorporating a focus on instructional leadership and creating collaborative work environments (Sutcher et al., 2018). In a recent California survey, principals self-reported participating to a great or moderate extent in developing their district's LCFF goals and allocation priorities (Koppich, 2019). However, there were significant differences in participation, depending on district characteristics. For example, principals in large and small districts reported participating at moderate or great levels (88% and 87%) as compared to those in medium-sized districts (69%), where medium-sized districts were defined as consisting of 2,000-9,999 students, small districts as having less than 2,000 students, and large having 10,000 or more students (Koppich, 2019).

While research suggests that principals must have genuine authority over decisionmaking related to personnel, curriculum, and budgets in order to create and facilitate a safe and supportive learning environment, often, before this develops, principals are moved from school

sites or leave the profession altogether. Nationally, approximately 18% of principals are no longer in the same position one year later, while in high-poverty schools, that rate is 21% (Levin & Bradley, 2019). In California, between the 2015-2016 and 2016-2017 school years, 22% of principals left their positions, with 7% moving to a different school site and 15% leaving either the state or the profession altogether (Sutcher et al., 2018). In other words, just over 1 in 5 principals left their position between school years. Because principal leadership has significant implications for student success by maintaining a positive school climate, motivating staff, and providing means for teachers to enhance their practice, turnover in 1/5 of the positions results in a loss of progress and stability. Levin and Bradley (2019) determined that attributes such as highstakes accountability policies, which create disincentives to remain in low-performing schools, lack of decision-making authority in areas such as spending, teacher hiring, and evaluation, and inadequate preparation and professional development, were many of the reasons why principals depart from their positions. Because capacity building and professional preparation are key to active engagement in change, the next section will explore building capacity for school principals via professional development.

Capacity Building

Capacity building has been defined as the increase in ability to perform functions, solve problems, and set and achieve goals (King & Newmann, 2004; Fukuda-Parr, et al., 2002; WHO, 2017). Others have defined it as a way for communities to be enabled and sustained to achieve an ever-expanding part in society and engage with public authorities (Ahmed et al., 2004). Most often, the term has been used in a narrow sense, meaning to strengthen the organization in the community rather than build the expertise of the people with whom the organization is engaging (Craig, 2007). The need for capacity building is often triggered by the necessity to fulfill a new

policy or procedure. As a consequence, capacity building may be characterized by a top-down hierarchy, denying communities the ability to act on their behalf, accompanied by the notion that those in need of capacity building are somehow inadequate—being deficient in skills, knowledge, and experience (Craig, 2007). Empowerment is critical in capacity building so that participants are actively engaged in determining the direction of change. Empowerment, through learning, takes place with the assistance of information exchanges, understanding others' perspectives, and the attainment of skills (Turcotte & Pasquero, 2001). High levels of capacity are achieved when individual members' competencies are directed toward a collective purpose through coordinated means (King & Newmann, 2004), bringing about an optimal level of efficacy from a given level of resources and organizational arrangement (Corcoran & Goertz, 1995). Groups, such as schools, should be empowered to act on their behalf, to identify issues, and define those issues without being mandated to promote an outside entity's own political or social agenda (Mowbray, 2005).

Professional development is an example of capacity building often used in school systems, where capabilities are improved through education (Hall & Simeral, 2017). According to Darling-Hammond and McLaughlin (1995), useful professional development engages through concrete tasks grounded in inquiry, reflection, and experimentation. Leithwood et al. (2006) found that development, collaboration, problem-solving, and learning from new ideas were most successful in continuous improvement professional development acts. Learning that begins with complex real-world activities set in the context of collaborative immersion are the most robust (Huffman et al., 2008), and the practices learned must be associated with the improvement of student achievement (Darling-Hammond & McLaughlin, 1995). Professional conversations are also a practical approach to policy implementation, as the successful implementation of any

policy or initiative is dependent on the policy path being translated into practice (Irvine & Price, 2014). Therefore, successful capacity building requires assiduous training, practice, reflection, and time.

Be that as it may, although it is clear that capacity building through the empowerment of learners is essential, in a recent study in California, superintendents acknowledged the importance of building capacity for themselves and others, contradictorily the state does not have a long-term plan to build the capacity of superintendents to lead the reform efforts entailed in the LCFF (Barrett, 2019). As such, it may be reasonable to suggest that principals may not receive the necessary support to lead the work of reform or decentralization either. Evidence to support this comes from the report "What's Next for California Schools? A Progress Report One Year After Getting Down to Fact II" (Perry et al., 2020). Capacity shortcomings limit educators' ability to pursue the continuous improvement envisioned by the LCFF due to a lack of professional development (Perry et al., 2020). Ultimately any policy based on subsidiarity should be sufficiently responsive to the best interests of its stakeholders, which would include opportunities to build capacity so that principals can be empowered to lead school staff in ways to improve student achievement.

The LCFF and Subsidiarity

Based on the evidence presented here, in policy, when principles of subsidiarity are established through outside agencies without precise definitions, discernible objectives, or capacity, institutions will be slow to change and will have difficulty attaining the policy's goals and objectives. California's former Governor Brown stated that higher or more remote levels of government, like the state, should render assistance to the local school districts but always respect their primary jurisdiction and the dignity and freedom of teachers and students (Brown,

2013). While SBM schools had been found to promote school-wide staff development to improve the capacity of the whole school (Department of Education, 1996), SBM failed when implemented as an end in and of itself (Wohlstetter & Mohrman, 1995). The Catholic principle of subsidiarity is rooted in the empowerment of the individual to take responsibility for others and the greater good. Decentralization and subsidiarity are not equivalent (Drew & Grant, 2017). Decentralization is assigning tasks to the lowest level rather than empowering individuals to advance the common good. Subsidiarity is empowering individuals or groups to be active participants in policy creation and implementation (Colombo, 2008).

LCFF must not solely be a program of fiscal decentralization but rather an opportunity for school communities to come together and make decisions that impact student outcomes. Odden and Clune (1995) suggest that decision-making should be decentralized so that teams of individuals who provide the services directly to the students are the decision-makers and are held accountable to student results. School funding should be used by decision-making teams in flexible and innovative ways. These recommendations are similar to what has been found to be the keystone concept of the LCFF. The LCFF has tenets based in subsidiarity, which is bringing the decision-making to the lowest level possible. Although at first glance, the LCFF appears to be a form of fiscal decentralization, the LCAP, as a complementary plan of vision and spending, is indicative that California's finance reform is more than merely fiscal decentralization.

The LCFF's guiding principle of subsidiarity encourages decision-making at the lowest suitable level. Suggesting that, over time, full implementation of the letter and spirit of the LCFF will require the state to be thoughtful about how to strike the right balance between decisions made at the district level and those that are more appropriately delegated to the school level (Affeldt, 2015). With new policy comes new roles and responsibilities. There can often be a gap

between policy creation and delivery or performance (Van Meter & Van Horn, 1975). Suitable training and additional staff time must be provided. Policy implementation is often perceived as simple; however, it always involves multiple issues and variables, as discussed earlier in this paper. When unsuccessful, observers may attribute the failure of a policy to insufficient planning, inadequacy of the policy, or lack of funding. However, these judgments may be unjustified as failure can also be caused by difficulties in implementation or the weakness of the capacity of the organization. When policies establish schools as the basic unit of accountability, a number of fundamental problems arise, according to O'Day (2002). Current California accountability models target the school for intervening and changing; however, schools are collections of individuals, and change must involve the behavior of all the individuals, including the students. External control mechanisms may seek to influence internal operations; however, externally generated rules may conflict with a school's internal norms of behavior (O'Day, 2002), and these conflicts may stifle innovative decision-making.

In education and other fields, common themes emerge when subsidiarity practices are used. What manifests is the increased adoption of subsidiarity practices when decisions originate by those closest to the source, guided by frameworks, targets, and accountability or measurements (Cavallo et al., 2016; Clark, 2009; Wößmann, 2003). Without a precise definition of the accountability for subsidiarity, institutions may be slow to make changes, resulting in difficulty attaining success. It is critical to ensure that decision-making occurs within the groups closest to the problem to be solved; however, these decisions must also be a part of broader conversations encompassing a framework of expectations and goals. School sites must have real authority over personnel, curriculum, and budget, as well as practical and meaningful capacity-building opportunities (Wohlstetter & Buffett, 1992; Wohlstetter & Mohrman, 1995).

Literature Review Conclusion

As noted, the Catholic principle of subsidiarity is rooted in the empowerment of the individual as a member of society, taking responsibility for others and the greater good (Drew & Grant, 2017). Subsidiarity can empower individuals or groups to be active participants in policy creation and implementation and applied as a framework to substantiate participation in the community (Colombo, 2008). At the implementation of the LCFF policy, Governor Brown stated that higher or more remote levels of government, like the state, should render assistance to the local school districts, but always respect their primary jurisdiction and the dignity and freedom of teachers and students (Brown, 2013). Based on the evidence presented in the review of the literature here, when principles of subsidiarity in policy are established through outside agencies without precise definitions, discernible objectives, or capacity building conditions, institutions will be slow to change and will have difficulty attaining the policy's goals and objectives (Cha, 2016; Hanushek et al., 2013; Muta, 2000; Sharpe, 1996; Wissler & Ida Ortiz, 1986). In education, however, when practices of subsidiarity through decentralization are used, resulting in positive student outcomes, common themes emerge. These themes include:

- systems or structures that are stable (Hanushek et al., 2013; Smylie & Wenzel, 2003; Cha, 2016; Sharpe, 1996),
- clearly defined responsibilities of centralized authorities and local education entities (Wößmann, 2003; Cha, 2016),
- strong principal leadership (Bryk et al., 1999),
- a cultivation of distributive leadership and local decision-making (Smylie & Wenzel, 2003; Bryk et al., 1999; Falch & Fischer, 2012) guided by frameworks, targets, and accountability (Cavallo et al., 2016; Clark, 2009; Wößmann, 2003)

and building the capacity of the community (Bryk et al., 1999; Muta, 2000; Sharpe, 1996).

With new policy comes new roles and responsibilities. In order for decentralization to be successful, the centralized authorities, which may be considered to be the CDE, the COEs, or the LEAs, must identify who has the primary decision-making authority, while providing structure and guidance through accountability measures. Full implementation of the letter and spirit of the LCFF requires districts to strike a balance between which decisions are best made at the district level and which are more appropriate for the school level (Affeldt, 2015). Principal leadership is crucial to the decision-making process. As stated earlier, principals have an indirect link to student achievement and are second among school-related factors affecting student achievement (Levin & Bradley, 2019; Wahlstrom et al., 2010). At the school site, principals should have genuine authority over decision-making related to personnel, curriculum, and budgets in order to facilitate a safe and supportive learning environment that fosters success for students. School leaders make decisions as a part of a complex system; therefore, it is critical to ensure that decision-making occurs within the groups closest to the areas of need. School funding should be used by decision-making teams in flexible and emergent ways. Decentralization requires a redesign of the organization beyond school governance, where school sites have real authority over practical and meaningful capacity-building opportunities (Wohlstetter & Buffett, 1992; Wohlstetter & Mohrman, 1995). Decentralized schools promote school-wide staff development to improve the capacity of the whole school (Department of Education, 1996). Local communities, such as schools, should be empowered to act on their behalf, to identify issues, and define those issues without being mandated to promote an outside entity's own political or social

agenda (Mowbray, 2005). Empowerment strengthens the capacity of people to be actively engaged so they can determine the shape of change.

Although at first glance, the LCFF appears to solely be a form of fiscal decentralization, the LCAP as a complementary plan of documenting how funds are spent is indicative of more than mere fiscal decentralization. There is opportunity for school communities to come together and make decisions that benefit students. Policies, such as the LCFF, and their supporting reporting measures often establish schools as the basic unit of accountability, while LEAs seek to influence what occurs at this level, sometimes causing fundamental problems to arise (O'Day, 2002). School leaders do not make decisions in seclusion as they are a part of a broader complex system, so decentralization and empowerment must involve the behavior of all individuals. The CDE has provided LEAs with an open door to outline and compose their plan of action to increase student achievement. Through these reforms, the LCFF is a bold course of action to give back the control of funding and decision-making to the individuals nearest to the students, which are argued here to be school site principals. This investigation is an exploration of how principals realize their decision-making authority and what, if any, influence local control has had on this process. Not enough is known about the principal's role in those decisions and how much autonomy they have in this model.

Conceptual Framework

This research is framed in systems thinking, specifically complex adaptive systems (CAS), which is the study of agents who learn or adapt in response to interactions with other agents whereby new strategies emerge (Holland, 2014). This theory best suits this research given that school systems and policies affecting school systems are complex and challenging to

simulate or study because there are many layers of interaction, and these interactions are nonlinear in nature. CAS was used to guide the research questions of this study.

This conceptual framework section is organized as follows. First, complex adaptive systems will be defined, and the fundamental characteristics of the theory will be explained. Existing research on complex adaptive systems as it pertains to education systems and management will then be discussed. In doing so, CAS as a framework is put forth as a particularly useful lens to understand how site administrators experience decision-making through local control. This chapter concludes with the connections between CAS and the study's research questions.

Systems Thinking: Complex Adaptive Systems

A CAS encompasses a system of self-organization where the elements of a system interact and organize without design or tight management (Holland, 2014). The system changes and reorganizes itself and its parts to adapt to the problems produced by its surroundings (Holland, 1992). As a result, it is this adaptability that makes complex systems challenging to simulate or study. An example of CAS, according to Holland (2014), is a commodities market where agents buy, sell, or adapt their strategies as market conditions change, all the while being influenced by exchanges of information, market bubbles, and crashes. The interactions among agents become more entangled as they offer other possibilities in the market with complex feedback loops that are often difficult to trace or analyze. CAS have a large number of components or agents that interact, adapt, and learn over time and space (Holland, 2006); and can respond to the environment in more than one way (Allen, 2001). The interactions between components or agents are often based on simple rules (Jacobson & Kapur, 2012), and these interactions create emergent properties and patterns of behavior (Mitleton-Kelly, 2003).

Moreover, CAS are considered remarkably adaptive; this adaptability plays an essential role in defining the complexity of the system (Keshavarz et al., 2010).

An example of CAS in the biological world is an ant colony where each individual has a role and interacts with other ants; however, if individuals are examined at the colony level, they appear to have the characteristics of an organism—adaptive and robust (Sullivan, 2011). LEAs can be considered a CAS, as they have nonlinear behavior, where the whole may behave differently than the individual parts (Anderson, 1999). CAS theory argues that systems are complex interactions of many parts that cannot be predicted by linear equations (Morrison, 2002). Decisions or actions made in a connected and interdependent system can affect other individuals or systems, and that effect may not have an equal or uniform impact (Mitleton-Kelly, 2003). School systems are always in the process of modifying and becoming something else through interaction and change, with their performance contingent on complex yet loosely linked factors that can be challenging to predict and control (Hawkins & James, 2018). Schools are complex, nonlinear, and unpredictable systems (Morrison, 2002), and CAS explores how ideas, initiatives, and interpretations form an internal ecology (Anderson, 1999).

Characteristics of CAS

Critical characteristics of CAS include hierarchies or levels nested within one another, feedback loops, diverse connections between members of the system or self-organization, and emergence, which is the creation of new system properties. A short definition and example of each of the characteristics pertaining to school systems are next.

Hierarchies. CAS are often hierarchically structured organizations, with each level governed by its own set of rules or laws (Holland, 2014), although not all the levels in the organization are well-structured (Hawkins & James, 2018). These hierarchies, where agents,

their schemata, functions, adaptations, and the strength of their connections are found, can change over time, resulting in a recombination of the system's parts or whole system evolution (Anderson, 1999). The system hierarchies generate processes, outcomes, strategies, or rules that affect the next level (Holland, 2014). Competitive pressure on the resulting emergent properties or processes is either promoted or suppressed via feedback loops (Holland, 2014; Hawkins & James, 2018). LEAs are typically hierarchical, with a local school board as the top tier, setting policy and hiring the superintendent. Further down in an LEA's structure, other levels include district-level administrators, school site administrators, teachers, and support staff. There are also parallel systems such as families, communities, organizations, and the media. All these levels are embedded in the larger county offices of education and the state education structure.

Feedback loops. CAS are networks in which agents are partially connected via feedback loops. Each agent has a schema—a cognitive structure that determines feedback, triggering sequences of behavior(s) based on the agent's perception of the environment (Anderson, 1999). Through feedback, competitive pressure on emerging properties results in the promotion or suppression of these new outcomes (Hawkins & James, 2018). The properties that emerge in hierarchical levels are not well-structured but are nested in other properties (Hawkins & James, 2018). Therefore, predictability is difficult, and small actions can have significant effects, with the potential for both chaos and stability as outcomes (Hawkins & James, 2018). In an LEA, feedback loops can be formal and informal and may be used to plan and reorganize practices (Keshavarz et al., 2010). For example, policy implementation in school systems is not linear but rather understood as a loop where causes and consequences interact in circular patterns, propelling improvements or causing deterioration (Steen et al., 2013).

Self-organization. A CAS contains self-organizing networks where agents in the system are partially connected (Anderson, 1999). The degree of connectivity in the networks determines the strength feedback loops have on the system (Mitleton-Kelly, 2003). Information at the heart of a CAS is interpreted by individuals, combined with prior knowledge, and passed on to others through system interactions (O'Day, 2002). In a complex system, there are intentional interactions of various kinds (Hawkins & James, 2018), with each agent observing and acting on information received (Anderson, 1999). Agents in these systems are interdependent, with ties between them that can be weak, unpredictable, or intermittent (Weick, 1982). Agents act to optimize their individual payoff since they cannot forecast the system-level consequences of their actions (Anderson, 1999). The interactional capability between actors affects the complexity of the system (Hawkins & James, 2018). It can be challenging to establish cause-andeffect relationships in a complex system due to in-system and cross-system relationships that evolve unpredictably, in turn developing schema, rules, laws, or procedures (Hawkins & James, 2018). The nature and strength of patterns of interaction are vital to understanding the relationships between individuals, organizational behavior, and change (O'Day, 2002).

Diverse interactions can be frequently observed within schools and between schools, families, and the community. Within schools, teachers co-construct their understanding of policy messages through formal networks and informal alliances (Coburn, 2001), while principals influence teacher sense-making by participating in the process of creating conditions for these networks and alliances (Coburn, 2005). Group sense-making provides opportunities for individuals to learn from one another, considering that context is critical to understanding education policies that attempt reform, which often require tremendous reorganization of agents', such as teachers' and principals' schema (Spillane et al., 2002).

Emergence. Emergence is a property of CAS, a complex process creating new order (Mitleton-Kelly, 2003) without clear boundaries (Holland, 2014). Emergence is challenging to predict due to the ongoing creation of new schemata and the whole system's nonlinearity (Cilliers, 1998; Morrison, 2010). Emergence occurs when individuals interact in a system yielding objects or properties that would not otherwise be obtained (Holland, 2014). Characteristics of how schools or LEAs function are emergent products of the interaction of many factors over time (Keshavarz et al., 2010). Leadership can be considered an emergent event that occurs between the interactions of people and ideas, owing to the notion that leadership is not solely the action of an individual but rather the emergence of new outcomes over time (Martin, 2019).

Complex Adaptive Systems Research in Education and Management

According to Hawkins and James (2018), complexity as a framework in use in educational research is growing; however, they maintain that complexity as a foundational aspect of schools is not consistently acknowledged, limiting research, policy, and practice in all areas of inquiry in schooling. Complexity theory is being integrated into the conceptual frameworks of numerous fields, such as finance, law, medicine, and management (Jacobson & Wilensky, 2006) but is limited in educational research. Complexity describes what has transpired and what is occurring but not what will manifest (Morrison, 2010). In a small qualitative study of 18 primary schools in Australia, utilizing semi-structured interviews, the range of perspectives on implementing and sustaining a school health program was explored, using CAS as a framework. (Keshavarz et al., 2010). Results from interviews, observations, and the literature review examined school structure systems and functions and whether they exhibited CAS characteristics. CAS as a framework helped to explain some of the challenges of introducing and

sustaining change in schools in a diverse, complex, and content-specific school system (Keshavarz et al., 2010).

In a review of the literature-conceptual study, Fidan and Balcı (2017) compared school systems and CAS and attempted to identify strategies used to manage schools as CAS. They suggested that to do so, school administrators should develop new skills and strategies to lead in an ever-changing and complex environment without the expectation of stability or predictability. School leaders should be able to detect emerging patterns, manipulate the environment, choose compatible organizational structures, and promote innovation (Fidan & Balcı, 2017).

Palmberg (2009) used a case study to explore CAS from the perspective of managing a school system. Local principals and central administrative employees of public and private schools in Sweden were interviewed, and themes that evolved were either confirmed or dismissed in later interviews. Schools, like a CAS, could be managed through vision, the delegation of responsibility and authority, diversity, experimentation, reflection, and feedback. Having a shared vision increases the school's capacity, and delegation creates the opportunity for the emergence of creative solutions, experimentation, and the will to change (Palmberg, 2009). In addition, diversity among agents adds to the experimentation in a school creating varied connections, interactions, and, ultimately, self-organization, all of which are CAS concepts.

Complexity theory attempts to discover how diverse elements of a system work together to collectively mold the system and its outcomes, coupled with how these elements vary over time (Lawrenz et al., 2018). Schools are involved systems, having high levels of interaction as institutions through diversity, the number of agents, the types of interactions and their context, and the non-linear nature of those interactions (Hawkins & James, 2018). Morrison (2002) suggests that school systems are like CAS with the following features as they:

- require organization and change over time, responding to macro- and microsocietal changes;
- are non-linear, given that causes do not always straightforwardly produce effects, and it can be challenging to infer causes from effects or outcomes;
- can be affected by small changes leading to massive effects;
- are a human service, relying on people, with relationships being paramount;
- operate in internal and external environments that are often mercurial and unpredictable;
- rely on a variety of communication methods and networking;
- demonstrate that the synergy of its parts is greater than the individual or a small subset of individuals; and
- are learning organizations where new properties emerge at every level.

There are times when social scientists tend to reduce complex systems by eliminating what is deemed minor or unnecessary (Anderson, 1999). According to Anderson (1999), models of boxes and arrows are inadequate for modeling complex connections and feedback loops as they do not specify the patterns of connections amongst agents; they only frame the variables. Traditional analytical methods like linear differential equations and statistical modeling work well for closed, linear systems where the whole is the sum of the parts; therefore, these standard methods cannot be used for emergent behavior because emergence cannot be obtained and analyzed (Jacobson & Kapur, 2012). Complexity theory is a relevant framework for studying organizations that face rates of external change that exceed their internal rate of change (Anderson, 1999), such as in schools and school systems.

CAS and Decentralization

In this study, CAS was used as a framework to investigate and describe principals' experiences with LCFF and subsidiarity, shedding light on the dynamics of decentralization at the school site level and principals' experiences with these changes. The strength of CAS is drawing together existing areas of educational leadership and management into a coherent theory (Morrison, 2010) to form the basis of the study of policy implementation (Mischen & Jackson, 2008). CAS focuses on understanding the patterns of interactions between system components or elements at different levels and times rather than a focus on these points in isolation. In this respect, CAS cannot offer clear guidance on how to control or predict future behavior since behaviors or variables can realize unpredictable pattern formations, and these formations or properties can play a positive or negative role in the system (Allen, 2001; Eoyang, 2006).

And while it is not possible to tell a single story about complex conditions (Cilliers, 1998) because human action and social interaction are nonlinear, it is also meaningless to look for simple causal relationships between action and outcome (Stacey, 2010), some tight relationships or strong links between organizational school system elements do occur (Weick, 1982). If educational systems were invariably tightly coupled systems, all members would agree on the rules or policies, compliance inspections would occur, and these inspections would be followed by feedback on how to improve compliance (Weick, 1982). On the contrary, school systems are loosely coupled. For example, there is a connectedness between the school site principal's office and the district office, with each retaining some identity and separateness. Their attachment may be limited or sporadic; however, there is some responsiveness between the two, even though each retains its own identity and generally its own physical or logical separateness (Weick, 1982). The complexity approach to managing is one of fostering, creating

conditions for empowerment, and realizing that excessive control and intervention can be counterproductive (Mitleton-Kelly, 2003). People in loosely coupled systems are more satisfied to be a part of a project that links with some essential values and themes (Weick, 1982). When this understanding is applied to school leadership, all are involved and take responsibility for the decisions and actions implemented (Mitleton-Kelly, 2003). The understanding of complex systems is governed by the invisible effects of diverse individuals who are exploring, interpreting, and attempting to model and make sense of their experiences (Allen, 2001), all while constructing their understanding of policy messages through various alliances (Coburn, 2001). Sense-making, as a community, provides alternate routes of learning as understanding education reform policies often requires an immense change to an agent's schema (Spillane et al., 2002).

This study draws upon insights from CAS as an approach to better understand how administrators define subsidiarity in the context of the LCFF, what decision-making practices are in place, how self-organization and emergence are occurring, and what interplay occurs between various hierarchies and feedback loops via a mixed method research design. Mixed methods are underpinned by complexity science as they straddle disciplines and philosophical perspectives (Varga, 2018). Complex systems are real-world systems that have open boundaries, and using a mixed methods study has the potential to illustrate complex dynamics that might otherwise be unknown.

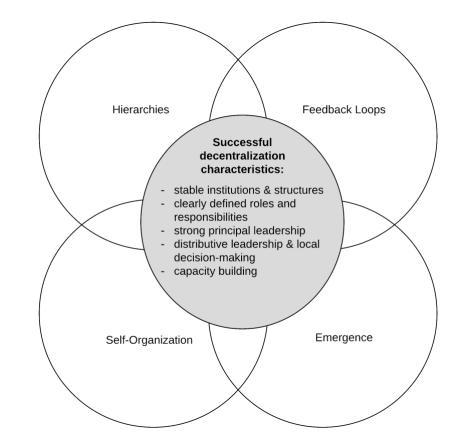
Research in education using CAS as a lens has lagged compared to other areas of management and leadership (Morrison, 2010). In the literature, there is a need to include insights gained from mixed methods or complexity analysis as a means to deepen understanding of how principals perceive their decision-making ability in the context of the LCFF and subsidiarity.

Findings from the literature review indicate that in order for decentralization to be successful key components must be in place. These components include:

- stable institutions & structures (Hanushek, et al., 2013; Smylie & Wenzel, 2003; Cha, 2016; Sharpe, 1996);
- clearly defined responsibilities of centralized authority and local education entity (Wößmann, 2003; Cha, 2016);
- strong principal leadership (Bryk et al., 1999);
- cultivation of strong, distributive leadership and local decision-making (Smylie & Wenzel, 2003; Bryk et al., 1999; Falch and Fischer, 2012);
- and capacity building (Bryk et al., 1999; Muta, 2000; Sharpe, 1996).

School leaders do not make decisions in isolation; instead, decisions are made as a part of a complex system. Using the CAS framework as a lens facilitated a more in-depth exploration of how agents in the school system interact to fulfill the LCFF policy of decentralization. Employing a mixed-method design proved useful in exposing the complexity of policy implementation. This study explored how local control or decentralization influences principals' decision-making using an explanatory mixed methods approach through the lens of Complex Adaptive Systems (Figure 1).

Figure 1



CAS Properties Overview and Characteristics of Successful Decentralization

A mixed methods research design was used to answer the following questions:

1. To what degree has local control by virtue of the LCFF, through the agency of subsidiarity or decentralization, reached the school site?

2. How have site principals taken part in the decentralization of decision-making as a result of the LCFF? Does participation vary between elementary and secondary levels, length of experience as a principal, or size of district?

3. To what extent are principals' decision-making processes pre-LCFF similar to or differing from the post-LCFF context? Do those similarities or differences in decision-making

processes vary between elementary and secondary levels, length of experience as a principal, or size of district?

4. What can we learn by using features of CAS—connectedness/hierarchies, feedback loops, emergence, and self-organization, to frame the experiences of school site principals via local control?

Chapter 3: Methodology

Explanatory Mixed Methods

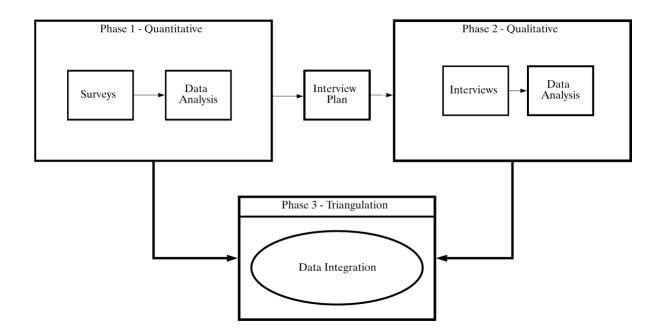
This section provides an overview of the methodology employed in this study. First, the mixed methods research design is described, including information about the study sample. Details about the data collection processes and analyses will follow. Finally, the limitations of the methodology will be acknowledged. This chosen methodology generated useful information on the impact and sense-making of local control and school principals' decision-making.

This study employed an explanatory mixed methods approach utilizing a survey to explore the research questions and follow-up interviews to further interpret the survey results (Figure 2). This design consisted of two separate and distinct phases: quantitative followed by qualitative, along with a third phase where the results were interpreted and connections were made across the data (Creswell, et al., 2010).

Mixed methods are defined as a third methodological movement following quantitative and qualitative methods (Creswell, 2010). In this methodology, the researcher first collected and analyzed the quantitative data (Phase 1), followed by the development of semi-structured interview questions to dive more deeply into the quantitative results (Phase 2). During the third and final phase of the study, the results from the previous phases were connected. The rationale for this approach is that quantitative data and the subsequent analysis provided a general understanding of the research problem, while the qualitative data and analysis explored and refined participants' views more in-depth (Creswell, 2003; Creswell, 2010; Rossman & Wilson, 1985). This design was well suited for this study as it allowed the researcher to capture trends and details of principals' decision-making that may have been lost in a solely quantitative study.

Figure 2

The Explanatory Mixed Methods Approach



Complexity science is firmly positioned in a pluralistic worldview (Varga, 2018), where diverse and competing interests are the basis for equilibrium. The research design used provided a more in-depth exploration of specific quantitative results to give more insight and explanation.

According to Krathwol (2009), surveys are used to generalize the commonality of responses or how much they differ. During Phase 1, the quantitative phase, school site principals answered an online questionnaire (see Appendix A) that explored their understanding of subsidiarity and decentralization, their LEAs' practices, what they perceived as their role in decision-making, and how efficacious they felt in their position. The survey included closedended questions, multiple-choice, and the majority of items used a five-point Likert scale which allowed comparison among responses. The information gathered gave the researcher broad information about the variables, such as

• principal characteristics, e.g., time in position, school type,

- district contexts, such as size of district and school level,
- principals' level of involvement in the LCFF policy in their district,
- differences in decision-making processes pre-LCFF and post-LCFF, and
- key features of CAS.

Qualitative data was collected from school principals using semi-structured interviews (see Appendix B). In Phase 2, information gleaned from the interviews expanded upon how specific decisions were being made in school districts, what barriers to full implementation might be occurring, and what solutions principals, who are actively involved in implementing the policy, might have had. While built upon answers from Phase 1, the questions in this phase captured the why or how behind the topics in survey questions. The semi-structured interview questions were refined based on the findings in the quantitative phase. Some changes were made to the initial IRB interview questions, so an amendment was submitted and approved.

Participant interviews accessed discourses operating in the LEAs at the district and school site levels, which provided a window to explore the interaction between the LEA and the school site. Interviewing school site principals was an opportunity to capture the complexity of decision-making in a CAS. It offered a way to understand organizational behavior in schools and the decision-making and leadership within them. Semi-structured interviews lend themselves to exploring a range of complex experiences which characterize CAS. Critical drivers of adaptation and change are the interactions between agents in a system, the flow of information, and feedback loop attributes explored through interviews. Areas investigated included organizational structure, barriers, feedback loops, and experiences with the LCFF. Additionally, select central or district office-level staff in charge of implementing the LCFF/LCAP process were interviewed to understand the context within which school principals operated (see Appendix C). District

office-level staff did not take the survey. Interview questions included longevity of administration and, where applicable, decision-making processes in the district prior to and after the implementation of the LCFF. The interview analysis included coding and thematic development.

Quantitative results may be inadequate to understand a CAS intimately; therefore, qualitative data are needed to help explain or build on initial results as a way of actively participating in the sense-making of the participants. Employing qualitative and quantitative methods enhanced the integrity of the findings (Creswell & Plano, 2011). At the point of integration, in Phase 3, both data sources were analyzed, and a joint display was created to combine an understanding of decentralization and how it has played out using the CAS framework. The remainder of this chapter will be developed by discussing the three phases.

Research Questions

In order for LEAs to accomplish the ultimate goal of providing educational excellence and opportunities for student success, school site administrators should be an elevated part of the decision-making process. Under the auspices of subsidiarity, the LCFF ought to aspire to return the control of finance and decision-making to those that are closest to the students. As described in previous chapters, California's school finance system is a departure from a top-down, centralized structure and an arrival at local control. Currently, the state funds LEAs, who then, in turn, determine how much control over finances and decision-making is devolved to the school site level. In order to fully act on students' behalf, school sites must have real authority over personnel, curriculum, and budget, as well as practical and meaningful capacity-building opportunities (Wohlstetter & Buffett, 1992; Wohlstetter & Mohrman, 1995).

The following research questions guided this study:

1. To what degree has local control by virtue of the LCFF, through the agency of subsidiarity or decentralization, reached the school site?

2. How have site principals taken part in the decentralization of decision-making as a result of the LCFF? Does participation vary between elementary and secondary levels, length of experience as a principal, or size of district?

3. To what extent are principals' decision-making processes pre-LCFF similar to or differing from the post-LCFF context? Do those similarities or differences in decision-making processes vary between elementary and secondary levels, length of experience as a principal, or size of district?

4. What can we learn by using features of CAS—connectedness/hierarchies, feedback loops, emergence, and self-organization, to frame the experiences of school site principals via local control?

Phase 1 - Quantitative Methodology

Protection of Human Subjects

The survey questionnaire was confidential to protect the study subjects, meaning very little personal identifying information was collected. Unique identification numbers were associated with participants' surveys so that data gathered from the CDE, such as district name, size, or other factors, could be linked back to data collected in the survey without revealing any personally identifiable information from the participant. A linking file was kept separate from the coded data set, and the researcher did not share this information with other individuals. Participants agreeing to contribute to the study were reminded of confidentiality procedures and information protection throughout the process. Before collecting data, participants were provided documentation about giving their informed consent to complete the survey, including the study's nature and their right as a participant to stop the study if they felt uncomfortable. Participants were told that the survey was voluntary and that no personal identifying information would be collected unless voluntarily given. They were also provided information about the nature and scope of risks, for which this study carried minimal threats of harm.

Sampling

Purposive sampling, where criteria for participation were set in advance, was utilized in this phase. Participants were employed in several school districts within a single county in California. Recruiting a range of school principals' characteristics provided access to different macro and micro diversities that are represented within the complex system of an LEA. District size, school grade range, and years in principalship were used as variables during the analysis. These variables were chosen to reflect the educational context in which principals operate. For example, district size may impact the resources available and the level of support they receive. Grade levels served may impact the principal's responsibilities, the challenges they face, and the amount of funding they receive due to various funding distributions based on student grades as a part of the LCFF. Moreover, years in the principalship, primarily focused on hiring before or after the LCFF implementation in 2013, may reflect their experience and familiarity with the context in which they work. By examining the relationships between these variables and the LCFF and decentralization, insight is gained into how these variables may impact the effectiveness of the LCFF. Each variable will now be discussed in more detail.

1. District size. Most of California's students attend schools in either large elementary or unified districts. Elementary districts have schools with kindergarten through sixth or eighthgrades, while unified districts contain kindergarten to twelfth grades. With approximately 1,000 elementary, unified, or high school-only districts in the state, this research will focus solely on

small, medium, and large unified districts. Current research indicates that principals self-reported having participated to a great or moderate extent in developing their district's LCFF goals and allocation priorities; however, significant differences in participation, depending on district size, were found (Koppich, 2019). Therefore, survey data was collected from unified school districts of various sizes within a specific county in California to delve further into how principals at differing levels and varying school district sizes experience the LCFF. Data was collected from large districts with 10,001 or more students, medium districts with 3,001 to 10,000 students, and small districts, with fewer than 3,000 students, proportional to California's unified districts. In 2019-2020, 343 unified school districts, and 116 were large districts. In the county which was studied, there were 20 school districts, categorized as six small, five medium, and nine large. So that the survey was distributed amongst unified districts proportional to those found in the state, the survey was distributed to principals in two small districts, one medium district, and two large districts in the same California county.

2. School type/Grade levels. In the report "Principal's Perceptions: Implementing the Local Control Funding Formula" (Koppich, 2019), principals' perceptions were reported using weighted survey results to align the number of responses from principals to their actual proportions in the population; however, the results presented did not delineate the experiences of principals at varying school levels (e.g., K-6, 6-8, 9-12); instead, the responses were presented from the perspective of all principals. There may be different responses to the research questions based on the level of students at the school sites since the LCFF funding amounts vary. Student funding ranges anywhere from a low of \$9,132 per pupil to a high of \$18,795 per pupil based on factors such as grade level and the percent of unduplicated counts within the LEA

(CDE, 2023). Responses in this study were included from various school levels within unified school districts, which provided more information about principals' perceptions of decentralization as it pertains to students' grade levels.

3. Tenure of principals. Nationally, about 18% of principals leave their position, and in high-poverty schools, 21% of principals depart (Levin & Bradley, 2019). As there is no existing data source for information about principal longevity in California districts, and with the LCFF having been signed into law in 2013, to capture the varying experiences of administrators who were principals before and after the implementation of the LCFF, it was crucial to survey principals in school districts with varying levels of unduplicated pupil counts (English Learners, foster students, and students from low-socioeconomic backgrounds). The reason being is that schools with high numbers of students with characteristics such as low socioeconomic status, English Learners, or being a part of the foster system are a primary predictor in principal turnover due to school characteristics like lower levels of resources, less competitive salaries or problematic working conditions (Levin & Bradley, 2019). Therefore, to ensure the survey of principals who had been in the job prior to 2013, surveys were distributed to school districts with varying levels of unduplicated counts based on the likelihood that districts with lower unduplicated counts have principals that have been in the position longer, as unduplicated pupil counts can be used as a potential indicator for principal longevity.

Once the participating districts in the Southern California county were identified, a letter introducing the study was presented to the district superintendent or via the district's research approval process, including IRB approval (see Appendix D) and the offer of a copy of the proposal. Follow-up phone calls were made to clarify information about the study using the information included in the introductory letter. Immediately after gaining district approval, a

letter of introduction (see Appendix E) was distributed via email to school site principals at elementary and secondary levels, as they were all pivotal in making teachers' involvement possible and shaping the nature of their contribution to school improvement. The email contained an electronic link to the survey, along with the Claremont Graduate University consent form, which included a description of the study, the purpose, eligibility, ways in which they could participate, the risks and benefits of participation, and a description of confidentiality (see Appendix F). The benefits of completing the study included information to understand local control's impact on site-level decision-making and how principals experience local control. Follow-up participants were individuals who indicated, by checking a box at the end of the survey, that they would be willing to participate in Phase 2 of the study. They gave permission for the researcher to contact them for this purpose. To increase participation in the survey, the survey was as short as possible to be considerate of respondents' time while not losing validity. The survey was streamlined, and an accurate completion time was determined after the conclusion of a pilot survey, which is discussed in the next section. A progress bar was used so that participants could see how much longer it would take to complete the survey. The survey was open for a period of four months during the COVID-19 pandemic while all the principals were supervising online schools. A first reminder was sent approximately three to four days after the initial dispersion, then again at four weeks, and a final reminder a week before the close of the survey.

Survey

The quantitative data was collected through a survey instrument, developed by the researcher using the online survey tool-Qualtrics. The survey instrument contained 153 items. The questions were grouped based on the common themes found in successful decentralization—

stable institutions and structures, clearly defined responsibilities, principal leadership, distributive leadership and local control, and capacity building. The tool included general population data, including years of experience and education levels. Closed-ended questions used a five-point Likert scale, while options ranged, for example, from strongly disagree to strongly agree and never or rarely to very often. The items included in the survey instrument were derived from the characteristics demonstrated in successful decentralization and the CAS framework. Skip logic, or conditional branching was used to tailor the survey to respondents based on the length of time administrators had been in the principalship so that questions could be adjusted for principals who had been in the position before 2013 and those who had not. A matrix was developed to illustrate the survey questions' alignment with the research questions (see Appendix G).

Pilot Study

Before collecting data, a small pilot study was employed with site principals (n=3), not in the study's sample, to 1) refine the instrument questions, 2) collect initial data, and 3) analyze preliminary results to determine if the questions were interpreted as intended. This pilot study was carried out using a small sample of volunteer subjects recruited from the researcher's personal and professional network of educational leaders. The pilot participants were debriefed after the survey administration to understand what problems may have arisen and any concerns there may have been, such as confusing items, items that do not differentiate between topics, items that do not fit, or items that may have had more than one answer. The content and structure of the survey was adjusted based on this feedback. Care was taken to ensure that the pilot study participants were excluded from the main study and that details from the pilot were not passed on.

Statistical Analysis

Once the data were collected, they were cleaned, and missing data were addressed. Unique variables were created. Descriptive statistical analysis and cross-tabulation were completed using MAXQDA. The descriptive analysis provided the basic features of the data, simple summaries of the sample, and measures and insights into any general trends. For crosstabulation, the independent categories in this study were:

Principal demographics: years of experience as a principal,

School characteristics: the range of students which was elementary (K-6) or

secondary (7-12), and

District characteristics: total enrollment.

Quantitative Validity

Through the pilot study, the survey was assessed as to whether it measured what it was intended to measure. As previously stated, feedback was provided by trial participants about any concerns with the instrument. Creswell and Plano (2011) state that methods to minimize threats in the explanatory sequential design are to examine all critical quantitative results and consider all possibilities for an explanation. The survey results were used to further develop the interview questions to explore any surprising or contradictory quantitative results more fully.

Phase 2 - Qualitative Methodology

Protection of Human Subjects

At the end of the survey in Phase 1, participants were asked if they were willing to participate in Phase 2 of the study, a 30–45-minute semi-structured interview via Zoom. Once willingness was established, participants received an email with a link to complete an additional Qualtrics questionnaire providing information about the consent for the interview (see Appendix H). The interview consent form included the language for consent, the nature of the study, and the participant's right to stop if they felt uncomfortable. The consent form gave information about confidentiality so that participants understood that data would be securely stored in a locked location and on a password-protected computer. They checked several boxes for consent indicating whether video recording, in addition to voice recording, was permitted. Once completed, they were sent a copy of the consent form. Since the consent form was completed prior to the Zoom interview, the researcher reviewed the consent form with the participant on the interview day before the interview began and answered questions as needed. In the same consent email, potential interview participants received information on scheduling an interview using a link to Calendly, which was provided by the researcher. Follow-up emails or phone calls were sent as needed.

Sampling

Along with the principals who agreed to interview after completing the survey, select district-level staff from participating districts working with the LEA's LCAP were contacted to participate in an interview. In this study, the qualitative phase was connected to the quantitative phase, and the principal participants were a subset of individuals from the quantitative sample. A purposeful sampling strategy was used to select individuals to provide the necessary information to understand the questions developed for this phase. The researcher had planned to intentionally select interview participants to look at diverse perspectives, targeting those who had been in the position prior to 2013 or for more than seven years or characteristics such as gender, ages of students at the school site, or the number of years of experience, which may have provided varying perspectives on decision-making processes. Ultimately, all those that agreed to participate were interviewed due to the overall low response rate of the survey.

The qualitative portion's target sample size was significantly smaller than the survey sample size, with interviews being completed until saturation occurred. According to qualitative researchers, a sample size of 12 to 16 may provide saturation (Guest et al., 2006; Hennik et al., 2016; Hagaman & Wutich, 2017). Glaser and Strauss (1967) defined saturation as the point where no additional data are found, and the researcher cannot develop other categories. At this point, the researcher becomes empirically confident that the category is saturated. Small sample sizes can be sufficient to provide accurate and complete information as long as participants have expertise in the area of participation (Romney et al., 1986).

Interviews

The semi-structured interview was designed to gather focused, qualitative textual data and offered a balance between the flexibility of an open-ended interview and the focus of a highly structured interview. Semi-structured interviews allow the researcher to investigate responses in ways that can help uncover the how and the why behind a subject rather than just bringing to light its existence (Creswell & Plano, 2011). In an explanatory sequential study, the quantitative results that will be followed up on were significant, surprising non-significant results, outliers, or distinguishing variables. The questions for this interview were further developed from the quantitative results, the literature review, and the conceptual framework. The questions were clarified based on the findings in the quantitative phase. The interviews lasted approximately 30 minutes to one hour.

Pilot Study

Prior to the formal collection of interview data, a small pilot study was employed to 1) refine the interview instrument, 2) collect initial data, and 3) analyze preliminary results to determine if the questions were interpreted as intended. The pilot study was carried out using a

small sample of volunteer administrators (n=3) who were not a part of the quantitative study but who were recruited from the researcher's personal and professional network. In addition, the participants were debriefed to gain an understanding of any problems that may have arisen during the interview.

Survey Analysis

Zoom audio or Zoom video recordings were made of the interviews and transcribed verbatim using MAXQDA software to store the data files. Data from the interviews were collected and coded shortly after each interview. The researcher recorded initial thoughts while notes, comments, and observations were made to find generalized patterns. MAXQDA was used to code digitally, enabling the researcher to block and label text segments and organize codes.

Trustworthiness

Credibility, confirmability, dependability, and transferability are used in qualitative research, like quantitative research's external validity, objectivity, and reliability (Creswell & Plano, 2011). Trustworthiness focuses on processes during and after the collection of data. For this study, interview questions were submitted to a small group of principals for feedback and discussion prior to developing the final interview questions. After the interviews were complete, member checking was used as a means to develop credibility.

Phase 3 - Integration of Data

As was discussed earlier in this chapter, the explanatory mixed methods model provided opportunities for conclusions or interpretations to be made following the individual phases. In the final phase of the study, analysis and interpretation were conducted across the quantitative and qualitative findings, as integration is the centerpiece of mixed methods research (Creswell & Plano, 2011). CAS features, such as connectedness or hierarchies, feedback loops, emergence,

and self-organization, while framing experiences of school site principals via local control, are discussed. The evidence from the qualitative strand is used to add insight to the quantitative strand, as a more profound understanding is achieved when personal experiences are used to explain statistical outcomes (Creswell & Plano, 2011). Finally, a joint display of data was created, connecting the quantitative data and the qualitative results through a matrix, noting the value added by the qualitative explanations through integration and interpretation.

Limitations of the Study

There are four significant limitations in this study that could be addressed in future research. These limitations include the following:

1. Sample size and sample bias. This study had a small sample size and a response rate of 30.3%. Looking at a larger sample could increase the generalizability of the findings. In addition, this study employed a purposive sampling technique that identified specific characteristics to recruit principals from a single area in California that could represent a sampling of urban, rural, and suburban unified school districts in the state. The results from this study may be different in large urban or small rural districts, so the findings may only be somewhat generalizable to school districts of similar size and location that are represented in this study.

2. Length of Time in Principalship. The average years of experience as a school site administrator in California is 6.2 years (*Schools and staffing survey: Table 6*, 2011), and LCFF has been in place since 2013 for more than ten years. Principal years of experience varies based on school type and characteristics such as school level, enrollment, and percentage of students with free or reduced-price lunches (*National Teacher and Principal Survey*, 2017). Gaining access to participants with more than ten years of experience was a challenge, as the average number of years of experience of all survey participants was eight. This may have had an impact on the survey and interview results. There was also limited ability to gain access to a wide variety of interview participants as interviews were completed with only those that had agreed to participate in the second phase of the research.

3. Education Level. There were a large number of principals that did not agree to be interviewed and may have had differing viewpoints. Additionally, thirty-five percent of survey participants had completed a doctorate, while 64% of the interview participants had completed a doctorate. The researcher believes this may have been because site leaders understood the difficulty in doing research to complete a dissertation and were more likely to participate in helping out a peer.

4. Natural Disaster. The survey and interviews occurred during the COVID-19 pandemic, which placed additional stress and time constraints on principals. This may have influenced the number of survey respondents as well as the number of interview participants.

Therefore, these results will need to be interpreted with caution. Further research should consider these limitations and take steps to address them to ensure more generalizable findings.

Positionality of the Author

As the primary researcher of this explanatory mixed method study, it is essential to acknowledge my own potential bias as the coordinator of this study.

"Complexity...[is] derived from the Indo-European *plek*-, "to weave, plait, fold, entwine." Such, then, is the first lesson of complexity thinking...we are woven into what we research, just as it is woven into us." (Davis & Sumara, 2006, p.16).

I, as the researcher, am extremely familiar with decision-making in public schools, given that I work in a public school system as a regular part of my employment and work to implement the LCFF and the LEA's LCAP. This experience could present bias in the survey instrument as well

as the data analysis if not reviewed by an impartial party and triangulated. I did my best to conduct this study with objectivity and sound research practice.

Chapter 4: Findings

Overview

This study aimed to understand how school site administrators see themselves in relation to and within the context of the LCFF and the principles of subsidiarity in a complex system. An explanatory sequential design was used, which involved collecting survey data followed by interviews to further describe and analyze the results (Creswell & Plano, 2011). The LCFF is based on the notion of subsidiarity, which gives decision-making control to those closest to the issues to be resolved. In the policy's current implementation, most often, this is considered the school district or LEA; however, those closest to students, such as principals and teachers, have the most significant effect on student achievement (Sebastian et al., 2017). If the goal of the LCFF is to effectively address achievement gaps for students, including low-income students, English Learners, or foster youth, then research on the LCFF has an obligation to acquire an understanding of decision-making at the ground level. Along with teachers, school site personnel are at the level closest to the students, with principals having an indirect yet pivotal link to influencing school climate, learning, and, ultimately, school achievement (Sebastian et al., 2017; Leithwood et al., 2004; Wahlstrom et al., 2010).

Research Questions and Hypothesis

This research aimed to answer the following questions:

1. To what degree has local control by virtue of the LCFF, through the agency of subsidiarity or decentralization, reached the school site?

2. How have site principals taken part in the decentralization of decision-making as a result of the LCFF? Does participation vary between elementary and secondary levels, length of experience as a principal, or size of district?

3. To what extent are principals' decision-making processes pre-LCFF similar to or differing from the post-LCFF context? Do those similarities or differences in decision-making processes vary between elementary and secondary levels, length of experience as a principal, or size of district?

4. What can we learn by using features of CAS—connectedness/hierarchies, feedback loops, emergence, and self-organization, to frame the experiences of school site principals via local control?

It was hypothesized that the findings of this research would vary depending on the size of LEA, the principal's experience, the existence of systems and feedback loops, along with formal and informal interactions among members of the system. Subsidiarity and capacity will be critical variables in leading the changes associated with the LCFF. Based on the literature review, it is postulated that decentralization down to the school site and the involvement of principals in district-level decision-making processes is limited.

Explanatory Mixed Methods

The findings are presented in three phases corresponding to the explanatory sequential research design. This model provided opportunities for conclusions or interpretations to be made following each of the individual phases. Phase one, the quantitative phase, presents the descriptive statistics for each theme of decentralization from a survey completed by school site principals. Additional data is presented based on LEA size, school level (i.e., elementary or secondary), and principal experience pre- or post-LCFF. In phase two, the qualitative phase, principal decision-making and the principal's role in the LCFF are more deeply understood through interviews, all within the context of the themes of decentralization. Finally, the

in a joint display of data that connects the qualitative data and the quantitative results through a table, noting the value added by the qualitative explanations.

Phase 1 - Quantitative Analysis

The quantitative data for this study was collected through a survey to answer the research questions. The target population within five districts was 122 site administrators, to which the surveys were distributed. In all, 43 surveys were completed or partially completed over a period of three months. During this time, the world was experiencing the unprecedented Covid-19 Pandemic, and navigating the difficulties presented by this for both the site principals and the researcher was challenging. At the close of the survey, 43 surveys were initiated, of which three were duplicates, while an additional three were less than 35% completed; the three duplicated and three partially completed data sets were removed from the analysis. Additionally, due to the overall low response rate, six surveys ranging in completion from 48% to 84% were included in the final analysis. The remaining 31 responses were 100% complete for a total data set of 37 (response rate of 30.3%). Therefore, the analyses will report different sample sizes (n) throughout this section. Descriptive statistical analysis and cross-tabulation were completed to provide simple summaries of the results and measure any general insights or trends. For cross-tabulation, the categories in this study were:

Principal demographics: years of experience as a principal,

School characteristics: the age range of students which was elementary (K-6) or secondary (7-12), and

District characteristics: total enrollment.

The focus of phase one was to explore the themes of decentralization and the school site principal's role in LCFF. This phase included a researcher-created survey distributed to school site principals in five districts, of various sizes, within a single California county. Only survey data that demonstrate meaningful differences or statistical significance are included in this section.

Demographic Data

Descriptive statistics were used to summarize demographic data from 37 participating site administrators. To maintain the confidentiality of all study participants, names and identifying information were omitted from these findings (Table 1). Of the responding 37 principals, 25 identified as female (67.6%), and 12 identified as male (32.4%). Principals ranged in age from 30-39 (10.8%), 40-49 (56.8%), 50-59 (27%), and 60-69 (5.4%). The highest level of education was as follows: participants holding a graduate degree (e.g., MA, MS), 27 (73%), and participants holding a doctorate (Ph.D., EdD), 10 (27%). During the time that elapsed between the survey and the interviews, an additional three participants received their doctoral degrees, bringing the total number of participants holding a doctorate to 35%. The majority of respondents were from large districts (10,001 students or more) (85%), with a handful of respondents (9%) from a medium-sized district of 3,001-10,000 students, and two respondents (6%) from a small district (fewer than 3,000 students). The principals represented schools from Transitional Kindergarten through high school (n=36). With the vast majority (72.2%) at the elementary level (n=26), four at middle school (11.1%), five at the high school level (13.9%). There was one respondent who oversaw a school of students in grades 6-12 (2.8%), and another who declined to state the level of students at their school site. The data reported in the tables and figures groups middle school and high school as secondary.

Table 1 presents the years participants had worked in education, years of experience as a principal, and their longevity in their current school district. The average number of years in education was 23, and the average number of years working in their current district was 17. Of the 37 participants, one declined to respond to the questions about longevity (n=36). The average number of years serving as a school site principal was eight.

Table 1

| Variable | r | F | Percent | Mean | SD | Min | Max |
|-----------------------------------------|--------|---|---------|------|------|-----|-----|
| Gender (n=37) | | | | | | | |
| Fema | ale 2 | 5 | 67.6 | | | | |
| Ma | ale 12 | 2 | 32.4 | | | | |
| Age (n=37) | | | | | | | |
| 30- | 39 4 | | 10.8 | | | | |
| 40- | 49 2 | 1 | 56.8 | | | | |
| 50- | 59 10 |) | 27.0 | | | | |
| 60- | 69 2 | | 5.4 | | | | |
| Years in Education (n=36) | | | | 23 | 6.84 | 7 | 34 |
| 14- | 18 7 | | 19.4 | | | | |
| 19- | 24 13 | 3 | 36.1 | | | | |
| 25- | 29 10 |) | 27.8 | | | | |
| 30- | 35 5 | | 13.9 | | | | |
| Years in Current District (n=36) | | | | 17 | 9.67 | 1 | 33 |
| 1 | -5 6 | | 16.7 | | | | |
| 6- | 10 5 | | 13.9 | | | | |
| 11- | 15 4 | | 11.1 | | | | |
| 16- | 20 7 | | 19.4 | | | | |
| 21- | 25 9 | | 25.0 | | | | |
| > | 26 5 | | 13.9 | | | | |
| Years as Principal in California (n=36) | | | | 8 | 6.01 | 1 | 26 |
| 1 | -5 1 | 6 | 44.4 | | | | |
| 6- | 10 12 | 2 | 33.3 | | | | |
| 11- | 15 6 | | 16.7 | | | | |
| 16- | 20 C | | 0.0 | | | | |
| > | 21 2 | | 5.6 | | | | |
| | | | | | | | |

Demographics

Table 1

Demographics (Continued)

| Variable | n | Percent | Mean | SD | Min | Max |
|-----------------------------------------------|---------|---------|------|------|-----|-----|
| Years in Current District as Principal (n=36) | | | 7 | 5.77 | 1 | 26 |
| 1-5 | 16 | 44.4 | | | | |
| 6-10 | 12 | 33.3 | | | | |
| 11-15 | 6 | 16.7 | | | | |
| 16-20 | 0 | 0.0 | | | | |
| >21 | 2 | 5.6 | | | | |
| Highest Degree Attained* (n=37) | | | | | | |
| Graduate Degree | 27 (24) | 73 (65) | | | | |
| Doctorate | 10 (13) | 27 (35) | | | | |
| Size of School District (n=34) | | | | | | |
| Small | 2 | 5.9 | | | | |
| Medium | 3 | 8.8 | | | | |
| Large | 29 | 85.3 | | | | |
| School Level (Grade Span) (n=36) | | | | | | |
| Elementary (TK-5, K-6) | 26 | 72.2 | | | | |
| Middle School (6-8) | 4 | 11.1 | | | | |
| High School (9-12) | 5 | 13.9 | | | | |
| Middle & High School (6-12) | 1 | 2.8 | | | | |

Note. *3 Principals received doctorates in the period between the survey and the interview.

Themes of Decentralization

In the survey, principals were asked to indicate their perceptions of the following five themes within their district. The five themes were developed through deductive reasoning from the review of the literature and include:

1) systems or structures that are stable (Hanushek et al., 2013; Smylie & Wenzel, 2003;

Cha, 2016; Sharpe, 1996),

2) clearly defined responsibilities of centralized authorities and local education entities

(Wößmann, 2003; Cha, 2016),

3) strong principal leadership (Bryk et al., 1999),

4) a cultivation of distributive leadership and local decision-making (Smylie & Wenzel,

2003; Bryk et al., 1999; Falch & Fischer, 2012) guided by frameworks, targets, and

accountability (Cavallo et al., 2016; Clark, 2009; Wößmann, 2003)

5) building the capacity of the community (Bryk et al., 1999; Muta, 2000; Sharpe, 1996).

Table 2 compares the themes of decentralization with exemplar items from the survey.

Table 2

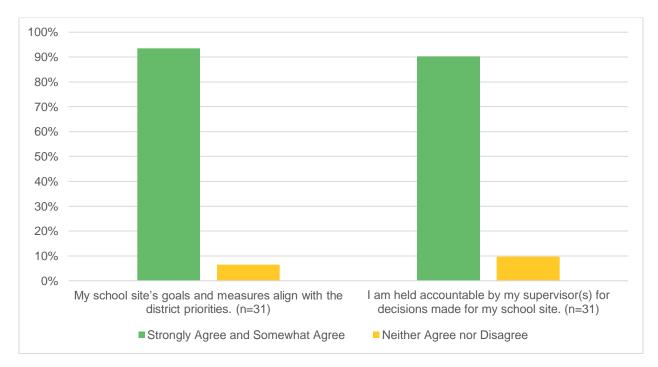
| Themes | Exemplar Survey Items |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stable Institutions and Structures | School site funding is equitable across schools in my district. My district engages stakeholders at all levels to promote coherence on initiatives. My district obtains external resources to further support district initiatives. My district attempts to manage external influences to support continued internal development. |
| Clearly Defined Responsibilities | Given my district's priorities, it is clear who is responsible and who has the authority to make certain decisions. My district has defined processes and tools to address the top priorities in the district. There is alignment among district goals, strategies, and resource allocation. |
| Principal Leadership | I have the support to make decisions necessary for accomplishing tasks. I am confident in supporting my teachers in reaching school and district goals. I am able to allocate human, financial, and physical resources equitably at my school site. |
| Distributive Leadership and Local Decision-Making | My district has moved away from hierarchical models of management. I feel supported by my supervisor(s) to experiment with policies or procedures to support student outcomes. I have autonomy of decision-making at my school site. I feel prepared to work with my site's leadership team to facilitate decision-making together. |
| Capacity Building | My district encourages staff development for all administrators. My district provides incentives and encouragement to develop knowledge and skills. Capacity building opportunities within the district are relevant to my goals. |

The rich text provided by the interview participants captured the respondents' feelings, attitudes, and perceptions about these themes in terms of the LCFF and the LCAP.

Stable Institutions and Structures. Stable institutions and structures in LEAs include clear alignment of goals and resources, managing external influences, obtaining resources, and feedback loops.

Alignment, Accountability, and External Resources or Influences. In Figure 3, almost all principals agreed that their school site goals and measure aligned with their district's priorities (94%), and "I am held accountable by my supervisor(s) for decisions made for my school site" (90%). These items indicate stability in the LEA. Additional components of stable institutions and structures are the management of external influences while obtaining external resources (Figure 4). Principals somewhat or strongly agreed (71%) that their LEAs obtained external resources to further support district initiatives. They were not entirely in agreement (55%) that their district managed external influences.

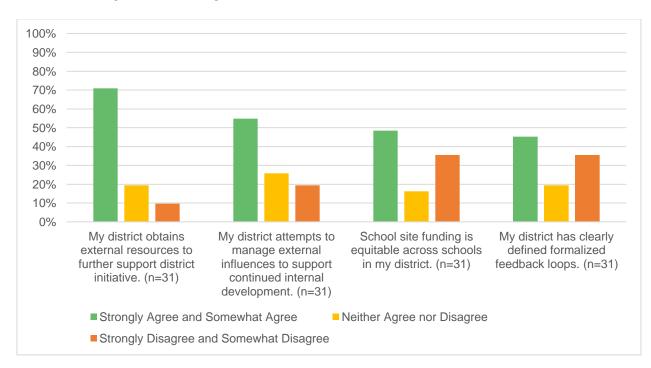
Equity and Feedback Loops. Additionally, in Figure 4, principals did not wholly agree that funding was equitable across schools in the district (48%); however, decentralization can be beneficial to student performance, despite differing levels of spending (Elacqua et al., 2021; Falch & Fisher, 2012), and when these resources are appropriately allocated (Elacqua et al., 2021). Equitable distribution may also depend on having the institutional capacity to do so, which may only occur in some areas. Finally, fewer than half (45%) of principals agreed or strongly agreed that their districts had clearly defined formalized feedback loops. In an LEA, feedback loops connect district personnel, and improvements can be propelled through this reciprocation of information (Steen et al., 2013).



Accountability in Stable Institutions and Structures

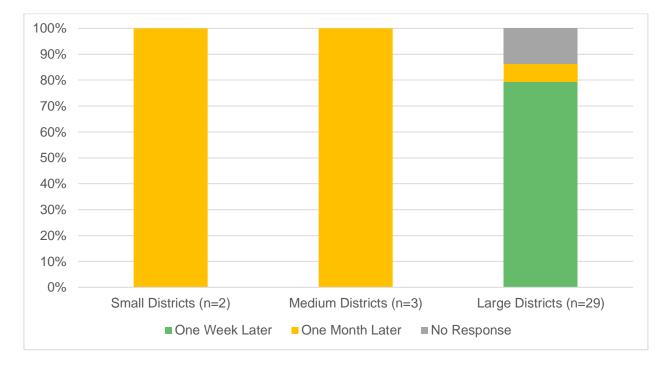
Figure 4

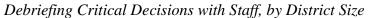
External Management, Funding, and Feedback

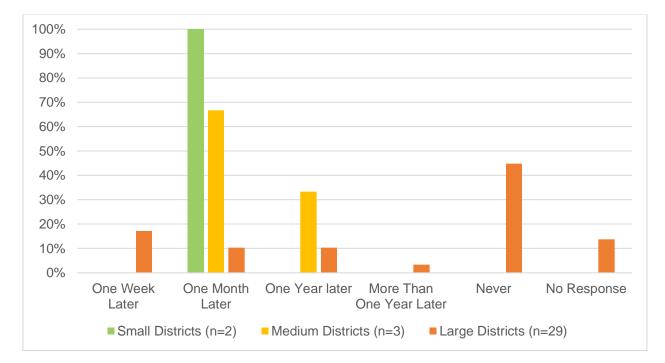


Reviewing the outcome of decisions made is a component of feedback loops, using cross tabulation (Figure 5), all five principals in small (n=2) and medium-sized districts (n=3) debriefed their staff on critical school-site decision outcomes monthly (100%) compared to principals in large districts (n=29), who mostly debriefed staff weekly (79%), while others debrief monthly (7%). When debriefing the outcomes of school-site decisions with the LEA's superintendent, principals in small (n=2) and medium-sized (n=3) districts reflected with the superintendent more immediately, typically within a month (100% and 67%) as compared to principals in large districts who may have debriefed up to a year later (10%), more than a year later (3%) or for about half, never at all (45%), as shown in Figure 6.

Figure 5







Debriefing Critical Decisions with Superintendent, by District Size

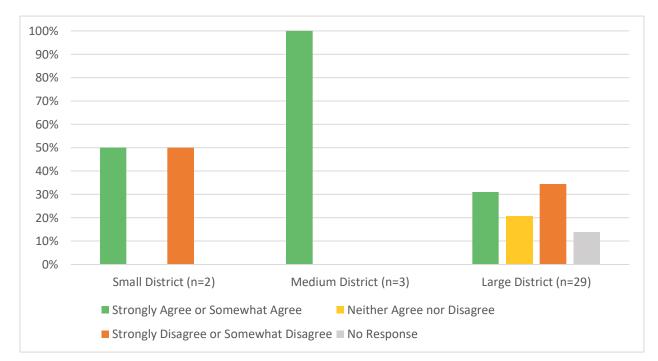
When principals were asked if their districts had clearly defined formalized feedback loops, responses varied by size of district (Figure 7). Using cross-tabulation, among the small district principals, it was split, where one principal strongly or somewhat agreed (50%) and the other strongly or somewhat disagreed (50%), whereas all three principals in the medium-sized district strongly or somewhat agreed (100%) that there were formalized feedback loops. The agreement varied more in the large district where only 31% agreed while 35% disagreed that there were formalized feedback loops.

Educational Partner Engagement. The point at which a site leader began their principal role, either before or after the LCFF was implemented, had a relationship with whether or not they agreed or disagreed with how their district engaged educational partners at all levels to promote coherence on initiatives (Figure 8). Using cross-tabulation, principals who began before the LCFF implementation were more likely to state that they agreed or strongly agreed that their

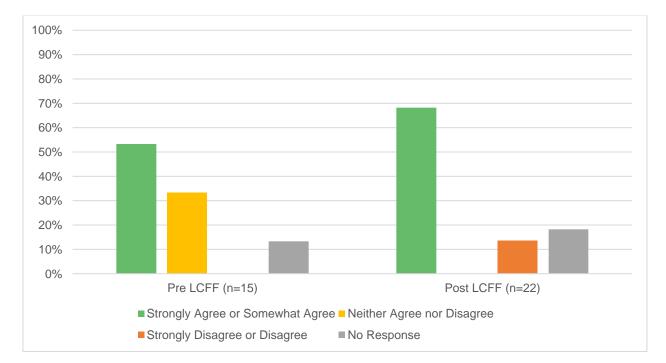
district engaged stakeholders (68%) compared to those that had become a principal after the LCFF (53%).

Strong positive results in the area of stability of the LEA and its structures demonstrate that accountability and alignment are ingrained in school districts. This orientation is likely due to a historical focus on test scores and accountability through initiatives like No Child Left Behind (NCLB). Other critical items, such as harnessing informal and formal feedback loops to review essential decisions at the district level, are more frequently utilized in small and mediumsized districts than large ones. Managing external influences which may impact an LEA's longterm vision is not perceived by principals as being elements of strength in their LEA. Aligned with feedback loops, a more significant percentage of principals who were site leaders before the LCFF was implemented had stronger perspectives on whether their district engages stakeholders at all levels.

Figure 7



Clearly Defined Feedback Loops, by District Size



District-Level Stakeholder Engagement, by Principal Longevity

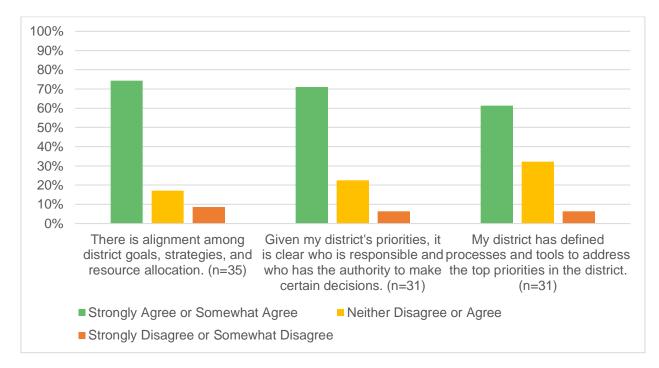
Clearly Defined Responsibilities. Survey participants were presented with items that measured their perception of the alignment of goals and resources along with who was responsible for various decision-making actions (Figure 9). Principals strongly or somewhat agreed (74%) that their district had alignment between its goals, strategies, and resources. Overall, 71% of principals strongly or somewhat agreed that it was clear who was responsible and who had the authority to make certain decisions. While 61% of principals strongly or somewhat agreed that their districts had defined processes and tools to address the LEA's top priorities.

However, while district-wide accountability measures and goals were found to be clearly defined throughout the districts (Yes = 72%; No= 28%), as illustrated in Figure 10, there were differences at the school-type level. It was determined that secondary principals all agreed (100%) that the measures and goals of the district were clearly defined throughout the district. In

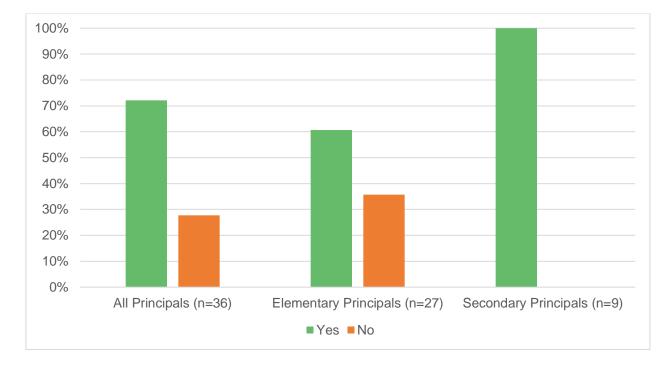
contrast, only 61% of elementary principals agreed that the measures and goals were clearly defined.

Research on decentralization indicates that it may only be successful when there is clarity between the defined expectations of the central office and the school site (Cha, 2016). It may be that in most districts, secondary principals are fewer in number and may work more closely with district-level personnel, or as is often the case, elementary principals are required to fulfill multiple roles at a school site, with fewer support personnel so they may not be as focused on budgets and financing, resulting in a limit on elementary principals' ability or time to increase their knowledge of the LCAP and its components.

Figure 9



Alignment, Authority, and Processes

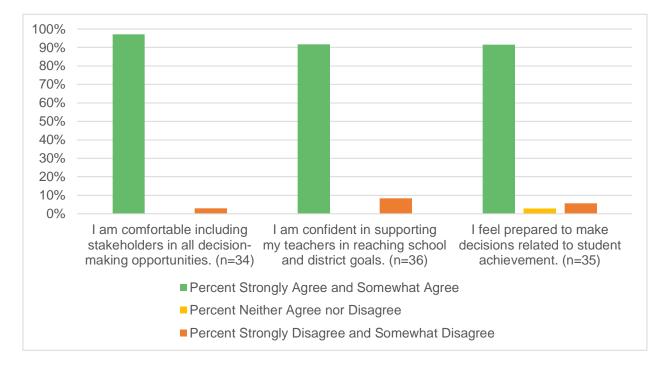


Accountability Measures and Goals are Clearly Defined, by School Level

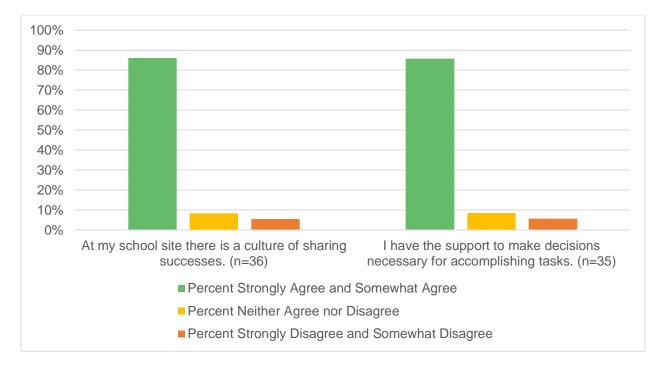
Principal Leadership. Principals at the school site play an indirect role in student achievement through their influence on teachers' participation in the decision-making process, shaping the school's culture, learning experiences, and, ultimately, student outcomes (Sebastian et al., 2017). Essential duties of principals are creating goals, budgets, and staffing-related decisions. Figure 11 shows that most respondents agreed or strongly agreed with their capabilities to lead their school sites. They are comfortable with including stakeholders in decision-making (97%), confident in supporting their teachers to reach school and district goals (92%), and prepared to make decisions related to student achievement (91%). Principals also agreed that there was a culture of sharing success at their sites (86%) and they have support to make decisions (86%) (Figure 12). Effective principals are able to strengthen the community connection while providing a student-centered, safe environment (Bryk et al., 1999).

Figure 13 shows that while the majority of principals (78%) indicated that they agreed or strongly agreed that they were "able to allocate human, financial, and physical resources equitably; this item had the lowest mean and the largest standard deviation (M=3.78, SD=1.47, n=36) of questions asked about principal leadership and efficacy. When principals lack experience in carrying out non-traditional educational tasks, such as budgeting, they are found to rely heavily on directions from the centralized system (Muta, 2000).

Figure 11



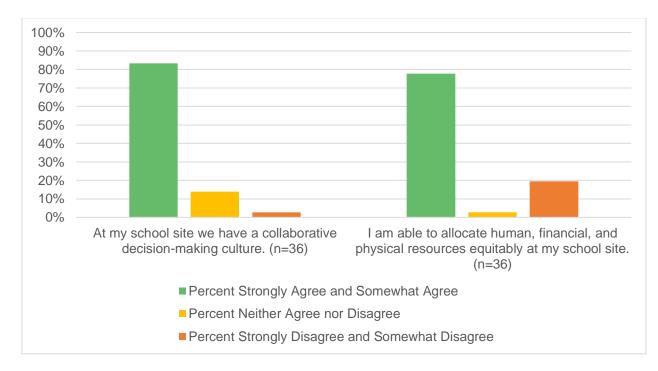
Principal Efficacy



School Culture and Decision-Making

Figure 13

Collaboration and Equitable Allocations



Distributive Leadership and Local Decision-Making. Site principals were asked to rate their site-level leadership skills, including promoting a sustained vision, encouragement of staff, and accountability.

Distributive Leadership and Feedback. Distributive leadership was measured at the site level and within the district (Figure 14). All surveyed principals (100%) somewhat or strongly agreed that they encourage and nurture innovative thinking amongst their staff. Furthermore, most all principals (97%) somewhat or strongly agreed that they feel prepared to work with their site's leadership team and facilitate other staff in decision-making. They also actively solicit input or feedback from their staff and communicate regularly with staff about the school's vision, objectives, and initiatives (97%). Slightly fewer principals agreed (86%) that they felt supported by their supervisor(s) to experiment with policy or procedure to support student outcomes, and 81% of principals strongly or somewhat agreed that feedback from their supervisor(s) influenced their decision-making (Figure 15).

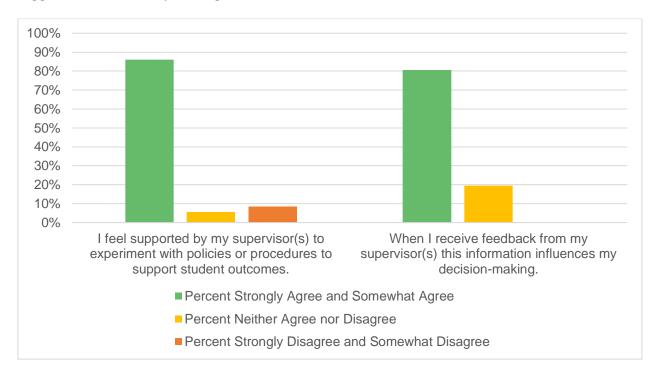
Distributive Leadership Between LEA and School Site. As shown in Figure 16, 81% of principals strongly or somewhat agreed that their district was supportive of change, and nearly as many (81%) strongly or somewhat agreed that district employees are encouraged to take initiative and make decisions on their own. Slightly fewer principals (78%) strongly or somewhat agreed that their district encourages and nurtures innovative thinking and the same number (78%) strongly or somewhat agreed that their district encourage alternative ways to implement policy based on school site needs, while 19% strongly or somewhat disagreed that their district supported this.

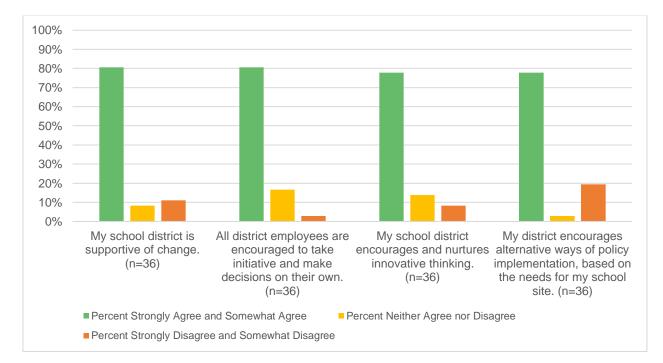


Distributive Leadership and Local-Decision Making at the School Site

Figure 15

Support and Feedback from Supervisors





Distributive Leadership and Local-Decision Making at the LEA Level

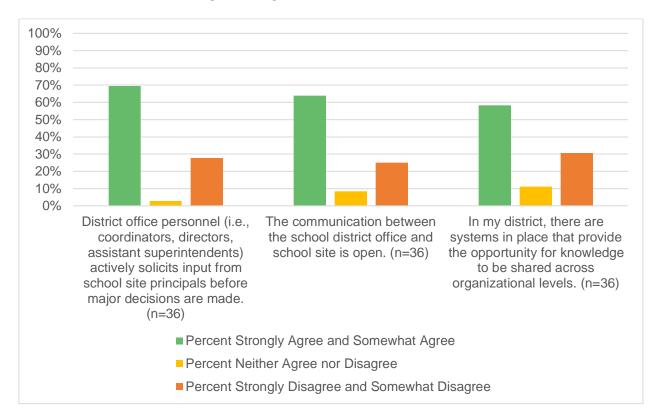
Figure 17 shows that 69% of principals agreed that district office personnel seek input from school principals prior to making significant decisions, however 28% of principals did not agree. Fewer principals agreed that communication was open between the district office and the school site (64%) and only 58% of principals agreed that there were systems in place for knowledge sharing within their district.

Hierarchy and Change. As shown in Figure 18, when asked, only half of the principals surveyed strongly or somewhat agreed that their district has moved away from hierarchical management models and that site employees' suggested changes to the district office are regularly implemented (50%), while 39% of principals strongly or somewhat disagreed on each of these statements. Distributed leadership is shared decision-making among individuals rather than a single person or position, allowing for more collaboration and inclusivity, potentially leading to greater innovation and problem-solving and increased engagement.

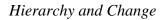
Altogether, these survey items denote that principals feel they encourage distributive leadership and decision-making at their school site but do not perceive that these elements of decentralization are in practice at the LEA district-office level.

In addition, using cross-tabulation (Figure 19 and Figure 20), it was found that 100% of principals in small districts strongly or somewhat agreed that changes by their school site to the district office were likely to be implemented, and fewer than half of large district principals (45%) and only 33% of medium district principals strongly or somewhat agreed that this occurred. Principals at the elementary level were more likely to say that changes suggested were implemented (50%), while secondary principals were less likely to say so (44%).

Figure 17



Communication and Knowledge Sharing



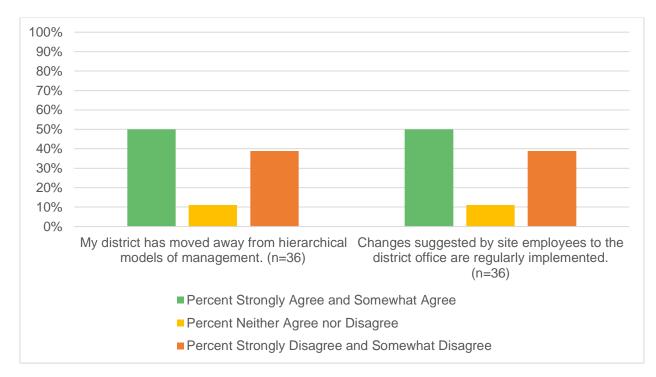
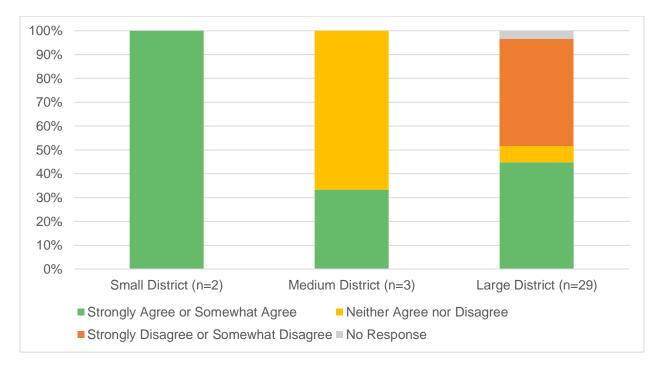
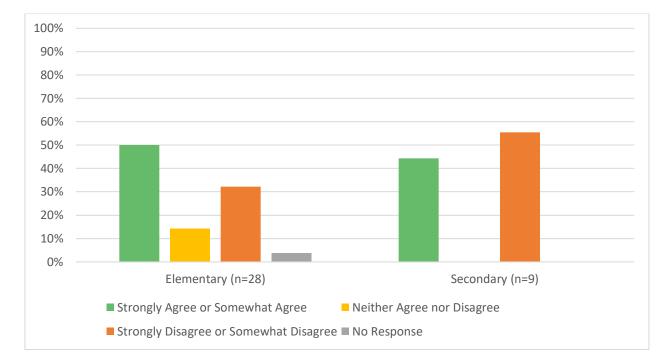


Figure 19

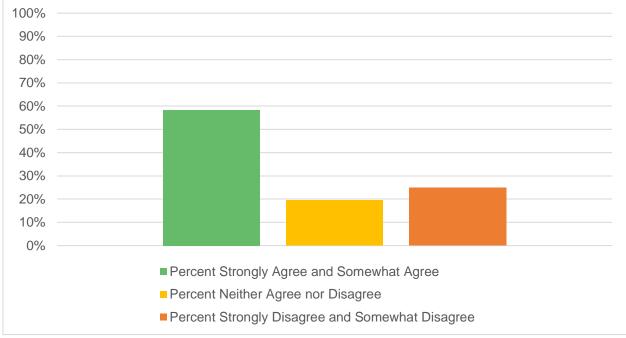
Changes Proposed from School Site Are Implemented at District Office, by District-Size





Changes Proposed from School Site Are Implemented at District Office, by School Level

California's Accountability System. When asked if "California's accountability system is helping our district refine improvement strategies," 58% strongly or somewhat agreed, 25% strongly or somewhat disagreed, and 19% neither agreed nor disagreed (Figure 21). Although California was the first state in the country to use a broader spectrum of data related to student outcomes, not all principals surveyed believed that their district was using it to refine strategies for improvement.



CA Accountability Systems are Helping Refine Improvement

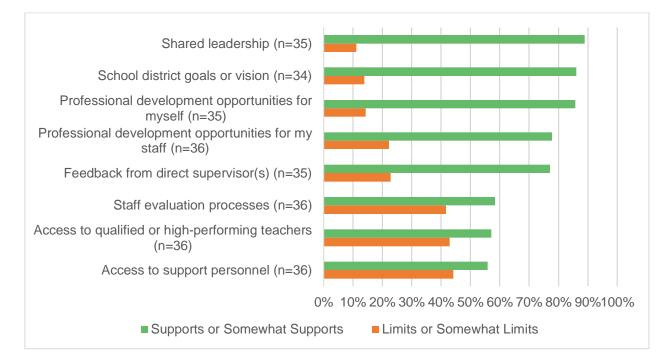
Note. n=36.

Decision-Making Supports and Constraints. In order to determine what supports site leaders in their decision-making, principals were asked how various sources impacted their processes. Items in Figure 22 were identified as supporting factors or those where more than 50% somewhat agreed or strongly agreed, while those in Figure 23 were limiting factors, or those items where more than 50% somewhat disagreed or strongly disagreed. Principals reported that shared leadership (89%), district goals or vision (86%), and their own professional development (86%) were the most substantial supporting factors in assisting them with decision-making. Conversely, classified or credentialed employee contracts (75%), district office mandates (67%), and state or federal regulation or policy (64%) limited or somewhat limited their decision-making efforts.

Principal Involvement in Planning. Figure 24 illustrates that when asked about their participation in planning and budgeting, principals responded that they regularly engage in the development of the School Plan for Student Achievement (SPSA) (89%) while rarely participating in the development of the district LCAP (46%).

Figure 22

Supporting Factors in Principal Decision-Making



Limiting Factors in Principal Decision-Making

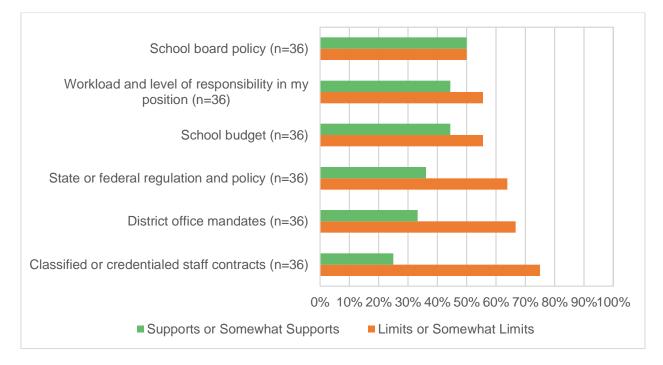
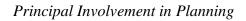
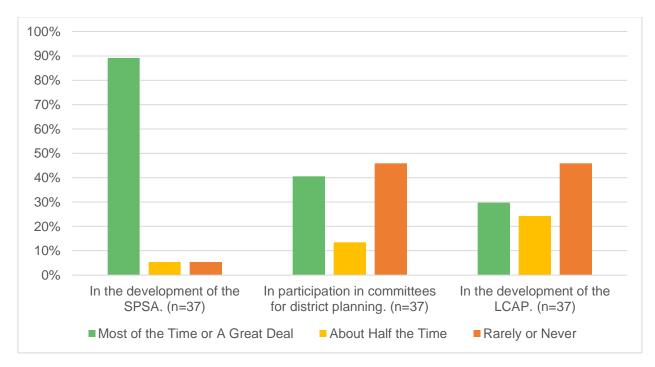
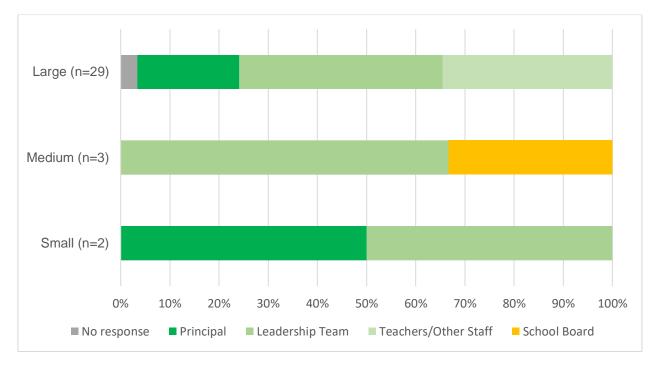


Figure 24



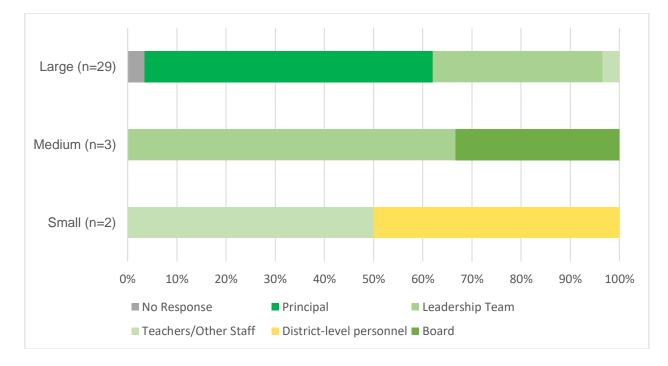


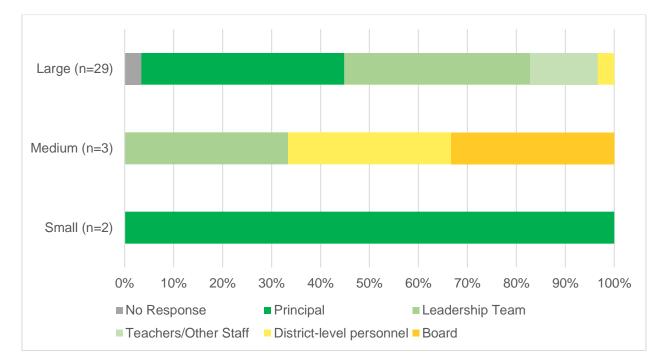
Decision-making in various areas differed by district size and school level. Using crosstabulation, it was found that principals in medium-sized districts (n=3) were more likely to state that the leadership team was the final decision-maker when it came to deciding upon the school mission or vision statements (67%) as compared to principals in small (50%, n=2) or large (41%, n=29) districts (Figure 25). Principals in medium or large districts were more likely to indicate that they or their leadership team made the final decisions for school budget allocations (67% and 93%, respectively) (Figure 26). Principals in the medium-sized district indicated that districtlevel personnel or the school board created the professional development plan for their school site (67%) (Figure 27), while district-level personnel made decisions on curriculum or supplementary materials, most often in medium (67%) and large districts (76%). In small districts, the principal or other site staff made those decisions (Figure 28). The site principal made assessment policies in small districts (100%). In contrast, in medium and large districts, they were made by district-level personnel (67% and 76%) (Figure 29), and interventions implemented at the school site varied by district size (Figure 30). In the small districts, the principal (n=2) was the primary decision-maker for interventions (100%); principals from the medium-sized district (n=3) reported that district-level personnel or the school board were the decision-makers (67%), while principals (n=29) in the large districts reported that it was the principal or leadership team that made decisions about interventions (69%).



Primary Decision-Making on Vision and Mission Statement, by District Size

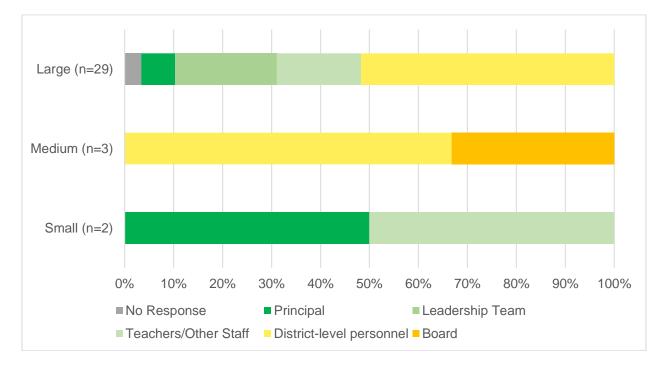
Primary Decision-Making on Allocation of School Site Funds, by District Size

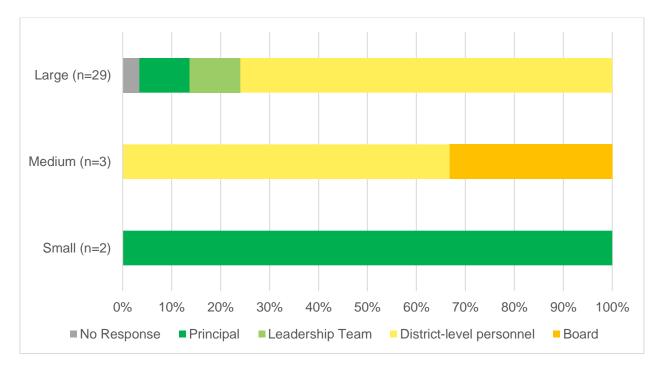




Primary Decision-Making on Professional Development for School Site, by District Size

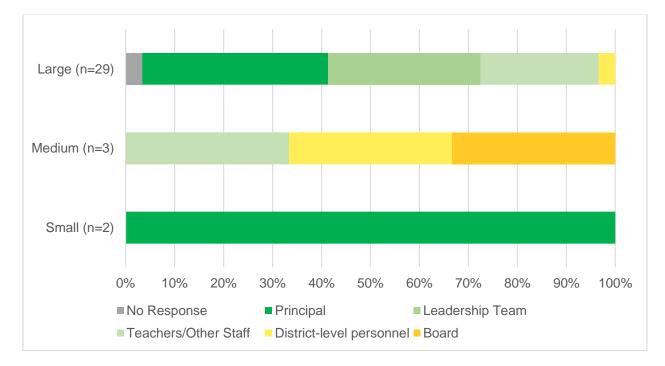
Primary Decision-Making on Curriculum and Supplementary Materials, by District Size





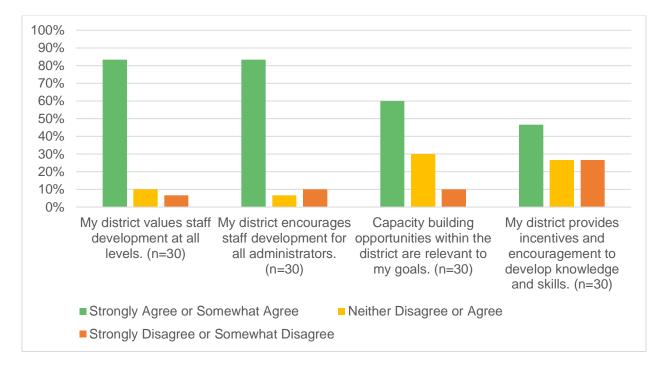
Primary Decision-Making on Student Assessment Policies, by District Size

Primary Decision-Making on Implementing Interventions, by District Size



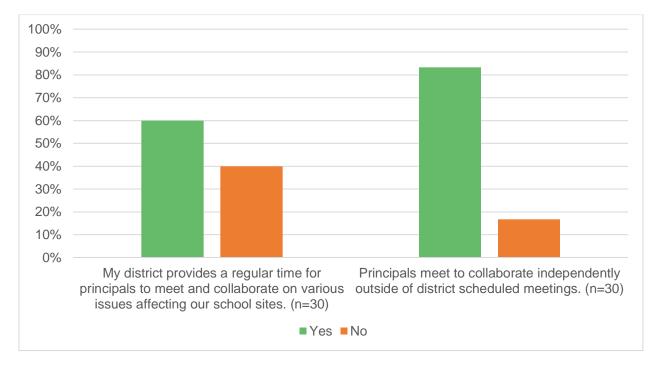
While 100% of surveyed principals agreed that they encourage and nurture innovation at their school sites and encourage distributive leadership and decision-making, they could not positively identify that distributive leadership was occurring at the district-office level through survey results on topics such as support provided by the LEA, encouragement in innovative thinking or alternative policy implementation, and systems around communication and knowledge sharing. Principals agreed that professional development helped them with decision-making. At the same time, factors such as staffing contracts and district mandates restricted how they could make decisions for their school site. The LCAP, a three-year blueprint for an LEA's student success, describes goals, actions, and services along with the vision of LEA spending. Among those surveyed, it was found that 46% of principals had little to no involvement in its development. District size and school level also play an essential role in who is a part of the decision-making group on certain factors, such as mission or vision statements and decisions about professional development.

Capacity Building. Principals responded to survey items about their perceptions of capacity-building actions in their districts (Figure 31). Capacity-building is critical to continued active engagement in change. While principals strongly or somewhat agreed that their district values development at all levels (83%), only 60% of principals said that capacity-building opportunities with their district were relevant to their goals. Fewer than half (47%) of principals strongly or somewhat agreed that their district provided incentives or encouragement to develop additional knowledge and skills.



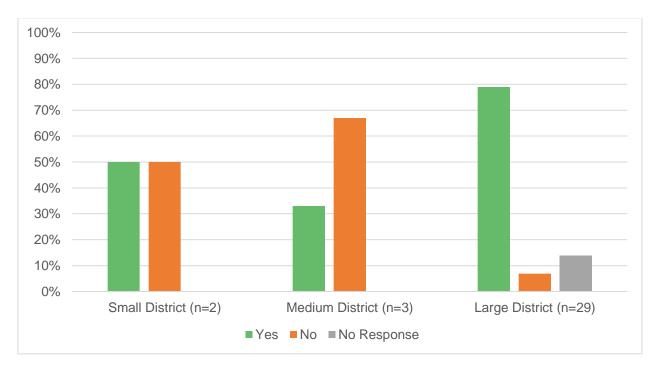
Capacity Building Opportunities and Incentives

Collaboration. Collaboration is a successful component of improvement. According to principals, 60% said that their school district provides time to meet and collaborate, while 40% said there was not this opportunity (Figure 32). In addition, principals were more likely to collaborate independently outside district-scheduled meetings (83% yes; 17% no). Based on cross-tabulation, collaboration opportunities outside of scheduled district meetings occurred more often in large districts as compared to small or medium-sized districts (Figure 33).



Principal Collaboration Opportunities

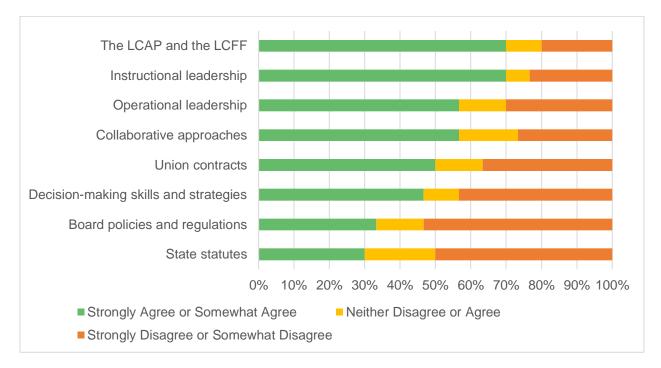
Principal Collaboration Outside of District Meetings, by District Size



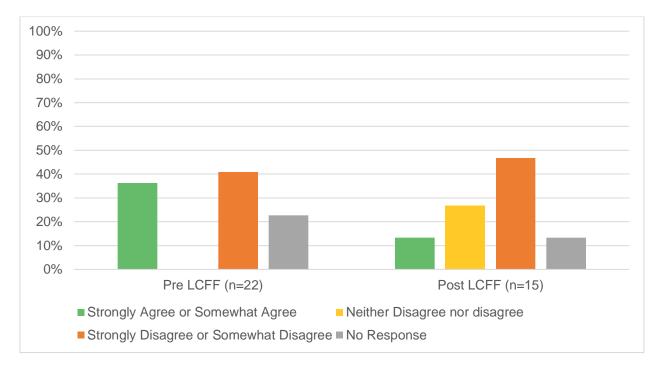
Professional Development. Muta (2000) states that professional development in nontraditional tasks is needed to support decentralization. As seen in Figure 34, when principals were asked if the following items were regularly offered, the most frequent responses strongly or somewhat agreeing were development on the LCAP and the LCFF (70.0%), Instructional Leadership (70%), and Operational Leadership (57%), while professional development on union contracts (50%) decision-making skills and strategies (47%), board policies and regulations (33%) and state statutes (30%) were less frequently available. Instructional leadership is a model of school leadership where principals work alongside teachers to support and guide in developing best practices, whereas operational leadership is monitoring the day-to-day organizational processes. These results indicate principals receive more professional development in areas such as instructional and operational leadership since these two areas constitute a significant portion of their responsibilities. It is noteworthy that decision-making skills or strategies appear to be absent from instructional or operational leadership development. Furthermore, the absence of training in policies, regulations, and statutes may impact or assist principals in making innovative decisions, is also apparent.

Depending on when respondents became principals, either before the LCFF was implemented or after, it was found that depending on their years of experience there were some differences whether or not they believed their district provided regular professional development on board policies and regulations (Figure 35). More administrators hired prior to the LCFF agreed or strongly agreed that professional development on board policies and regulations were provided regularly (36%), whereas those hired after LCFF agreed or strongly agreed at a much lower rate (13%) that these opportunities were provided. Findings were different for professional development in union contracts (Figure 36). Principals hired before 2013 were less likely to agree that they had received professional development on union contracts (32%) than those hired more recently (53%). This difference may be due to newer principals receiving training on evaluation systems and processes which are often a part of the union contracts. Muta (2000) noted that for a decentralized system to work well, professional development in non-traditional tasks was needed to encourage leaders to take diverse paths, which may lead to creativity and experimentation.

Figure 34

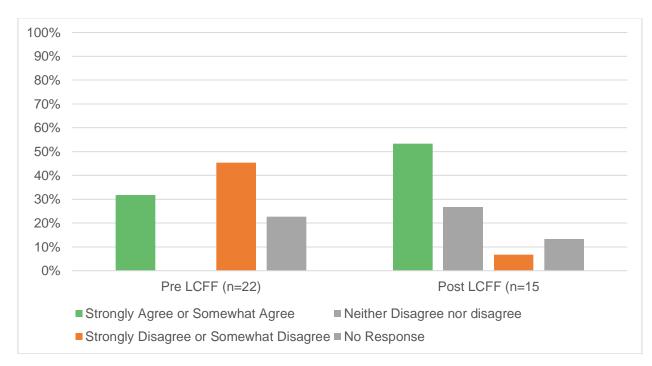


Professional Development Opportunities for Principals, by Subject Area



Professional Development on Board Policies and Regulations, by Time in Principalship

Professional Development on Union Contracts, by Time in Principalship



Sources of Information for Decision-Making. If the LEA did not offer applicable

professional development or support, principals often sought their own sources of information (Table 3). Most principals consulted with their school site leadership team (n=26; 84%), other school site staff members (n=24; 77%), and other district principals (n=23, 74%). The least relied-on sources of information were university experts (n=2; 7%), social media (n=3, 10%), their district website (n=4; 13%), or professional organizations, such as ACSA (n=4; 13%).

Table 3

| Source (n=31) | n | % |
|---------------------------------------------------------------|----|------|
| School site leadership team | 26 | 83.9 |
| Other school site staff members | 24 | 77.4 |
| Other principals in my district | 23 | 74.2 |
| My supervisor(s) | 20 | 64.5 |
| The Single Plan for Student Achievement (SPSA) | 18 | 58.1 |
| Research articles or books | 14 | 45.2 |
| District office personnel | 14 | 45.2 |
| Mentor or coach | 10 | 32.3 |
| Professional development opportunities or conferences | 10 | 32.3 |
| The Local Control Accountability Plan (LCAP) | 9 | 29.0 |
| Education news (i.e., EdWeek, EdSource) | 8 | 25.8 |
| District website (i.e., board policy, department information) | 4 | 12.9 |
| Professional organizations (i.e., ACSA) | 4 | 12.9 |
| Social media (i.e., Facebook, Twitter) | 3 | 9.7 |
| University experts | 2 | 6.5 |

Sources of Information for Principal Decision-Making

Capacity building is the process to improve the ability to perform functions, solve problems, and to set and achieve goals (Bruce & Newmann, 2004; Fukuda-Parr et al., 2002; WHO, 2017). The need for capacity building is often initiated by the need to fulfill a new policy or procedure. It can result in a top-down hierarchy accompanied by the notion that those in need of capacity building are deficient in skills, knowledge, and experience (Craig, 2007). Although it is clear that capacity building through the empowerment of learners is essential, in recent research, California superintendents acknowledged the importance of capacity building; however, the state does not have a long-term plan to build the capacity of superintendents to lead the reform efforts entailed in the LCFF (Barrett, 2019).

In this study, the most commonly offered professional development for site leaders was related to instructional and operational leadership, the LCAP, and the LCFF, with less support and learning opportunities in union contracts, decision-making skills or strategies, and board policies, regulations, and state statutes. The findings suggest that principals receive greater professional development in instructional and operational leadership, which occur without the growth of decision-making skills or strategies. This, coupled with a lack of development in policies, regulations, statutes, and union contracts, may impact innovative decision-making. These results support the findings from Perry et al. (2020), where capacity shortcomings limit educators' ability to pursue the continuous improvement envisioned by the LCFF due to a lack of professional development in identifying improvement strategies, the information, and knowledge to implement the LCFF fully.

Quantitative Analysis Conclusion

The quantitative data analysis offered important information regarding stable institutions and structures, clearly defined responsibilities, principal leadership, distributive leadership, and capacity building. Structures like accountability and alignment of plans and goals have long been a part of California's education system and were found to be in place according to principals. However, there were essential characteristics of stable institutions and structures that were not evidenced by principals in the survey, such as feedback loops, managing external influences, and engagement of stakeholders. Clarity between the defined expectations of the district or central office and the school site is also crucial. The survey results showed a clear divide between elementary and secondary principals on how accountability measures and goals were clearly defined throughout their districts. Principal leadership is critical in strengthening community connection while providing a student-centered, safe environment; an area of need appeared in the data to be the ability to allocate human, financial, and physical resources equitably. When principals lack experience in carrying out non-traditional tasks such as these, they are found to rely more heavily on the central office, which may lead to a more centralized means of school governance. Principals believe that they encourage distributive leadership at their school sites; however, they are often not a part of the LCAP creation process, which may demonstrate a lack of distributive leadership from the district level. Furthermore, capacity building through the empowerment of learners is critical to the success of the new policy. However, it was found that one of the most commonly offered professional development was instructional leadership, with fewer learning opportunities in board policy, regulations, and state statutes.

Phase 2 - Qualitative Analysis

The qualitative data for this study was collected through interviews, LCAP district-level meeting observations, and LCAP document analysis. The interview participants completed the survey and volunteered to engage with the researcher for a semi-structured interview via Zoom. A total of thirteen interviews were completed over a period of four months. All interviews were

recorded and transcribed with each participant's permission. Eleven interviews were completed with school-site administrators, while two additional interviews were conducted in different districts with district-level personnel who were instrumental in writing the LCAP. These district-level interviews provided context for the school-site principal interviews. Data from interviews were also triangulated with document and meeting analysis. Documents included publicly available LCAPs, district websites, and notes from district meetings. The analysis of the transcribed interviews and documentation was completed using MAXQDA. The focus of the interview was to explore the themes of decentralization and the school site principal's role in LCFF.

Interview Participants

Eleven site principals volunteered to participate in the interview (Table 4). To maintain the confidentiality and anonymity of all study participants, names and identifying information have been omitted from the findings. A total of five administrators identified as female (46%), seven administrators identified as male (64%), ranging in age from 30-39 (9%), 40-49 (55%), to 50-59 (36%). The education levels of the survey participants were four (36%) with graduate degrees (e.g., MA, MS), and seven (64%) held doctorates (EdD). The average number of years in the principalship was 10.5 years with a range from 3 years to 23 years. All interview participants were from large districts of more than 10,001 students. The principals represented schools from Transitional Kindergarten through High School. Eight (73%) of the participants were at the elementary school level (ES), one (9%) was at the middle school level (MS), and two (18%) were at high school (HS). Both of the district-level personnel were from large school districts.

Table 4

| Pseudonym | School Level | Years of Experience |
|-----------|-----------------------|---------------------|
| Owen | Elementary | 4 |
| Ben | Elementary | 10 |
| Mina | Elementary | 10 |
| Orla | Elementary | 10 |
| Jay | Elementary | 10 |
| Rose | Elementary | 11 |
| Cal | Elementary | 13 |
| Kerri | Elementary | 23 |
| Bodhi | Middle School | 12 |
| Finn | High School | 4 |
| Nala | High School | 7 |
| Julia | District Office Staff | 4 |
| Tara | District Office Staff | 9 |

Themes of Decentralization

During the interviews, questions were asked of principals to elicit information about their

perceptions of the five themes of decentralization within their district. These themes can be

indicators of success with decentralized educational agencies. Table 5 compares the themes with

the interview questions.

Table 5

Decentralization Themes and Interview Question Exemplars

| Themes | Exemplar Interview Questions |
|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stable Institutions and Structures | On the survey you said that your district attempts/does not attempt to manage external influences from outside the district in order to support continued internal development, can you give me an example of an external influence and how your district attempts/does not attempt to manage this influence? On the survey, you indicated that your district attempts/does not attempt to secure external resources to further support the district's initiatives, please name an initiative that your district has and describe how they have/have not secured external resources. [If the response was does not-please name a district initiative and how you think the district could secure external resources to support this work.] |

Table 5

Decentralization Themes and Interview Question Exemplars Continued

| Themes | Exemplar Interview Questions |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clearly Defined Responsibilities | Would you say your school site planning and decision-making align with your district's LCAP in terms of targeted funding and equity? Engagement of stakeholders in spending? How are they similar? Or different? What benefits are there for school site leaders with the way the state has decentralized funding? What challenges are there for school site leaders with the way the state has decentralized funding? And what solutions would you recommend? |
| Principal Leadership | What types of decisions, at your school site, do you feel you have the most control or authority over and why? Additional questioning in this area would probe specific responses such as hiring, professional development, etc. Describe the shifts you have seen since the LCFF. How has your autonomy and authority changed since the LCFF was implemented (2013)? What shifts have you seen with targeted support for low-income, foster, and EL students, pre/post the LCFF? Has anything changed with the stakeholder engagement around planning and spending since the LCFF was implemented? Has there been a shift in anything else as far as at the school site from pre LCFF to post? |
| Distributive Leadership and Local Decision-Making | How would you describe your school district's decision-making process? As centralized, decentralized, or a mix of decision-making processes and give an example. On the survey you took, you indicated that California's accountability system is/is not helping your district refine improvement strategies. Tell me more about how it is/is not helping. [If needed ask-Can you give me an example?] |
| Capacity Building | On the survey, you marked that your district provides/does not provide incentives and encouragement to develop knowledge and skills, describe how your district provides encouragement and what are the incentives? [If the response was does not-describe then ask-how do you think your district could provide encouragement and incentives to develop your knowledge and skills.] |

The rich text provided by the interview participants captured the respondents' feelings, attitudes,

and perceptions about these themes in terms of the LCFF and the LCAP.

Stable Institutions and Structures. In an LEA, stable institutions and structures include

a clear alignment of goals and resources, management of external influences, external resource

obtainment, along with systems for feedback.

Alignment of Goals and Resources. When asked about management and coordination of goals and resources, one Elementary Principal (Rose) said that they are held accountable for their decision-making related to spending by being more collaborative with all stakeholders. While another principal, who entered the position the year the LCFF was implemented, disclosed that the new system holds everyone accountable for the things they are buying as they need to talk to their teams to determine what to purchase (Jay, ES). An Elementary Principal reflected that while being held accountable is a good thing; principals must be cautious of what we are held accountable for, as the current system still relies on test scores. They stated that "it would take a lot more work to have a more meaningful accountability system, but we work hard anyways regardless of what we do... I feel we should be working in the right system" (Owen, ES). Another elementary school principal stated that they had been permitted to be creative, have their individual school focus, and seek resources for their school site (Orla, ES). While another in the same district stated that they had been engaged in focused planning for about six years, and along with this focused process, the documents they had created contained goals and actions that they felt were more effective than what the LCAP model and template looked like (Owen, ES). There was some consensus that in this district, the superintendent "makes sure everyone is involved because they want all lenses and frames to have a say in what's going on for the betterment of the students" (Finn, HS).

Interviews with district-level staff were completed to provide context for the system within which principals worked. Given that stability relates to the development of solid and informative district plans, district office personnel who directly oversaw the LCAPs indicated that their district and others they have worked in do not stick with any one strategy very long to see if the actions are worthwhile. They believed their district needed to determine effectiveness

measures, and while they felt their district sometimes did sustainable things, the district as a whole needed to think about how to measure impact. "How do you know if it's making a difference?" they asked (Julia, DO).

Equitable Funding Distribution. Principals had differing views on how their districts provided equitable funding distribution to the school sites under the LCFF. One Principal said it is more equitable now since you get more money and funding when there is a student need or underperformance (Owen, ES). Another stated that the district distributes funding based on enrollment, which was equitable in that way (Kerri, ES). Julia (DO) stated that there will be site that reach out to ask for additional support based on site need, so there is additional funding provided. Finally, Bodhi (MS) stated that his budget was also based on student enrollment. However, this funding method had also become a challenge because enrollment statewide has been dropping, so each school could expect a different dollar amount every year (Bodhi, MS). As a result, it could be difficult to budget staffing and programs from one year to the next with changing budget amounts.

External Resources. Principals' responses differed when questioned if their respective districts helped secure external resources to support various initiatives above and beyond state or federal funding. One principal stated they had a district grant writer who had recently secured a \$25,000 grant for food and clothes at their site (Kerri, ES), while another said they had partnerships where they get sponsorships and grants (Owen, ES). This particular administrator also added that they did not feel their district was seeking external resources at a level where it was not an area of concern (Owen, ES). They preferred that it was more structured and focused (Owen, ES). One high school principal shared that their district did seek out external resources, but there were times when what was organized and brought forward was not always appropriate

for all school sites (Nala, HS). Others felt that they were permitted to go and seek donations (Cal, ES) or that it was more of a grassroots movement.

External Influences. Principals stated that different sources of external influences, such as community groups, parents, or other political shifts, may influence the LEA. They were asked to consider whether their districts assisted in managing external influences such as political shifts or other external changes. Responses varied from agreeing that their district managed external resources to the opposite. For example, an Owen (ES) shared that vendors knew when the school would receive their budgetary allocations and would start calling the school. However, their district would head off some of those calls and explain the parameters of what the schools could or could not spend money on (Owen, ES). He also stated that parents sometimes tried to influence how the site funding was used. However, there were times, depending on who was at the district level, those external influences could be managed (Cal, ES). Other principals, all at the elementary level, agreed that outside influences needed to be managed at the district level. Political groups vying for the attention of a school or wanting to manage parts of the daily operation were inhibitors (Kerri, ES). Another principal stated that in their district, board members tried to influence school sites to use a particular program which caused conflict at the site level. "If you know anything about managing people and working in teams, everyone has to be involved and interested, or it will fall flat or be a fight the entire time, and then it affects the students" (Rose, ES).

Community Engagement. Engaging educational partners as a means of providing opportunities for input and creating stable institutions was something that a District Office Staff member stated was a positive result of the LCFF and LCAP (Julia, DO). Tara (DO) agreed that their LEA was engaging with stakeholders, now referred to as educational partners, by using

more surveys and community meetings. Principals recognized the importance of engaging educational partners, from staff members to those in the community (Rose, ES), and that it is a continual process throughout the year. In contrast, prior to LCFF, it had been much less frequent (Owen, ES).

Feedback Loops. When asked if their district had formalized feedback loops or clear means of communication, an Elementary Principal responded that the district needed to do things that were more preventative than reactive. "We do a lot of reactionary things in silos that aren't created in systems." (Orla, ES). At the same time, Nala (HS) gave an example of documentation that was required of them. She said that the document request was of something similar from each department, yet each department wanted slightly different information on their form. This task then required twice the amount of work at the school site. In addition, it was evident to her that the various departments were not communicating amongst themselves (Nala, HS).

Feedback loops in an LEA can be formal or informal and can be used to plan and reorganize practices (Keshavarz et al., 2010). They are a crucial part of continuous adaptation and innovation. When asked how principals received feedback on their progress, most replied that this feedback came through various reports (Rose, ES), test scores or dashboard metrics (Owen, ES), surveys (Bodhi, MS & Owen, ES), and their site leadership or grade level teams (Jay, ES). Owen (ES) said that occasionally district-level personnel would do walkthroughs and make suggestions, or they would receive school recognition or awards to know they were doing a good job. Sometimes they might hear an "atta boy" at a district meeting (Orla, ES), but those feedback opportunities were not very common. There did not seem to be any structured feedback systems for principals (Orla, ES), including the formal evaluation process, which was not followed through on frequently (Nala, HS). Information sharing happens most often at district

meetings (Rose, ES), which for this district was an improvement in its collaboration and sharing structures. Another principal stated that often the principal meetings ended up being top-down knowledge sharing (Owen, ES) or that the middle-management or district office personnel were not always comfortable with feedback and sharing knowledge (Finn, HS).

LEAs must have elements such as management, coordination of aligned goals and resources, and feedback loops. These elements help to ensure that LEAs effectively manage and direct their resources toward achieving goals while being responsive to their educational partners. Principals felt that they were held accountable for their decision-making by educational partners, and they had been afforded the opportunity to be creative when making these decisions. Although there may be accountability to their educational partners in how funding is spent, at the district level, LEAs may need to stay with actions long enough in order to collect enough data to know what is working and what is not. There should be more consistency in whether districts secure additional funding outside of typical means and have a consistent process. External influences ranged from special interest groups, parents, or other politics, and support from the LEA to assist in managing these circumstances varied. Funding based on student needs was an improvement; however, decreasing enrollment in the state of California provides new challenges. Principals reported that districts needed to establish effective feedback mechanisms allowing for planning and reorganizing practices in formal or informal ways, and they were not being consistently used to promote stability and productivity.

Clearly Defined Responsibilities. Unambiguous control between the LEA and school site, conflict prevention, and at the LEA level, coordination of actions and goals are essential for decentralization to be successful. Interview participants answered questions related to the alignment of LEA goals, site goals, and processes in their district.

Coordination of Actions and Goals. Principals overwhelmingly said that their school site planning and decision-making align with their district's LCAP in terms of funding, equity, and engagement of educational partners; however, there were obstacles when it came to the coordination of actions between the LEA and the school site. With respect to site planning being aligned with the district, Nala (HS) said that her district usually kept things broad in the LCAP, so there was not much they did at the site level that was not in alignment with what the district was doing. Finn (HS) stated that everything at their site was aligned with their areas of focus and growth from their Western Association of Schools and Colleges (WASC) plan and that through strategic planning, their vision was shared with their educational partners. The initiatives from their WASC plans were also in their SPSA. Other principals stated that their district had given them autonomy and flexibility regarding their plans, so their SPSAs aligned with the district's LCAP (Cal, ES). By focusing on the student populations at their site, they made decisions that aligned with the district (Bodhi, MS).

Defined Processes and Tools. When asked about defined processes and tools to address top priorities in the district, Orla (ES) stated that there was no system. "We just meet...we may meet once a month as principals, we may meet once a quarter as managers and supervisors, but there is no system that is tried and true every single year, [there is] no place where we can go and get all the information in one place, we have to look it up on our own, our notes, call a friend..." (Orla, ES). Finn (HS) commented that educational partners and mid-management have different priorities or visions that are not always aligned with the site; even though his district emphasized shared leadership, he stated that there were people in the district office who did not understand what shared leadership entailed (Finn, HS). When given feedback, Finn (HS) would ask those at the district level if priorities from various departments were recommendations or directives so he

could better make decisions for leading his site. Nala, a High School Principal from a different district, stated that she gets directives from every department, whatever those departments' initiatives were, and she felt that as the school site leader she had to make sense of it all (Nala, HS).

Aligning school site plans and goals with the district LCAP may be straightforward as LEAs and schools have long been writing plans with goals. However, the challenge is moving beyond the plans and forms and creating systems where administrators and other educational partners can readily access information and deepen their understanding of and support for shared leadership.

Principal Leadership. School site principals have an indirect link to achievement via teachers by being critical agents in ensuring that teachers are involved in the site's decision-making processes, thus influencing school climate, learning, and ultimately student achievement (Sebastian et al., 2017). The essential function of the principal is to make decisions related to goals, budgets, and staffing.

Budgeting. Principals shared their thoughts on the LCFF and being able to budget for their school site. The word cloud (Figure 37) presents the most common words found in principal responses (Table 6). Overall, principals stated there was more flexibility in budgeting and hiring than before.

Most Frequently Occurring Words for School Site Budgeting

autonomy funding district year flexibility lcff school programs able plan

Table 6

Word Frequencies for School Site Budgeting

| Frequency | | | | | | |
|-------------|----------|------|------|--|--|--|
| Word | Absolute | % | Rank | | | |
| more | 19 | 6.29 | 1 | | | |
| autonomy | 8 | 2.65 | 2 | | | |
| able | 7 | 2.32 | 3 | | | |
| district | 6 | 1.99 | 4 | | | |
| lcff | 6 | 1.99 | 4 | | | |
| funding | 5 | 1.66 | 6 | | | |
| flexibility | 3 | 0.99 | 7 | | | |
| hiring | 3 | 0.99 | 7 | | | |
| money | 3 | 0.99 | 7 | | | |
| plan | 3 | 0.99 | 7 | | | |
| programs | 3 | 0.99 | 7 | | | |
| school | 3 | 0.99 | 7 | | | |
| year | 3 | 0.99 | 7 | | | |
| | | | | | | |

When asked about decision-making around budgeting at their site, one participant stated, "...in my district, we have been permitted to be creative and to have our brands and then to seek our own resources" (Orla, ES). She also shared that she felt they could do more, and their district wanted them to do more. However, when it came down to being creative and trying new things, they had to work through the process of getting contracts, applying for additional funding from the district, and getting slowed down or blocked by the process even though the freedom to be creative was there (Orla, ES). Rose (ES) stated that she had increased leeway in how she budgeted. Rose shared that even though they do their budgets in the spring for the following school year, the new funding system enables them to flex with the times. She gave the example of being able to change course quickly because of the COVID-19 pandemic where they had gone into the 2019-20 school year not knowing they would end up virtual and, when shut down, did not have enough laptops to support virtual instruction. With the flexibility of the LCFF, they could purchase technology quickly. Rose (ES) felt that if it had not been for the LCFF, the money would have been tied up; this way, they could make decisions to support their students during that year. Kerri (ES) agreed that they have autonomy but with parameters and guardrails to set up systems and supports for the students and school. Mina (ES) stated that they have more flexibility and a better system to monitor progress throughout the year.

Ben (ES), who had been a principal for 15 years, specified that he had greater autonomy and recalled that prior to the LCFF, the district took the funding, and then principals were told how to utilize the funds they would receive. This principal shared that now there is more "wiggle room" than before (Ben, ES). Cal (ES), having served in the principalship for over 13 years, shared that the LCFF has led to more flexibility and autonomy in terms of how they spend their funding. He gave the example that their site has a school-wide social-emotional learning (SEL)

program funded through a grant. However, they have been able to do additional activities to support a more comprehensive implementation of their SEL focus because of the flexibility with the LCFF. Cal said this would have been challenging under the prior funding process. It has helped open up more opportunities allowing them to plan and be more targeted and not stuck within specific categories and restrictions (Cal, ES).

Hiring. Owen (ES) agreed that they have more autonomy over hiring and staffing and gave the example of how they created their own interview protocols and selection criteria in addition to what the district already had in place. Hiring was one of the most important things they did, as it was essential to select the right person for the right position (Owen, ES). Nala (HS) felt that the LCFF gave them a lot more freedom because it allowed them to address the needs of the kids they had at their site instead of having very stock programs. She explained that they have autonomy over instructional programs, discipline, and personnel as long as they justify what they are spending, and their LEA approves. Nala (HS) shared that she frequently hired for their site, which she had not seen in other districts as there was more centralized control over hiring practices elsewhere.

Decision-Making Challenges. Principals also shared various challenges that had arisen since the LCFF was implemented. Most concerns were related to how their school site budgets were funded via their LEA. The LCFF loosened how they could utilize funds so they could spearhead and use the funds in different areas based on needs at their school site. However, they felt the funding needed to also be available to hire support personnel since their teachers felt stretched post-pandemic. Ben (ES) shared that their district would not allow that. Jay (ES) stated that although there was flexibility overall, certain monies, such as those designated for students in foster care, were harder to spend. As a result, they would "get in trouble" for not spending this

designated funding even though they had tried and been denied by the district for what they had planned (Jay, ES). Cal (ES) stated that LCFF was still restrictive because the expenditures had to be designated in the LCAP to be approved for spending. Additionally, they felt that there were circumstances where traditional data would not always support their spending, so requests for funding specific programs or items would not be approved (Cal, ES).

According to interviewees at the secondary level, timelines for spending were a concern since most LEAs require all spending to be completed by February or March, which is well before the end of the year (Nala, HS). They also received pushback from the district level on spending money on personnel (Bodhi, MS). Finn (HS) talked about the amount of paperwork imposed on them to receive additional funding from their district, which required that they go through various channels and educational partners, along with approval from mid-management, who often had different priorities and visions that were not always aligned with the principal's priorities; ultimately making things difficult to move forward on (Finn, HS). Owen (ES) felt they worked in "the paradigm of standardized test accountability along with the belief that what it truly means be an educated person does not always directly correlate to an increase of test scores every year." As a new principal, "I had concerns for my job" (Owen, ES).

Overall, principals felt there was more flexibility regarding budgeting and hiring; they could do more and provide more programs and opportunities for their students. However, there were challenges. These included the amount of documentation needed to use their funds, alongside not being able to provide specific programs or support, such as additional personnel or programs, which do not fit in the typical California Dashboard-type accountability results. In addition, factors such as lack of decision-making authority in spending and teacher hiring are reasons principals depart from their positions (Levin & Bradley, 2019). Principal responses to

the open-ended questions presented here indicate that principals feel they have more control over hiring and budgeting; however, the amount of documentation and administrative work required for spending can be a hindrance.

Distributive Leadership and Local Decision-Making. Local decision-making and decentralization of funding have been found to have a positive relationship with student outcomes (Falch & Fischer, 2012). Principals were asked about their involvement in the development of the district LCAP and whether distributive leadership and decision-making at the site level and reflected on California's accountability system.

Educational Partner Engagement. In one district, a principal shared that surveys ask how they are doing with professional development or other topics and that prior to LCAP, this was not common practice (Cal, ES). Another commented that there is more burden of proof on the district to ensure that the community is being engaged in the development of the LCAP (Owen, ES), while a fellow elementary principal felt that their district offers opportunities for involvement. They had yet to see much change in authentic engagement in the process (Orla, ES). She felt that the district has had to get more input from the site level and sees more alignment in this area since they are asking some of their colleagues for input, and it appeared to them that "the sites were leading the district instead of the other way around" (Orla, ES). Overall, there was more involvement for educational partners to have a say in what is going on for the betterment of students, which has been a change for the better (Finn, HS).

Two district office staff members in different districts who worked on developing and writing the LCAP were interviewed. Julia (DO) stated they have had planning and action teams and had administrators involved in the meetings; despite this, even though they felt that the

principal's role was influential in the creation of the LCAP, the information was often brought to them as happenstance. She said that site leaders did not always understand the LCAP and that their district had not effectively informed principals about what it entailed (Julia, DO). Tara, the other District Office Staff member interviewed shared that the school board, which has changed since the time of the interview, was very interested in what employees were thinking in terms of what should be included in the LCAP and that this school board had been encouraging more involvement (Julia, DO). She said principals have always been invited to LCAP community meetings but did not often provide input when attending (Julia, DO).

Hierarchy. When principals were asked about their districts being centralized, decentralized, or a mix of both, they had a variety of responses; however, very few responded that their district was genuinely decentralized. Instead, they talked about how there were attempts at designing a structure for decentralization, but they did not substantiate that it was genuinely taking place. For example, Cal (ES) said that their superintendent had tried to create a horizontal organizational chart to allow for more opportunities to branch and network with other departments and provide support; however, Finn (HS) who was from the same district indicated that although the superintendent and some departments had embraced a horizontal organization, not all who worked at the district office had (Finn, HS), which made things challenging.

Other principals gave examples of how they felt their districts were centralized regarding decision-making. "The district departments do whatever they feel, which may not always be appropriate for individual sites" (Nala, HS). Finn, the other High School Principal, stated that their district had asked them to write additional goals beyond the SPSA, which they felt fulfilled more of a centralized need than a school site need. He reflected that as a district, they were "all over the place" regarding decision-making support, and the district office was putting obstacles

in the way of focusing on redevelopment after the pandemic (Finn, HS). A specific example shared by Jay (ES) was when a district instructed principals to be on-site for summer school after administrators had already set their vacation calendars for the year. The administrators were told to redo their calendars and felt torn between taking much-needed time for themselves and being on campus to support the students (Jay, ES).

Others felt that their districts were a mix of centralization and decentralization. Julia (DO) said that everybody is given a choice about implementing particular programs, but they said they would be judged on their choice at the district level, which is not a good thing, and they believed this to happen frequently. Kerri (ES) said her district was a mix of both, although she thought their peers might say it was centralized. She shared that as a site leader, she had to know what she needed to do for students and do it, but that other administrators might get hung up when they do not keep the bigger picture in mind as they are more focused on every single check and balance (Kerri, ES).

Local Decision-Making. When asked about autonomy over decision-making at their site, principals said they have more autonomy, but they have to have their team on board; there has to be trust and shared leadership (Rose, ES; Nala, HS; Finn, HS) along with continually communicating or over communicating with the educational partners (Bodhi, MS). They agreed that they had more flexibility in how they used their funds and could request additional funds from the district, which opened more possibilities (Cal, ES). Jay (ES) stated that the shift in autonomy and authority has changed in a good way. He felt it was holding them accountable to spending in more innovative ways because they had to get buy-in, see where the money was going, and decide if it was working and they were seeing results (Jay, ES).

Principals felt confident in facilitating decision-making at their school site while providing staff and the community with opportunities to participate; they shared how they relied on their school plans and school teams to work together to make decisions. The LCFF and the LCAP process have focused me more, said Jay (ES). Owen (ES) stated that he focused on creating teams with students, teachers, and specific areas of focus. Most principals stated that they ensured they had teacher "buy-in" for everything (Jay, ES), with many talking about relying on their leadership team (Ben, ES; Kerri, ES; Owen, ES). Rose (ES) said she learned how to lead the school collaboratively with the teachers, and commented that the school sites that struggled most were the ones that did not involve their teachers. The LCFF shaped how they do things. Bodhi (MS) stated that before the LCFF, he tried to do everything by himself, and now he has shifted to collective responsibility to meet the needs of everyone on the campus, including the adults (Bodhi, MS). Others agreed that they refer back to their school plans since those were made with the feedback from various sources, like their leadership team, educational partners, School Site Council (SSC), and Positive Behavior, Intervention, and Support team (Orla, ES).

California's Accountability System. Principals noted the advantages and challenges of California's accountability system, helping their district refine student improvement strategies. Advantages of favorable characteristics cited by principals include that the California Dashboard is more of a growth model than before (Cal, ES). In addition, the dashboard has widened the lens of accountability while focusing on specific student groups that were overlooked in the past, such as students in foster care (Owen, ES and Nala, HS). Another positive was that districts could do more localized assessments (Mina, ES) as a part of the accountability measures.

The interview participants also identified challenges with the state's system. Ben (ES) pointed out that the California Dashboard measures had been in constant flux, with no way to

compare year to year, especially with changes to the assessments and measurements due to the COVID-19 Pandemic (Ben, ES). Mina (ES) stated that the dashboard results needed to be more timely. While Owen (ES) felt strongly that accountability under the LCFF had not changed much but was just renamed. He noted that the purpose of the LCFF was to decrease the amount of top-down authority, but he felt it was still there. He gave an example of how in his district, they had included a focus on African American or Black students in their LCAP due to a significant need; yet, the LCAP was sent back by the County Office of Education for revision not to include this student group specifically (Owen, ES), even though it was an area of concern for their district. Currently, in California racial and ethnic groups are tracked but are not targeted for funding (Gallegos et al., 2023) due to Proposition 209, which bans affirmative action, including a prohibition on race-conscious funding (Education Trust-West, 2020).

While principals agreed that the LCFF leads to greater alignment with goals, strategies, and resources, coupled with increased flexibility with spending, many decisions continued to be top-down, which aligns with Koppich's (2019) findings. Although the LCFF is a form of fiscal decentralization, the LCAP is a complementary plan indicating student needs and how funding is to be allocated and spent; there should be more involvement of school site leaders in developing the LCAP. Based on interview responses, principals have seen that LEAs are committed to engaging their community members; however, even though principals were more involved via surveys and invitations to meetings, information on the LCFF and the LCAP was only sometimes shared in advance, and principals did not often provide input.

When decision-making is decentralized at the school level, there can be positive impacts on student achievement (Hega, 2000; Barankay & Lockwood, 2007; Wößmann, 2003). Overall, principals described their districts as centralized or a mix of centralization and decentralization.

Although there were attempts in one LEA to create a more horizontal institution, not all members of the district were committed to this belief. Most principals agreed that they included their staff in decision-making, focusing on trust and shared leadership, which may not have always been the case in the district offices of their LEA. Principals saw pros and cons with the Dashboard highlighting strengths such as the growth model and widening of the lens of accountability, but it is not a timely measure, and there was still work to be done to make the LCAP and Dashboard better tools.

Capacity Building. Capacity building initiatives are crucial in the role of sustained involvement in the process of change.

Initiatives and Incentives. When asked about capacity building initiatives in their districts, responses varied. Some principals stated there were some opportunities for their development. For example, two principals described being a coach for the Association of California School Administrators (ACSA) or acting as an internal coach for their district (Kerri, ES and Rose, ES). Their district also provided some support for pursuing a doctorate, but in the long run, they felt there needed to be more compensation or an adequate stipend for having such a degree (Rose, ES). Another described that in their LEA, there was a district-funded, required professional development program for administrators that they attended during the instructional day, and although it took them away from the school site, the principal described it as new learning and very relevant (Mina, ES).

Other interview participants stated there needed to be more incentives from their LEA or encouragement for them to continue building capacity outside of their own motivation. Most principals shared that they seek their own professional development (Finn, HS and Cal, ES). "I don't think there really is necessarily any incentives to further ourselves; on the other end of the

spectrum, they're not necessarily slapping our hand if we're not doing it" (Rose, ES). Ben (ES) said that while teachers are given extra duty pay to attend professional development, administrators are expected to get it independently. "It's all on our own, whether I did my doctorate or went to a conference or jumped into a workshop... there's no initiative or incentives" (Finn, HS) from the district.

Professional Development. Throughout the interviews, principals stated that there needed to be additional professional development or training to provide support to increase the understanding of budgets, the LCFF, and various policies or laws that impact spending. "Budgeting is an area that principals are often least trained in" (Mina, ES). "We need to better teach administrators how to leverage funding for whatever goals they are working towards" (Owen, ES). "Start at the basics with new principals, give them time for budgeting, and work with them step by step" (Kerri, ES), or "make it a part of their onboarding process" (Rose, ES). Even at the secondary level, Finn (HS) stated that it is left up to the principal to figure out what to do without any coaching. Ben (ES) said that they get their own information on educational law through ACSA, which helps them with decision-making, and felt the information should also be coming through their district.

Collaboration. In addition to capacity building opportunities, principals must attend various district meetings to receive updates or training on new programs. When asked about opportunities for collaboration and learning, principals responded that their districts often hold monthly principal meetings, sometimes divided into job-alike meetings or groupings based on their location in the district (Bodhi, MS). Jay (ES) stated that he preferred their elementary principal-only meetings because they were more geared to what they were doing at that level. While Ben (ES) lamented that during the principal meetings, which was often the only time they

got together, there were no opportunities to share; they were just given more information and more things to do, and if there was sharing, the culture of the meetings in their district made these opportunities into a competition when "it shouldn't be because we're all for the same goal" (Ben, ES).

From the interviews, principals described how their districts did not provide opportunities for capacity building in areas that they deemed to meet their own professional needs. They often had to seek out training and spend their money to do so. One area of identified need was budgeting, which was a concern for many of the principals interviewed. This finding corresponds to the research on decentralization that often principals cannot carry out the non-traditional tasks of the position, like working with finances. Capacity building and professional preparation are key to active engagement in change, so building capacity for school principals via professional development should continue as a goal for LEAs.

Qualitative Analysis Conclusion

LEAs must have key components such as efficient management, aligned goals, resource coordination, and precise feedback mechanisms. These elements ensure that LEAs effectively manage their resources and direct them toward their goals. The principals interviewed reported feeling accountable for their decision-making and indicated that they had the freedom to be creative in making these decisions. However, although they indicated that they are accountable to their educational partners in terms of expenditures, their LEAs may need to be monitoring the outcomes of these decisions long enough or collect enough data to determine their effectiveness. Principals indicated there needed to be more consistency in securing additional funding outside of state and federal sources, and there needed to be more standardization in the processes. External influences from special interest groups, parents, or other political forces were present,

and the level of support from the LEA in managing these varied. The funding based on student needs was seen as a positive development, but decreasing enrollment in California presented a new challenge to developing budgets.

Due to the long history of plan writing and goal setting by LEAs and schools, the alignment of school sites' plans and goals with the LEAs is straightforward. The real challenge lies in going beyond this and establishing systems that allow administrators and other educational partners to access information quickly and gain a deeper understanding and support for shared leadership. As previously mentioned, principals reported feeling more freedom in budgeting and hiring, which enabled them to provide more programs and opportunities for their students. However, they faced challenges such as the significant amount of documentation needed to use their funds and the inability to offer specific programs or support that required additional personnel. These areas proved to be a hindrance to their feelings of control of decision-making.

Research has shown that decentralizing decision-making to the school level can positively impact student achievement (Hega, 2000; Barankay & Lockwood, 2007; Wößmann, 2003). Principals generally described their LEA as centralized or a combination of centralized and decentralized. While one LEA attempted to establish a more decentralized structure, not all were fully committed to this approach. Most of the principals interviewed stated that they involve their staff in the decision-making process, prioritizing trust and shared leadership, which may not be the norm at the district level.

Principals understand that professional development or capacity building is essential in their role. However, they felt that their districts needed more professional development offerings that addressed their specific needs. As a result, many of them had to seek out training on their

own. Budgeting was a common area of concern, which aligns with the research findings that many principals need more skills and training in the areas of budgets and finances, which is a non-traditional aspect of the role. To support active engagement in change, it is critical to provide ongoing professional development and capacity-building opportunities for principals.

Phase 3 - Integration of Data

The quantitative data for this study were collected through a researcher-created survey, while the qualitative data were collected through interviews. In phase three of the data analysis, integration occurs by connecting the quantitative data, which provides a general understanding of the research problem with the qualitative data to refine and explore participants' views more indepth (Fetters et al., 2013; Creswell, 2003; Creswell, 2010; Rossman & Wilson, 1985).

Themes of Decentralization

During the survey and the interviews, questions were asked of school site principals to elicit information about their perceptions of the following five themes within their district, which can be indicators of success with decentralized educational agencies:

- systems or structures that are stable (Hanushek et al., 2013; Smylie & Wenzel, 2003; Cha, 2016; Sharpe, 1996),
- clearly defined responsibilities (Wößmann, 2003; Cha, 2016),
- principal leadership (Bryk et al., 1999),
- distributive leadership and local decision-making (Smylie & Wenzel, 2003; Bryk et al., 1999; Falch & Fischer, 2012) guided by frameworks, targets, and accountability (Cavallo et al., 2016; Clark, 2009; Wößmann, 2003),
- and building the capacity of the community (Bryk et al., 1999; Muta, 2000; Sharpe, 1996).

The descriptive statistics and the rich text provided by the participants captured the respondents' feelings, attitudes, and perceptions about these themes in terms of the LCFF and LCAP and will be presented in an integrated joint display highlighting key findings from Phase 1 and Phase 2. The joint display, or integrated matrix, bring the data together through visual means to draw out additional insights (Fetters et al., 2013).

Stable Institutions and Structures. In LEAs, stable institutions and structures are characterized by well-defined goal alignment and resource allocation, the effective management of external factors, the acquisition of resources, and the implementation of feedback mechanisms. Table 7 is an integration of the key aspects of the quantitative and qualitative research, followed by discussion.

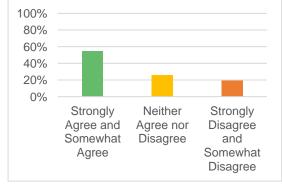
Table 7

Stable Institutions and Structures Integrated Matrix

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 4a My district obtains external resources to further support district initiatives. 100% 80% 60% 40% 20% 0% Strongly Agree and Agree or Disagree and Agree Somewhat Disagree Disagree | Kerri (ES) stated she had a district grant writer who had recently secured a \$25,000 grant for food and clothes at their site, while another said they had partnerships where they get sponsorships and grants (Owen, ES). Owen (ES) did not feel his district was seeking external resources at a level where it was not an area of concern. Others felt that they were permitted to go and seek donations (Cal, ES) or that it was more of a grassroots movement. They preferred that it was more structured and focused (Owen, ES). | Successful schools in the Chicago Annenberg Challenge (Smylie & Wenzel, 2003), took advantage of external resources and used them efficiently and strategically to move the school's initiatives forward. Although there were some reported instances of seeking outside resources, neither district represented in the interview had a systemic approach or designated group of staff dedicated to securing external resources. |

Figure 4b

My district attempts to manage external influences to support continued internal development.



Depending on who is at the district level, vendors, parent groups, or other outside groups could be managed so that these groups understood the parameters of what schools could or could not do (Cal, ES and Owen, ES).

Board members trying to influence school sites to use a particular program caused conflict at the site level. "If you know anything about managing people and working in teams, everyone has to be involved and interested, or it will fall flat or be a fight the entire time, and then it affects the students" (Rose, ES). There are structures typically in place in a school district where district office staff support site leaders. In these cases, principals commented that there were times when there was support provided by the district to manage external influences. Schools should be given the authority to address their needs without being compelled to further a political or social agenda imposed by external entities (Mowbray, 2005).

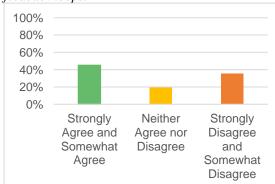
| | - |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exemplar Quote or Sample Vignette | |
| It is more equitable now. You get more money and funding when there is a student need or underperformance (Owen, ES). | Although shifts in budget amounts may impact programs and staffing at the school level, Wößmann (2003) found in a TIMMS study |
| The challenge is, that because school budgets are based on student enrollment, a different dollar amount can be expected every year, especially with statewide public school enrollment dropping (Bodhi, MS). | across 39 countries, that school autonomy was linked to improved performance in math and science standardized test scores. This finding was independent of the level of funding and was attributed to a combination of factors such as centralized exams, independence in processes, and personnel decision. |
| | It is more equitable now. You get more money and funding when there is a student need or underperformance (Owen, ES). The challenge is, that because school budgets are based on student enrollment, a different dollar amount can be expected every year, especially with statewide public school enrollment dropping |

Figure 4d

My district has clearly defined formalized feedback loops.

Somewhat

Agree



Somewhat

Disagree

Principals received feedback on their progress, through various reports (Nala, HS) or test scores or dashboard metrics (Owen, ES), surveys (Bodhi, MS & Owen, ES), and leadership or grade level teams (Jay, ES).

Occasionally district-level personnel would do walkthroughs and make suggestions, or they would receive school recognition or awards to know they were doing a good job (Owen, ES).

The formal evaluation process was not followed through at times (Nala, HS). Information sharing happened most often at district meetings (Rose, ES); others stated that principal meetings were top-down knowledge sharing (Owen, ES) and middle-management or district office personnel were not always comfortable with feedback and knowledge sharing (Finn, HS).

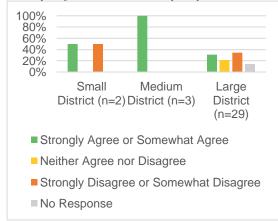
Feedback, both formal and informal, can be used to plan and reorganize practices (Keshavarz et al., 2010). The implementation of policy is not, however, a straightforward process, rather it follows a cyclical pattern as a part of a CAS, where causes and consequences interact, leading to progress or decline (Steen et al., 2013). LEAs and schools are not tightly linked systems where all members have a shared understanding of rules and policies. Instead, they are loosely coupled, which highlights the importance of recognizing that each member of the system is attempting to make sense of their experiences and construct their own understanding (Allen, 2001; Coburn, 2001). Sense-making as a community while utilizing feedback loops is essential for continuous improvement.

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 6 Debriefing Critical Decisions with Superintendent, by District Size | There did not seem to be any structured feedback systems for principals (Orla, ES). The formal evaluation process was not followed through with very frequently (Nala, HS) and it was uncommon for superintendents in large districts to evaluate principals directly. Occasionally district-level personnel would do walkthroughs and make suggestions (Owen, ES). | Superintendents in large districts may not typically directly supervise principals. In the survey, small and medium-sized district administrators may have had more access to the superintendent due to their size. |

Figure 7

Clearly Defined Feedback Loops, by District Size

Small Districts (n=2)
 Medium Districts (n=3)
 Large Districts (n=29)



| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 8 District-Level Stakeholder Engagement, by Principal Longevity | Principalship Post LCFF: In contrast, prior to LCFF it had been much less frequent (Owen, ES). | Smylie and Wenzel (2003), found in their research on the Chicago Annenberg Challenge, that engaging the community to promote |
| 100% 80% 60% 40% 20% 0% Pre LCFF (n=15) Post LCFF (n=22) • Strongly Agree or Somewhat Agree • Neither Agree nor Disagree • Strongly Disagree or Disagree | Principalship Post LCFF: Orla said that her district offers opportunities for involvement but not authentic engagement in the process. Principalship Pre LCFF: Engaging stakeholders as a means of providing opportunities for input District Office Staff member stated was a positive result of the LCFF and LCAP (Julia, DO). Tara (DO) agreed that their LEA was engaging with their stakeholders, by using more surveys and community meetings. Principals recognized the importance of engaging educational partners, from staff members to those in the community (Rose, DO) | coherence on initiatives was one factor as a part of distributed leadership that led to stability or improvement. Although principals that were hired before or after the LCFF was implemented agreed that their LEA engaged education partners, true involvement or commitment may need to be the next step. |
| ■No Response | ES), and that it is a continual process throughout the year. | |

Schools that were successful with decentralization, such as those in the Chicago Annenberg Challenge, could effectively and strategically utilize external resources to advance their initiatives (Smylie & Wenzel, 2003). The results indicate that while some school site leaders sought outside resources, neither of the districts included in the interview had systemic approaches or specific teams responsible for obtaining external resources. Another supportive characteristic of decentralization is establishing structures where the district office staff assists the site leaders in working with external pressures. However, when external pressures come from within the district, pressuring site leaders to adhere to specific programs or political stances can be challenging. School communities should have the autonomy to address their needs without being obligated to advance political or social agendas that may not advance a school site's initiatives (Mowbray, 2005).

Although changes in budget allocations could affect programs and staffing at the school site level, autonomy was associated with better performance on standardized math and science assessments (Wößmann, 2003). These results were not dependent on the funding level; they were attributed to factors such as centralized exams while having autonomy in decision-making processes and hiring (Wößmann, 2003). Providing principals with information and data demonstrating the closer relationship between student achievement and autonomy in decision-making related to personnel and other school-site processes, compared to funding amounts, could lead to greater agreement on whether or not their district funds equitably. Moreover, it may be necessary to investigate why less than half of the surveyed principals believed the funding to be equitable, which could be related to how their districts distribute funding to the site level within this particular county.

Policy implementation is not a straightforward process; rather, it is cyclical, where

interactions lead to progress or decline (Steen et al., 2013). LEAs and schools are not highly connected where all members share the same understanding of rules and policies; instead, they are loosely connected, emphasizing the importance of recognizing that each member is attempting to make sense of their experience and construct their own understanding (Allen, 2001; Coburn, 2001). Both formal and informal feedback can be used to plan and reorganize practices (Keshavarz et al., 2010). Using feedback systems to create sense-making as a community is essential for continuous improvement. According to the surveys and interviews, most principals did not agree that there were established feedback loops. Even when such systems were in place, they were not consistently utilized, or the feedback did not address the needs or initiatives of the school site. Instead, it was discovered that principals relied more on feedback from their sites and data reports rather than from district office personnel. Due to the large size of some districts, feedback from superintendents with any regularity was minimal. Administrators from small and medium-sized districts may have had more opportunities to interact with the superintendent due to their district size, which may lead to different outcomes related to connectivity between the school site, funding, and the LCAP.

Principals who were hired after the LCFF acknowledged that their districts engaged educational partners, there were more who disagreed that this was not enough. Engaging the community to promote coherence on initiatives was one aspect of distributed leadership contributing to stability or progress. LEAs may need to encourage deeper involvement and commitment in the LCAP as a necessary next step.

Clearly Defined Responsibilities. For decentralization to succeed, clear controls between the LEA and the school site, conflict prevention and resolution, and coordination of

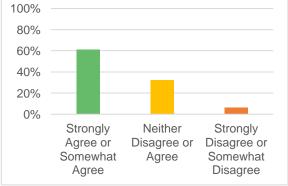
actions and objectives are vital. Table 8 is an integration of both the survey and interview findings in the area of clearly defined responsibilities.

The majority of principals surveyed agreed that there was an alignment of resources with district goals, strategies, and resource allocation. When aligning their school site plans or SPSAs, they were able to easily do so because they felt that their LEAs' LCAPs were general enough to be in alignment. Educational partners or mid-management personnel may have varying priorities or visions that do not consistently align with the school site's initiatives or mission. While 70% of principals acknowledged that it was evident in their LEA who was accountable or had the power to make specific decisions, for decentralization to succeed, there must be a precise delineation of decision-making responsibilities and the removal of any uncertainty (Cha, 2016). Fewer principals agreed that their LEAs had established procedures for focusing on top priorities. The interviewees emphasized the need for prioritizing processes and requests as they experienced directives from multiple departments that were not always coherent, resulting in conflicts between school site initiatives and department and LEA priorities.

Table 8

Clearly Defined Responsibilities Integrated Matrix

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 9a There is alignment among district goals, strategies, and resource allocation. 100% 80% 60% 40% 20% 0% Strongly Neither Strongly Agree or Disagree or Disagree or | The district usually kept things broad in the LCAP, so there was not much they did at the site that did not align with what the district was doing (Nala, HS). SPSAs are aligned with the district's LCAP (Cal, ES), and by focusing on student populations at their site, they make decisions that align with the district (Bodhi, MS). | Most principals in the survey agreed that district goals were aligned with resource allocation and understood their decision- making authority. |
| Somewhat Agree Somewhat Agree Disagree | | |
| Figure 9b <i>Given my district's priorities, it is clear who is</i> <i>responsible and who has the authority to make</i> <i>certain decisions.</i> 100% | Different stakeholders or mid-management have different priorities or visions that are not always aligned with the site (Finn, HS). | Successful decentralization requires a clear definition of decision-making authority and elimination of ambiguity (Cha, 2016), specifically related to defining the responsibilities of the school site and the LEA |



| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 9c My district has defined processes and tools to address the top priorities in the district. 100% 80% 60% 40% 20% 0% | We get directives from every department, whatever those departments' initiatives were, and they felt that the school site leader has to make sense of it all (Nala, HS). | Fewer principals believed that their LEAs had established specific procedures for addressing top priorities. The interviewees revealed the necessity for defining processes, as they felt they received conflicting directives from various departments leading to occasional conflicts between the school site and LEA priorities. |
| Strongly Neither Strongly Agree or Disagree or Disagree or Somewhat Agree Somewhat Agree Disagree | | |

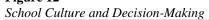
Principal Leadership. Principals are critical agents in involving teachers in the decisionmaking process at the school site. In addition, site leaders indirectly impact student achievement through their influence on school climate and learning because they play a crucial role in making decisions related to goals, budgets, and staffing (Sebastian et al., 2017). In Table 9, there is a synthesis of key components from the quantitative and qualitative elements of the study.

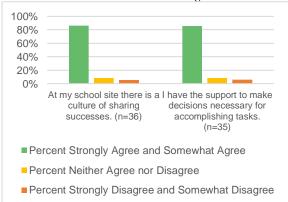
Sebastian et al. (2017) have highlighted the importance of principals in ensuring teachers' participation in decision-making, which has an indirect yet significant impact on student achievement. Principals can improve student achievement by creating a comprehensive school vision, fostering a strong learning environment, nurturing teacher development and retention, and utilizing data to make informed decisions. The principals who participated in the survey and the interviews were confident in their ability to make decisions regarding student achievement. In addition, interviewees added to the survey data by naming how they lead their schools, which included being collaborative and inclusive and recognizing their role in leading the school with their educational partners to engage in research, experiment, reflect, and grow together.

Table 9

Principal Leadership Integrated Matrix

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 11 Principal Efficacy 100% 80% 60% 40% 20% 0% 1 am comfortable 1 am confident in 1 feel prepared to including supporting my stakeholders in all teachers in related to student decision-making reaching school opportunities. and district goals. (n=35) I Percent Strongly Agree and Somewhat Agree Percent Neither Agree nor Disagree Percent Strongly Disagree and Somewhat Disagree Figure 12 | It has helped open up more opportunities allowing us to plan and be more targeted and not stuck within specific categories and restrictions (Cal, ES). "I have autonomy with my stakeholdersI have to be transparentI have to educate my stakeholders, my parents, my staff members" (Finn, HS). | According to Sebastian et al. (2017), principals play a crucial role in ensuring teachers' involvement in decision-making, and this role indirectly impacts student achievement. Second only to classroom instruction, principal leadership significantly affects academic success (Levin & Bradley, 2019). Principals can increase student achievement by establishing a school-wide vision, promoting a robust learning environment, supporting teacher growth and retention, and utilizing data to inform their decisions. Principals surveyed and interviewed believed they were well equipped to make decisions related to student achievement, such as collaborating with educational partners to achieve school and district goals. |





As a staff, we were all researchers; we would go deeper, experiment, and reflect. We would make mistakes and develop together (Owen, ES).

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 13 Collaboration and Equitable Allocations 100% 80% 60% 40% 20% 0% At my school site we have a collaborative decision- making culture. (n=36) I am able to allocate human, financial, and physical resources equitable Allocations | "I learned how to lead in a way that is very collaborative, very inclusivewhen you can humble yourself to realize I'm leading the school with the teachers and with the stakeholders, then it's just a whole new way of looking at things, and you get farther," (Rose, ES). | Principals may feel efficacious in leading thei own school sites, but may struggle with budgeting equitably. |
| Percent Strongly Agree and Somewhat Agree | | |
| Percent Neither Agree nor Disagree | | |
| Percent Strongly Disagree and Somewhat Disagree | | |

Distributive Leadership and Local Decision-Making. Table 10 provides insight into the survey and interview and key findings in this area. Research by Falch and Fisher (2012) has shown that local decision-making and the decentralization of funding positively correlate with student achievement. Site principals responded to inquiries about their leadership abilities, including sustaining a vision, inspiring staff, and being held to accountability measures.

In CAS, feedback can exert pressure that fosters or suppresses new outcomes (Hawkins & James, 2018). The survey results indicated that principals felt backed by their supervisors and were open to considering their suggestions when making decisions. When supervisors provide support to principals to test out policies, it can pave the way for innovation. During the interviews, principals mentioned receiving feedback from their leadership team or other sitebased groups, while others referred to specific metrics. However, only a handful of principals cited their supervisors as sources of feedback. This may indicate that while distributive leadership occurs from the principal level down, it may be less widespread from the district office level to the principal.

The survey indicated that most principals felt their LEAs were receptive to change and supported their autonomy. In the interviews, principals highlighted the flexibility of funding and their autonomy to determine how it should be allocated. However, it is noteworthy that almost 20% of principals disagreed with the notion that their district encouraged alternative approaches to policy implementation. This could be attributed to the need for more training in state statutes, board policies, and regulations so that principals have a better understanding of how they can be innovative within the borders of legislation.

Table 10

Distributive Leadership and Local Decision-Making Integrated Matrix

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 15 Support and Feedback from Supervisors 100% 80% 60% 40% 20% 0% I feel supported by my supervisor(s) to experiment with policies or procedures to support student outcomes. Percent Strongly Agree and Somewhat Agree Percent Strongly Disagree and Somewhat Disagree | "I would say once a month for this past semester, we met with our evaluators, which was good, they came out for a site visit, and we came together multiple timeswe had the opportunity to see everyone's goals, to get feedbackso we have had a lot more interface than I'm accustomed towhich is good because I'm one of the more senior site leaders now and I still want the feedback too," (Bodhi, MS). I had supervisors that would do walkthroughs and make suggestions and tell me to do different things, and I would take their suggestions, but if it were not something that was important, I would get back to work on things I thought were important (Owen, ES). Typically the feedback we get on the LCAP is verbal or sometimes written comments (Tara, DO). | The principals surveyed reported feeling supported by their supervisors and were willing to consider their feedback when making decisions. When principals feel supported by their supervisor(s) to experiment with policies, there is the potential for innovation to occur. Through feedback, pressure on emerging properties results in the promotion of suppression of these new outcomes (Hawkins & James, 2018), a characteristic of CAS. Wher questioned about how they receive feedback or the progress and performance of the schools, during the interviews, principals cited various metrics or feedback from their leadership team or other-site based groups. Only a few mentioned supervisors as a source of feedback. |

Phase 1: Ouantitative Phase 2: Oualitative Phase 3: Integration Survey Results Exemplar Quote or Sample Vignette Figure 16a Distributive Leadership and Local-Decision Making at the LEA Level LCFF does not have as many strings attached; it Based on the survey findings, most principals gives the district flexibility or autonomy on how expressed that their districts were open to 100% to spend funds and allocate them to targeted change and encouraged them to take the 80% 60% areas of need (Cal, ES). initiative in their decision-making. Throughout 40% the interviews, principals noted the flexibility 20% LCFF/LCAP has allowed us to target what we in funding provided by the LCFF and the 0% are doing and align our strategic planning. We LCAP. However, it is worth highlighting the Mv school district is All district employees are

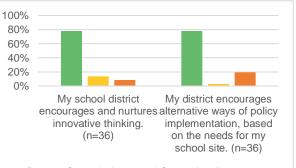
supportive of change. encouraged to take (n=36) initiative and make decisions on their own. (n=36) Percent Strongly Agree and Somewhat Agree

Percent Neither Agree nor Disagree

Percent Strongly Disagree and Somewhat Disagree

Figure 16b

Distributive Leadership and Local-Decision Making at the LEA Level



- Percent Strongly Agree and Somewhat Agree
- Percent Neither Agree nor Disagree
- Percent Strongly Disagree and Somewhat Disagree

can request additional funds for special projects to target student acceleration or other programs (Owen, ES).

We often create change through fear, and the best we get is compliance; when we do that, we never get commitment or innovation (Owen, ES).

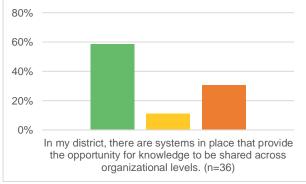
larger percentage of principals who either somewhat or strongly disagreed with the idea that their district promotes alternative methods for policy implementation. This observation could be linked to principals' need for more training regarding state statutes, board policies, and regulations.

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 17a Communication and Knowledge Sharing 80% 60% | I think our roadblock is describing what we're doing, communicating what we are doing. We know what the funds are supposed to be used for and how they should be used and communicate it clearly so that everyone understands (Tara, DO) | Passing knowledge on to others through system interactions is a component of self-organization in CAS (O'Day, 2002). Group sense-making allows staff to learn from one another (Spillane et al., 2002). |
| 40% 20% District office personnel (i.e., coordinators, directors, assistant superintendents) actively solicits input from school site principals before major decisions are made. (n=36) | DO). We have principal meetings. I like those where it is just elementary principals because it's geared to what we're doing at that level (Jay, ES). | District office staff know they need to improve their communication practices; however, one principal pointed out that such efforts often turn into a top-down approach for disseminating information rather than a collaborative sense-making process. |
| Percent Strongly Agree and Somewhat Agree | For knowledge sharing, a lot of it ends up being top-down knowledge sharing (Owen, ES). | |

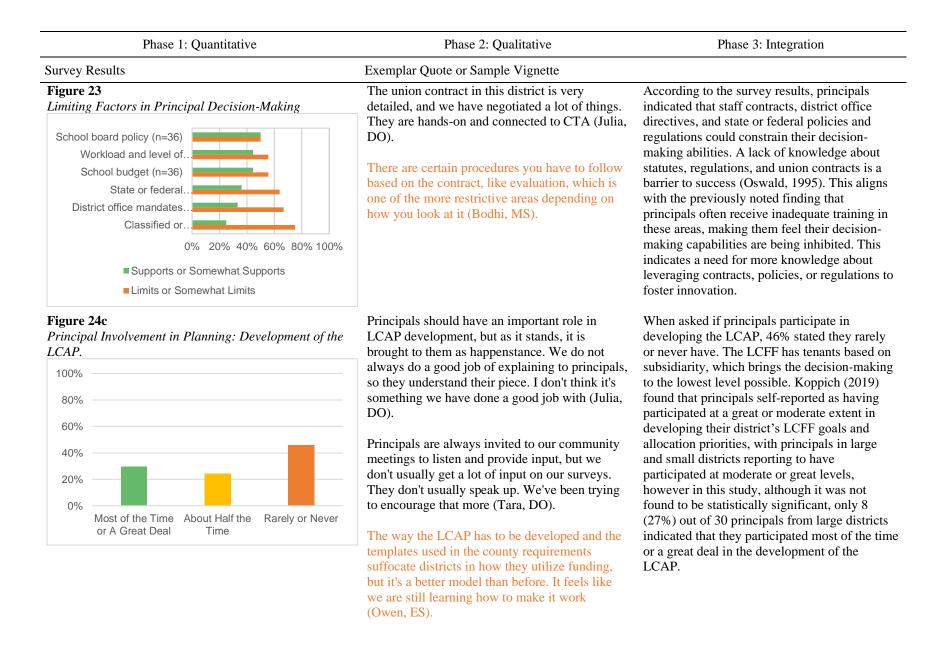
- Percent Neither Agree nor Disagree
- Percent Strongly Disagree and Somewhat Disagree

Figure 17b





| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 18 <i>Hierarchy and Change</i> 100% 80% 60% 40% 20% 0% My district has moved away from hierarchical models of management. (n=36) Changes suggested by site employees to the district office are regularly implemented. (n=36) Percent Strongly Agree and Somewhat Agree Percent Neither Agree nor Disagree Percent Strongly Disagree and Somewhat Disagree | We are leaning towards decentralization. The superintendent's message uses the language of a flat organization, and some departments have embraced this (Finn, HS). The superintendent talks about a flat system. I have seen some things improve, but others are still top-down, or one department does not know what the other department is doing (Owen ES). The district is centralized and decentralized. We | Although decentralization has been demonstrated to raise achievement, it can falt when systems have difficulty balancing top- down parameters and local autonomy, where lines of accountability are blurred (Kubal, 2006). Principals in a decentralized system must understand their roles and responsibilities in the decision-making structure (Oswald, 1995). Principals somewhat or strongly disagree that their district has moved away from top-down management. Although in one district that was part of the interviews, there has been a push from the superintendent to be more decentralized, there were others throughout the district office who continue to conform to a hierarchy. |
| Figure 21 California Accountability Systems are Helping Refine Improvement 100% 80% 60% 40% 20% 0% Percent Strongly Agree and Somewhat Agree Percent Neither Agree nor Disagree Percent Strongly Disagree and Somewhat Disagree | The California Dashboard mode is more of a growth model than before (Cal, ES); we can do more localized assessments (Mina, ES) and it has widened the lens of accountability, while focusing on specific student groups that were overlooked in the past, such as students in foster care (Owen, ES and Nala, HS). The California Dashboard measures have been in constant flux, with no way to compare year to year, especially with changes to the assessments and measurements due to COVID-19 (Ben, ES). The LCFF had not changed much but was just renamed. It was to decrease the amount of top-down authority, but it is still there. They had included a focus on Black students in their LCAP due to a significant need; yet, the LCAP was sent back for revision not to remove this student group specifically (Owen, ES). | While the California Dashboard is a more inclusive change in the measures that schools are rated on, these measures may still be seen as a top-down, outside-in way of measuring schools. Levin and Bradley (2019) found that principals may leave their posts because of high-stakes accountability policies, making principals less likely to remain in low- performing schools. One principal shared that their district attempted to focus on Black students, an identified need in their district, be was not permitted to include this information their LCAP as Black students are not one of the unduplicated student count groups and race cannot be considered for direct funding. This may be evidence that although the district use data to refine improvement strategies for student outcomes, there is still a top-down practice. |



While district office staff who were interviewed acknowledge the need to enhance their communication practices, principals pointed out that, at times, such efforts often resulted in a top-down approach to disseminating information rather than collaborative sense-making. Sharing knowledge through interactions within a system is a crucial element of self-organization in a CAS (O'Day, 2002). In addition, learning from one another through group sense-making can enable staff to acquire new knowledge and skills (Spillane et al., 2002).

The California Dashboard, while more comprehensive in its evaluation of schools, may still be viewed as an externally imposed assessment method. This top down-approach to school evaluation has been linked to high-stakes accountability policies that may cause principals to leave their positions in low-performing schools (Levin & Bradley, 2019). For example, in one instance shared in the interviews, an LEA could not include specific information related to efforts to support African American or Black students because, in the LCAP, this student group is not considered part of the unduplicated student count. Again, this may indicate a top-down approach to decision-making, despite the district's use of data to inform improvement strategies for student outcomes.

In a decentralized system, principals must understand their roles and responsibilities within the decision-making framework (Oswald, 1995). Implementing decentralization has been shown to improve academic outcomes; however, it can face challenges when balancing top-down regulations and local autonomy, leading to blurred accountability (Kubal, 2006). According to survey participants, principals mostly disagreed that their district had shifted away from top-down management. Even though the superintendent in one district had advocated for more decentralization, individuals within the district office continued to adhere to a hierarchical structure, according to principals from that district.

Based on survey findings, principals suggested that the decisions they make can be impacted by staff contracts, district office directives, and state or federal policies or regulations. However, a lack of understanding of these policies and regulations may hinder success (Oswald, 1995). This corresponds with the previously mentioned discovery that principals often receive insufficient training in these areas, which leads to a feeling of being constrained in their decisionmaking abilities. This suggests the need for more comprehensive knowledge about utilizing contracts, policies, or regulations in order to facilitate innovation.

Almost half of the principals surveyed reported rarely or never participating in the development of the LCAP. The LCFF principle of subsidiarity emphasizes decision-making at the lowest possible level, which the researcher argues is the school site. While Koppich (2019) found that principals reported participating to a moderate or great extent in developing district LCFF goals and allocation priorities, this study demonstrated that only 8 out of 30 principals from large districts reported this, indicating a need for further inquiry into understanding why principals in large districts or these districts, in particular, are not involved in the development of the LCAP.

Capacity Building. Building capacity is essential for sustained involvement in the change process. Therefore, ensuring active participation in change, such as changes in policy, capacity building, and professional development, is crucial. Table 11 offers essential findings of phase one and two of this study along with a discussion about each finding.

Table 11

Capacity Building Integrated Matrix

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 31b Capacity Building Opportunities and Incentives | Some principals stated there were some opportunities for their own development. Most often, however, it was described as the opportunity to coach another administrator versus growing in their skills. Two principals described being a coach for the Association of California School Administrators (ACSA) or acting as an internal coach for their district (Kerri, ES and Rose, ES). | Principals without prior experience or knowledge in non-traditional tasks, such as budgeting, may benefit from additional training or professional development in these areas (Muta, 2000). Support like this could lead to a deeper understanding of the process and foster greater creativity and experimentation. |
| Capacity building opportunities within the district are relevant to my goals. | "I don't think there really is necessarily any incentives to further ourselves; on the other end of the spectrum, they're not necessarily slapping our hand if we're not doing it" (Rose, ES). | Active participation in change requires capacity building alongside empowerment to ensure participants are involved in determining the direction of change. There |
| Strongly Agree or Somewhat Agree Strongly Disagree or Somewhat Disagree Neither Disagree or Agree | "It's all on our own, whether I did my doctorate or went to a conference or jumped into a workshop there's no initiative or incentives" (Finn, HS). | needs to be long-term planning for building superintendents' knowledge to lead the reform initiatives (Barrett, 2019). An effective policy based on subsidiarity should respond to the needs and interests of its |
| | Teachers are given extra duty pay to attend professional development, and administrators are expected to get it independently (Ben, ES). | educational partners, including school site leaders. Providing capacity-building opportunities can empower principals to lead their staff in ways that improve student |
| | In other districts, "they pay for them | |

[administrators] to go to attend the ACSA academies or you know certain things like that or you know, attend certain conferences...our district does not do any of that." (Ben, ES).

their LEAs could have consistently offered

incentives or encouragement for their

continued development.

| Phase 1: Quantitative | Phase 2: Qualitative | Phase 3: Integration |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Survey Results | Exemplar Quote or Sample Vignette | |
| Figure 32 Principal Collaboration Opportunities 100% 80% 60% 40% 20% 0% My district provides a regular time for principals collaborate independently to meet and collaborate outside of district on various issues affecting our school sites. (n=30) Yes No | The district often holds monthly principal meetings, sometimes divided into job-alike meetings or groupings based on their location in the district (Bodhi, MS). Principal meetings were often the only time they got together. There were no opportunities to share; they were just given more information and more things to do, and if there was sharing, the culture of the meetings made it out to be a competition when "it shouldn't be because we're all for the same goal" (Ben, ES). | The survey data suggests that principal meetings, which could provide opportunitie for collaboration and sharing, were not consistently provided in all districts. In contrast, collaboration more frequently occurred outside of district-scheduled meetings. Interview participants acknowledged that there were scheduled district meetings, but they only sometimes allowed enough time for sharing, collaboration, and professional growth. A lack of collaboration opportunities may lim principals' ability to pursue continuous improvement in the LCFF (Perry et al., 2020). |
| Figure 34 Professional Development Opportunities for Principals, by Subject Area | Budgeting is an area that principals are often least trained in (Mina, ES).We need to better teach administrators how to leverage funding for whatever goals they are working towards (Owen, ES).Start at the basics with new principals, give them time for budgeting, and work with them step by step (Kerri, ES), or make it a part of their onboarding process (Rose, ES). | The challenges of decentralization are linker to principals' limited experience or capacity with non-traditional tasks. To effectively operate within a decentralized system, additional training or development in non- traditional functions like budgeting, statutes regulations, and decision-making are necessary, along with support for diverse approaches to foster creativity and experimentation (Muta, 2000). During the interviews, budgeting was an area many participants expressed a need for more |

Neither Disagree or Agree Strongly Disagree or Somewhat Disagree

Strongly Agree or Somewhat Agree

support. Additional support in this area is

innovative ways.

necessary to help principals effectively manage the funding provided by the LCFF so that funding can be used in flexible and

For change to be successful, capacity building and empowerment are necessary to ensure that participants are involved in determining the direction of change. A policy based on subsidiarity should respond to the needs and interests of all educational partners, including school site leaders. The interviews conducted in this study revealed that LEAs could consistently offer incentives or encouragement for the continued development of principals. Additional training on professional tasks such as budgeting may benefit principals who need more experience or knowledge in this area, potentially leading to a deeper understanding of the process and promoting greater creativity and experimentation (Muta, 2000).

Survey results indicate that not all districts offer regular principal meetings, which could be opportunities to facilitate collaboration and sharing. Instead, collaboration tended to occur most often outside of district-scheduled meetings. While interviewees acknowledged the existence of district meetings, they felt there was limited time for sharing, collaboration, and professional growth. Limited opportunities for collaboration may impede principals' efforts to achieve continuous improvement in the LCFF (Perry et al., 2020).

Principals' limited experience or capability in handling non-traditional tasks is a significant challenge associated with decentralization. Principals require additional training or development in non-traditional tasks like budgeting, knowledge of statutes and regulations, and decision-making to function efficiently within a decentralized system. Interview participants expanded upon areas of professional development need, particularly budgeting. Extra assistance in this area may be crucial to assist principals in managing the funding provided by the LCFF effectively, allowing for flexibility and innovation.

Joint Matrices Conclusion

In this phase, the quantitative data was connected to the qualitative results to add insight into particular findings of the survey. The five themes of decentralization will be summarized here. Characteristics of stable institutions and structures involve the strategic use of external resources while managing external pressures as well as feedback systems. None of the LEAs included in this study had specific procedures for obtaining external resources or for providing consistent support for external influences. Establishing structures where the district office staff assist site leaders in working with external pressures to promote autonomy is essential. While feedback systems are crucial for continuous improvement, most principals disagreed that these systems were in place in their districts (see sections on Stable Institutions and Structures). The engagement of educational partners in planning and initiatives requires deeper involvement and commitment by all in the LCAP.

Successful decentralization requires clear control and coordination between the LEA and the school site and established measures to prevent conflicts and ensure alignment of actions and goals. Principals feel that their LEAs' LCAPs were general enough to align with their school plans. While most principals identified that they knew who had the authority to make certain decisions, 29% of principals were unsure or disagreed. During the survey, 39% of principals disagreed or were unsure about procedures in their LEA for focusing on top priorities; while in the interviews, they highlighted the importance of communication between departments as they received conflicting directives, which resulted in conflicts between school site initiatives and the district.

School principals play a critical role in promoting school climate, learning, and, ultimately, student achievement by ensuring that teachers are involved in the decision-making

processes of the school site (Sebastian et al., 2017). Principals felt prepared to support their staff and make decisions regarding student achievement. In the interviews, the consensus was that they had become more collaborative and inclusive and engaged with their educational partners.

There is a positive correlation between local decision-making, decentralization of funding, and student outcomes (Falch & Fisher, 2012). While principals felt supported by their supervisors, few indicated that they received feedback on progress or decisions made by their supervisors. Knowledge sharing, opportunities for group sense-making, and learning more about being innovative within the guardrails of legislation were areas of growth. Although there has been improvement in growth measures for schools and districts, provided support via the LCAP for specific student needs has been moderated by the county, indicating there is still a top-down approach to addressing specific student needs. A critical finding is how principals responded that staff contracts, district office directives, and other policies or regulations impact their decisions. This implies the need for a deeper understanding of how these items can be leveraged to increase innovation. Furthermore, only some principals in large districts participated in developing the LCAP. The researcher argues that the LCFF, based on the principle of subsidiarity, highlights the importance of decision-making at the school site which is the lowest possible level.

Capacity-building initiatives are crucial in promoting sustained involvement in the change process by enabling continued active engagement. LEAs should consistently offer incentives or encouragement for site leaders' continued professional development, particularly focusing on decision-making, budgeting, and legislation. Opportunities for sense-making and collaboration are critical to engaging everyone in determining the direction of change.

Chapter 5: Key Findings, Implications, and Recommendations

This study aimed to gain insight into the perspectives of school site administrators in the context of the LCFF and the principle of subsidiarity and how they position themselves within a complex system. An explanatory sequential design (Creswell & Plano, 2011) was utilized, comprising of the collection of survey data, followed by interviews, to provide additional description and analysis of the survey results. The concept of subsidiarity forms the basis of the LCFF, where decision-making authority is delegated to those closest to the problems to be addressed. In the policy's current implementation, this is often considered the school district or LEA; however, those closest to students, such as principals and teachers, have the most significant effect on student achievement (Sebastian et al., 2017). Therefore, if the LCFF aims to address achievement gaps for students, then it is the responsibility of the LCFF research to gain insight into principal decision-making processes. In this chapter, the study's findings are linked to the research questions along with essential components of the literature review to answer the research questions and provide implications and next steps based on the results as well as recommendations for future research.

Discussion

Survey responses from 37 principals provide a broad perspective on the LCFF, their LEAs practices, what they perceived as their role in decision-making, and how efficacious they felt in their position. Interviews with 11 principals and 2 district office staff allowed a deeper examination of decisions made, successes, or barriers to full implementation of the LCFF. Analysis of the survey and interview data through integration provided new insights into the findings.

Research Questions

This research aimed to answer the following questions:

1. To what degree has local control by virtue of the LCFF, through the agency of subsidiarity or decentralization, reached the school site?

2. How have site principals taken part in the decentralization of decision-making as a result of the LCFF? Does participation vary between elementary and secondary levels, length of experience as a principal, or size of district?

3. To what extent are principals' decision-making processes pre-LCFF similar to or differing from the post-LCFF context? Do those similarities or differences in decision-making processes vary between elementary and secondary levels, length of experience as a principal, or size of district?

4. What can we learn by using features of CAS—connectedness/hierarchies, feedback loops, emergence, and self-organization, to frame the experiences of school site principals via local control?

Research Question 1. The first research question was—*To what degree has local control by virtue of the LCFF, through the agency of subsidiarity or decentralization, reached the school site*? Although certain aspects of decentralization have reached the school level, other components require additional refinement, exploration, or institutionalization within the LEA. When considering the fundamental components of decentralization - stability of the LEA, clearly defined responsibilities, principal leadership, distributive leadership and local control, and capacity building - further improvements must still be made. Areas, where decentralization has reached the school site, include:

- Greater alignment of LCAPs and SPSAs, which provide stability in process and
 procedures and clearly defined responsibilities related to goal setting, actions taken, and
 expenditures. Over 70% of principals agreed that there was alignment in their LEA
 among district goals, strategies, and resource allocations, and they were able to align their
 SPSAs with the LCAP because the LCAP goals were broad.
- *Increased flexibility in budgeting, hiring, and program choice.* While principals agreed that they were able to allocate resources, this information was expanded upon during the interview, where patterns emerged indicating more flexibility than prior to the LCFF in how funds could be allocated.
- Accountability to educational partners in how money is spent while engaging them at all *levels*. Prior to the LCFF, principals often created the school plan in isolation. Through interviews, it was shared that they now rely heavily on their educational partners, such as SSC, leadership teams, and parent groups.
- *Encouragement of and nurturing innovative thinking.* Principals are prepared to work with various site teams, actively solicit input or feedback from their staff and communicate about objectives and initiatives. Survey results indicate principals feel efficacious in their decision-making at the site level, confirmed via interviews where they shared about leading their staff collaboratively.

Areas where decentralization to the school site level should be addressed:

• Build a formalized structure to obtain external resources to support individual school sites' goals and actions. In the survey, 71% of principals agreed that their district obtained external resources to further district initiatives; however, the interviews

expanded the depth of understanding here, indicating that principals would prefer a more structured focus, one that was organized and provided resources for specific site needs.

- Manage external influences so that site leaders can focus on needs at the school site. Only 55% of principals agreed that their district managed external resources, and while the interviews expanded on this, results were mixed; where they indicated at times, there was district-level support, at others, it was the district staff or school board who tried to influence programs or politics at the site.
- *Create an LEA that genuinely embraces and supports local-decision making and distributive leadership practices, so they are not just at the school site but are implemented at the district level as well.* Only 50% of principals agreed that their district had moved away from hierarchical models of management. Through the interviews, the pattern that emerged indicated that principals felt they had moved away from hierarchies at the site when it came to decision-making; however, LEAs seemed to be a mix of both, and it was often dependent on beliefs held by district office staff.
- Arrange incentives and encouragement for principals to develop additional knowledge and skills. Only 47% of principals agreed that their LEA provided incentives and encouragement to continue developing skills and knowledge. The information gathered during the interviews found limited financial incentives for principals to continue their skill development. Based on a website analysis of LEAs included in this study along with LEAs in the surrounding areas revealed that the typical stipend offered on average for a doctoral degree was \$3,542. The median amount was \$2,523 with a range from \$750 as the lowest to \$8,474 as the highest.

- *Provide support by supervisor(s) to experiment with policy or procedures.* While 86% of principals responded that they felt supported in this area, 14% were unsure or disagreed, and 22% were unsure or disagreed that their district encourages alternative ways of policy implementation based on the needs of their site.
- Prepare and provide professional development in the areas of problem solving, state statutes, board policies, and regulations that can impact the ways in which school plans and budgeting decisions are made, along with decision-making skills and staff contracts. Principals require additional training or development in non-traditional tasks like budgeting, knowledge of statutes and regulations, and decision-making to function efficiently within a decentralized system. Professional development on board policies and regulations (53%), state statutes (50%), and decision-making skills (47%) are the least frequently available professional development topics.
- *Create shared learning opportunities where principals can continue to support shared leadership while collaborating and innovating together*. Collaboration is a successful component of improvement. According to principals, 40% said there was not this opportunity to collaborate.
- Actively involve principals in providing input in developing the LCAP or other committees for district-level planning. The LCAP, a three-year blueprint for an LEA's student success, describes goals, actions, and services along with the vision of LEA spending; survey results indicated that 46% of principals rarely or never engaged in the development of the LCAP for the LEA and only 8 out of 30 principals (27%) from large districts reported being a part of the process.

Hanushek et al. (2013) found that countries with stable structures were more successful with decentralized decision-making. Stable institutions and structures within LEAs encompass vital elements, such as aligning goals and resources, managing external influences effectively, securing necessary resources, and implementing effective feedback mechanisms. These elements are vital to maintaining stability in an LEA. The data collected at each stage demonstrated that accountability and alignment, achieved through LCAP and SPSA documentation, were crucial factors contributing to stability. SPSAs in these districts were aligned with district LCAPs. This has become common practice due to initiatives like NCLB and others where plan writing and goal setting have been established components of accountability. However, in the district-level staff interviews, it was found that districts may not continue with any one strategy for very long to determine if the actions were worthwhile and use of measures of effectiveness was an area of concern, nor could they include in their plans students who were not a part of the unduplicated count group.

Research Question 2. The next question had two parts to be addressed—*How have site principals taken part in the decentralization of decision-making as a result of the LCFF? Does participation vary between elementary and secondary levels, length of experience as a principal, or size of district?* As was discussed in the section on Research Question 1, principals have been involved in decentralization through increased flexibility in budgeting, hiring, and program choice, working in a distributive leadership fashion by collaborating with various educational partners and encouraging and supporting innovation at their school sites. However, it was found that in the five districts surveyed, only 46% of principals were involved in developing the LCAP. Out of the 37 responses to this question, at the elementary level, 32% of principals were involved most of the time or a great deal in the LCAP development, while 27% were about half the time,

and 41% were rarely or never involved. At the secondary level, 27% of principals were involved most of the time or a great deal, 20% about half the time, and 53% were rarely or never involved in the LCAP development.

The length of principalship was grouped into pre-LCFF implementation or postimplementation. There were 56% of principals hired prior to the LCFF implementation actively involved most of the time or a great deal, 11% about half of the time, and 33% rarely or never. For those hired after the LCFF was implemented, 22% of principals were involved in the development of the LCAP most of the time or a great deal, 29% were involved about half of the time, and 50% were rarely or never involved. In the 34 responses for district size, 100% of smalldistrict principals were involved in the development of the LCAP, 33% of principals in the medium-sized were involved, and 28% of large-district principals were involved in theirs. In contrast, 62% of large-district principals reported rarely or never being involved in developing their LEA's LCAP.

Koppich (2019) found that 82% of principals surveyed agreed that their school and community participated in developing the district's goals and priorities, and 82% reported involvement either to a great extent or moderate extent in the development of the LCAP during the 2016-2017 school year. However, based on the data collected for this study, only 46% of principals stated they were involved most of the time or a great deal of the time. The discrepancy may be due to two identifiable factors, one being that this survey took place during the COVID-19 pandemic, which may have influenced the ability of principals to be involved in their LEAs LCFF development due to the virtual schooling that was taking place. The other factor may be the sample of principals. Koppich (2019) surveyed 267 principals administered from 2017 to 2018 using a stratified random sampling method, while this study focused on districts in a single

California county. Koppich (2019) also noted that their surveys were conducted prior to the full implementation of the state's accountability system and System of Support.

Research Question 3. The third question was also comprised of two parts—*To what extent are principals' decision-making processes pre-LCFF similar to or differing from the post-LCFF context? Do those similarities or differences in decision-making processes vary between elementary and secondary levels, length of experience as a principal, or size of district?* There were eight school site leaders interviewed who were principals prior to the LCFF implementation. When asked an open-ended question about whether or not the LCFF or LCAP process has changed the way they made decisions, principals responded with the following themes:

- I collaborate more with teachers (Jay, ES; Orla, MS; Owen, ES; Rose, ES; Bodhi, MS).
- I am more focused and work closely with teachers and what they see as needs (Bodhi, MS; Finn, HS; Nala, HS; Orla, ES; Rose, ES).
- I can be more creative, flexible, and autonomous with spending (Cal, ES; Finn, HS; Jay, ES; Nala, HS; Rose, ES).
- We are better educated when we consider budgeting based on need and review this plan throughout the year (Bodhi, MS; Owen, ES).
- We have a collective responsibility to meet the needs of our students (Ben, ES; Bodhi, MS; Kerri, ES; Orla, ES; Owen, ES).

There was only one principal who felt that their decision-making had stayed the same. This was also the most tenured principal, who, presumably over the decades, had seen many changes during their principalship. Kerri (ES) stated that the current funding system was "icing on the cake"; you have to stay the course and be as consistent as possible, no matter the funding. Using cross-tabulation, more principals who were hired before the LCFF implementation agreed or strongly agreed with the statement that their decision-making had remained the same (68%, n=22), while fewer who were hired after 2013 agreed or strongly agreed (53%, n=15).

Research Question 4. The final question was—*What can we learn by using features of CAS*—*connectedness/hierarchies, feedback loops, emergence, and self-organization, to frame the experiences of school site principals via local control?* The present study is grounded in systems thinking, specifically, CAS, which examines agents that learn or adjust their behavior based on interactions with other agents, leading to the emergence of new strategies (Holland, 2014). This theory is particularly relevant to this research as school systems and the policies that impact them are intricate and challenging to simulate or analyze due to the numerous layers of interaction and the nonlinear nature of these interactions. Characteristics of CAS include hierarchies, feedback loops, self-organization, and emergence.

Hierarchies. LEAs have a hierarchical structure, where the local school board holds the highest position and is responsible for formulating policies and appointing the superintendent. The lower levels consist of district-level administrators, school site administrators, teachers, and support staff. Alongside these levels, other structures exist, such as families, communities, organizations, and the media. All these levels are interconnected within the larger county office of education and state framework. Although LEAs are hierarchical in nature, they should continue to work on decentralizing decision-making to the individuals nearest to the students, which would be the site principal and staff.

In the research presented here, principals agreed that their district was supportive of change, and they were encouraged to take initiative while promoting and supporting collaboration and innovation at their site. However, only half of those surveyed felt that their

LEA had moved away from hierarchical management or that their ideas suggested to the district office were regularly implemented. When asked, principals in one district expressed that their superintendent had focused on creating a horizontal organization chart and emphasized the role of site leaders as one of the most important parts of the district. However, most principals felt district office staff needed to embrace local decision-making and reconsider top-down decision-making. The environment in which principals operate suggests that they perceive themselves as being supporters of distributive leadership despite working in a hierarchical system. However, they are not convinced that the implementation of decentralization elements at the district-office level is taking place within their LEA.

Feedback Loops. Keshavarz et al. (2010) suggest that in an LEA, feedback loops can be both formal and informal, serving the purpose of developing and modifying their practice. Steen et al. (2013) suggest that policy implementation in school systems is not a linear process but somewhat cyclical, where causes and consequences interact, leading to progress or a decline in the function of its systems. Fewer than half of the surveyed principals (45%) agreed that their districts had defined formalized feedback loops. However, the medium-district principals felt that their district had formalized feedback loops (100%), which appears to be unique in that small and large-district principals' agreement was far less, 50% and 31%, respectively. One component of a feedback loop is debriefing or reviewing the outcomes of decisions made. District size was a factor in the debriefing of decisions, where large-district principals reported debriefing with their staff more often. Small and medium-district principals in large districts most frequently responded that they never debriefed with the superintendent at all (45%). Within an LEA, feedback loops establish connections between district staff, including the

superintendent. These connections enable the reciprocation of information and can facilitate improvements (Steen et al., 2013).

Updates on progress are an essential aspect of feedback and continuous improvement. While it can be facilitated through various means, principals stated they obtained updates not directly from the supervisor(s) but through reports, test scores, metrics, and their school site teams. The principals did not report that their LEAs had structured feedback systems, including productive evaluation systems. Additionally, they perceived principal meetings as a top-down information-sharing process rather than a time for collaboration and sense-making.

Self-Organization. Principals play a critical role in the sense-making and selforganization process by creating and facilitating conditions for these connections and partnerships (Coburn, 2005) among staff members, families, and communities. School staff collaborates to understand policy messages through formal and informal networks (Coburn, 2001). Professional development can offer individuals a change to engage in collaborative sensemaking, allowing them to learn from one another. At the same time, the context in which relationships form between people plays a critical role in understanding how policy is enacted (Spillane et al., 2002).

Collaboration is an influential aspect of self-organization. Some principals (60%) reported that their district provided time for collaboration amongst peers, while the majority (83%) reported engaging in independent collaboration outside of district-schedule meetings. Although principals participated in district meetings, based on their reflection, these meetings were top-down, or if collaboration were a component, the meetings' culture made it more of a competition than a truly collaborative experience.

Building capacity is essential for maintaining ongoing involvement in the process of change via collaboration and understanding policy and practices. While principals agreed that their district valued development at all levels (83%), fewer principals (60%) felt that capacity-building opportunities were relevant to their goals, and fewer than half (47%) of principals felt that their district offered incentives or motivation to acquire more knowledge. LEAs most often provided professional development in instructional leadership, the LCAP, and the LCFF, while board policies, regulations, state statutes, and decision-making skills were the least frequently available learning opportunities. What emerges when LEAs fail to provide relevant professional development is that principals frequently look for their own sources of information to aid in decision-making. Most principals consulted with their school site leadership team, other school staff, or other district principals most frequently.

Emergence. Leadership, and in this case, school-site leadership, can be viewed as an emergent event that arises from the interplay between individuals and ideas. This perspective acknowledges that leadership is not solely the action of an individual but rather the emergence of novel outcomes over time (Martin, 2019). Principals must cultivate new skills and strategies in an ever-changing and complex environment independent of stability and predictability and have the ability to identify emerging patterns, positively manipulate the circumstances or conditions of the school, and select suitable organizational structures while promoting innovation (Fidan & Balcı, 2017). What has emerged from the LCFF and the LCAP implementation is a system of school finance that has created more autonomous control at the school-site level, where educational partners are engaged through a collaborative process. This study has revealed various emergent outcomes. There is enhanced flexibility in the areas of budgeting, hiring, and program selection at the school site. Along with accountability to educational partners in terms

of how funds are utilized. Another emergent outcomes is the LCFF/LCAP's fostering of innovative thinking between principals and staff.

Implications and Recommendations for Practice

LCFF begins with respect at the local level, creating a thought partnership to ultimately benefit students (Dr. Cohn, Personal Communication, August 25, 2016). The LCFF is more than a policy of fiscal decentralization. It is an opportunity for school communities to come together to make decisions that impact student outcomes. Limited studies focus on principals' experiences, so this study adds new knowledge to the California school finance field. Based on this study's findings, six implications and recommendations impact practices regarding the LCFF and the LCAP.

This study provided insight into principal decision-making in the context of the LCFF. The first implication is the importance of creating an LEA that employs distributive leadership and local-decision making processes. School leaders do not make decisions in isolation but rather as part of a complex system. Principals should continue to be empowered to be leaders responsible for shaping the direction of their school sites. School sites must have real authority over personnel, curriculum, and budget (Wohlstetter & Buffett, 1992; Wohlstetter & Mohrman, 1995), along with professional development and increased support from their LEA.

LEAs and their members should create structures that genuinely support local-decision making and distributive leadership practices, so they are not solely occurring at the site level but are implemented district-wide. For example, Smylie and Wenzel (2003) found that local decision-making and distributive leadership created stability or improvement in Chicago Public Schools. Distributed leadership consisted of, among other components, a coordinated approach to sustaining a school vision, engagement in school-wide initiatives, incentives and

encouragement to develop skills, and holding staff accountable. Additionally, Bryk et al. (1999) found that schools that were improving had strong local governance, local decision-making, student-centered and safe climates, capacity building of staff, and trust among the adults. LEAs obligate principals to establish environments with these characteristics, so LEAs should promote these features throughout the district office and between the connection to the school site.

The second implication is related to managing external influences. Outside influences include state and federal regulations, community interests, and political pressures. These can impact a school site's focus on student achievement. Therefore, schools must have the authority to recognize and define issues that concern them without being compelled to advance an external entity's political or social agenda (Mowbray, 2005). External influences should be strategically and consistently managed so that site leaders can focus on needs at the school site and continue to support development. LEAs should have a strategic plan in place to assist in buffering outside influences by using political capital to influence decisions made while working to minimize any disruptive effects. In circumstances where external factors come into play, districts should assist principals and limit the influence of political groups or board members at the school site. This could be implemented by

- establishing clear protocols for communication between board members, political groups, and school personnel
- providing resources and support for principals to navigate complex external influences
- foster a culture of collaboration and shared decision-making between principals and other educational partners.

Third is the need to establish formal structures to obtain external resources that support school site goals and actions and are aligned with the school's development. Failure to secure

adequate external resources in a systemic and organized manner may stifle a school's further development (Smylie & Wenzel, 2003). Formalized structures to obtain external resources to support individual school sites' goals and actions should be implemented. Although there was some indication that seeking out external resources occurred, it was often a grass-roots movement, or resources sought did not apply to individual site goals. LEAs should implement a formal process to identify available resources, such as grants and partnerships with community organizations and local businesses. LEAs could then establish a system to identify the specific needs and goals and connect them with appropriate resources. This could involve working closely with school leaders and staff to identify areas of need and developing the means to connect with external resources. In addition, LEAs could provide training and support to principals on how to effectively seek out and utilize external resources by offering workshops on grant writing, developing partnerships, and leveraging community resources.

A fourth implication relates to principal capacity building and professional development. Building capacity among principals and other school leaders is needed to implement the LCFF effectively. Principals should have a clear understanding of budgeting, decision-making, state laws and regulations, and techniques for collaboration. They should possess the skills and knowledge to make informed decisions about staff contracts and be able to experiment with alternative policy or procedure implementation. Although capacity building, in relation to the necessity to improve the application of the LCFF, is needed, principal empowerment requires the exchange of information, mutual sense-making, and the acquisition of necessary skills (Turcotte & Pasquero, 2001). A collective purpose and coordinated efforts can increase competency (King & Newmann, 2004), resulting in principal efficacy. LEAs can promote effective leadership and improve student outcomes by investing in principals' development.

Developing and offering professional development to principals that cover state laws, board policies, and regulations that can affect school planning and budgeting decisions. Additionally, principals should receive training related to decision-making and LEA staff contracts, which are essential for effective school management. The results demonstrated that principals receive training on instructional and operational leadership rather than decision-making skills and strategies. Additional support for principals is also needed in experimenting or finding new ways to implement district policy and procedures; LEAs should provide principals with supervisors or consultants who can help principals develop innovative solutions to complex problems, focusing on student achievement. To foster collaboration and shared learning experiences, LEAs could create opportunities for principals to engage in professional learning communities where they can exchange ideas, share best practices, and support one another. Finally, LEAs should establish incentives for principals to encourage them to enhance their expertise and abilities. This can be done by offering professional recognition, additional training opportunities, or financial incentives. Similar to how teachers are supported to improve their capacity and skills, principals should also be provided support and resources to do the same.

The fifth implication is establishing precise feedback mechanisms to ensure effective communication and collaboration. Feedback will ensure that goals and actions are aligned with district priorities, and district-level decision makers can then take into account the perspectives and needs of the individual school sites. In addition, group sense-making allows individuals to gain knowledge from one another while providing context to the LCFF (Spillane et al., 2002). The recommendation is to establish clear feedback mechanisms to ensure that connections between district staff, including the superintendent or cabinet members, enable the reciprocation of information which can facilitate change. This could also include the implementation of regular

check-ins and progress reports to provide input to school site principals on progress being made and identify areas of improvement. Regular feedback can help build trust and strengthen relationships between school site leaders and the district office, ultimately leading to better student outcomes.

The sixth and final implication and recommendation is principals' engagement and participation in developing the LCAP. In the policy's current implementation, the LEA is considered to be the lowest decision-making unit; however, those closest to students, such as principals and teachers, have the most significant effect on student achievement (Sebastian et al., 2017), with principals having an indirect link to student success, second only to classroom instruction (Leithwood et al., 2004; Wahlstrom et al., 2010). Principals should be actively engaged in developing the LCAP so that the plan better reflects the community's needs, ultimately providing financial support to improve student outcomes. The LCAP is a crucial document, as a part of the LCFF legislation, that outlines how a district will use its resources to enhance students' academic achievement and success. Active engagement should include attending meetings to analyze site-level and district-level data and provide input on the plan's goals, actions, and implementation. Their involvement will also promote collaboration and communication between the district and school levels, leading to a more integrated and unified effort to improve outcomes for students.

Recommendations for Further Research

There are four recommendations for further research.

1. Look at a larger sample size to increase the generalizability and representation of the findings to better understand principal decision-making in the context of the LCFF. A large

sample size may better represent the population, and the results may be more statistically significant and reliable.

2. Investigate the effectiveness of different district models of the LCFF implementation, including how the policy has been utilized to meet the needs of varying student populations within the state. The distribution of the LCFF funds to the site has taken on different modes depending on the district. Although LEAs typically allocate funds to sites based on enrollment, one district reserved funds specifically for additional projects. The LEA staff approved these projects for site-based initiatives developed by the school. Further research should examine how LEAs are implementing resource allocation.

3. Explore the role of educational partner engagement and decision-making in the process and the extent to which their input is incorporated into district LCAPs or school-site SPSAs. Involving partners in the decision-making process can result in a more comprehensive understanding of the needs of the community and ultimately lead to better outcomes. Additionally, exploring trust and collaboration among educational partners is crucial, as these characteristics result in greater involvement and support for decisions made.

4. LEA LCAPs should be examined as to how they have impacted equity as decisionmaking has become decentralized. In this study, only 48% of principals surveyed agreed that funding was equitable across schools in their district. Decentralization can create both opportunities and challenges for promoting equity (Leer, 2016; Parry, 1997). Local control allows districts to create programs that fit the needs of the students, while it can also lead to disparities in resource allocation and access to quality education.

Conclusion

According to the results, school principals felt they had increased flexibility and leeway when it came to budgeting. This allowed them to provide extra programs and opportunities for students. However, their responses reveal that although they feel more empowered in making decisions, the extensive documentation and administrative tasks involved can present obstacles. Therefore, it is crucial that individuals are empowered to be active participants in policy implementation.

Within decentralization, tension between a centralized system and a local entity is likely to occur. This tension was evident in the data presented here. Tension arises when the LEA authority has policies and regulations that are applied to all the schools within the district, whereas the school sites may have unique needs or priorities that conflict with these policies. A framework for decision-making and resource allocation, while allowing for school sites to make decisions on how to implement the framework, may assist in meeting the community's unique needs. Additionally, principals in this study perceive that decentralization of decision-making, while occurring at the school site, is not taking place or is limited from the district office to the site. The district office staff may still retain significant control over certain aspects of decisionmaking, such as budget allocation or policy implementation. When systems, such as an LEA, have difficulty balancing top-down parameters and local control, the lines of accountability are blurred. If principals have authentic decision-making authority, they may feel compelled to comply with district-level policies to maintain good relationships with district-level administrators or for fear of retribution for going against district directives. There may also be a need for clarity or communication, and without clear guidelines, principals may be hesitant to act without explicit approval.

This study attempted to look at LEAs and principal decision-making through the lens of complex adaptive systems. CAS compels us to consider the dynamics of LEAs and their diverse traits and agents, where multiple forces, factors, and influences must be considered during any change process. There needs to be more research on schools and LEAs as Complex Adaptive Systems, which may be partly due to CAS being a relatively new field of study that has not been widely applied to education research. Morrison (2002) suggests that school systems are like CAS as they change over time, responding to macro and micro societal changes, relying on relationships and various communication methods and networking. They also demonstrate that through the collective efforts of the agents in the system, in this case, the school site principals, there is the potential to generate novel results through self-organization.

At its core, subsidiarity is rooted in the empowerment of the individual member, taking responsibility for others and the greater good (Drew & Grant, 2017). This research was an essential step in exploring principal decision-making in the context of the LCFF. Although this study contributes to the research on the LCFF, there is still much to learn. While only generalizable to some LEAs, it gives insight into principals' decision-making in a single county in California. The findings highlight the need for additional research into the LCFF and the various mechanisms that impact achievement. This study has offered actionable recommendations that can influence the implementation of the LCFF policy and practices.

References

- Ahmad, E., Brosio, G., & Tanzi, V. (2008). Local service provision in selected OECD countries: Do decentralized operations work better? (No. WP/08/67). Fiscal Affairs Department: International Monetary Fund.
- Affeldt, J. T. (2015). New accountability in California through Local Control Funding reforms: The promise and the gaps. *Education Policy Analysis Archives*.

https://doi.org/10.14507/epaa.v23.2023

- Allen, P. A. (2001). A complex systems approach to learning in adaptive networks. *International Journal of Innovation Management*, *5*(2), 149–180.
- Anderson, P. (1999). Complexity theory and organization science. *Organization Science*, *10*(3), 216–232.
- Barankay, I., & Lockwood, B. (2007). Decentralization and the productive efficiency of government: Evidence from Swiss cantons. *Journal of Public Economics*, 91(5–6), 1197–1218. https://doi.org/10.1016/j.jpubeco.2006.11.006
- Barrett, C. L. (2019). *Thriving during an era of whole system educational reform: Effective practices for superintendents*. Claremont Graduate University.
- Bersin, A., Kirst, M. W., & Liu, G. (2008). Getting beyond the facts: Reforming California school finance. *Berkeley Law*.
- Bradshaw, B. (2003). Questioning the credibility and capacity of community-based resource management. *The Canadian Geographer*, 47(2), 137–150.
- Brown, E.G. (2013). (2013, January 24) *State of the State Address*. Retrieved from https://www.ca.gov/archive/gov39/2013/01/24/news17906/index.html

Bryk, A. S., Hess Jr., A. H., Mirel, J., & Wong, K. (1999). Policy lessons from Chicago's experience with decentralization. *Brookings Papers on Education Policy*, *2*, 67–127.

California Tax Data. (n.d.). What is Proposition 13? Retrieved from

https://www.californiataxdata.com/pdf/Prop13.pdf

- Catterall, J. S., & Brizendine, E. (1985). Proposition 13: Effects on High School Curricula, 1978-1983. *American Journal of Education*, *93*(3), 327–351. http://www.jstor.org/stable/1085384
- Carozza, P. G. (2003). Subsidiarity as a structural principle of international human rights law. *The American Journal of International Law*, 97(1), 38–79.
- Cavallo, M., Elliott, M., Touza, J., & Quintino, V. (2016). The ability of regional coordination and policy integration to produce coherent marine management: Implementing the Marine Strategy Framework Directive in the North-East Atlantic. *Marine Policy*, 68, 108–116.

https://doi.org/10.1016/j.marpol.2016.02.013

CDE (2022a). California Dashboard 2022 Dashboard Toolkit: Getting to Know the California School Dashboard. Retrieved from

https://www.cde.ca.gov/ta/ac/cm/documents/gettingknowdashboard22.pdf

- CDE (2022b). California School Dashboard and System of Support. Retrieved from https://www.cde.ca.gov/ta/ac/cm/
- CDE (2022c). Equity: Fair outcomes, treatment, and opportunities for all students. Retrieved from https://www.cde.ca.gov/qs/ea/
- CDE. (2023). Local Control Funding Formula Overview. Retrieved from https://www.cde.ca.gov/fg/aa/lc/lcffoverview.asp and https://www.cde.ca.gov/fg/aa/pa/pa2223rates.asp

- Cha, S. (2016). Decentralization in educational governance and its challenges in Korea: Focused on policy conflicts between central and local government in education. *Asia Pacific Education Review*, 17(3), 479–487. <u>https://doi.org/10.1007/s12564-016-9448-3</u>
- Chu, C., & Uhler, B. (2016). Cal Facts. Sacramento: Legislative Analyst's Office. Retrieved from https://lao.ca.gov/reports/2016/3511/CalFacts2016.pdf
- Clark, D. (2009). The performance and competitive effects of school autonomy. *Journal of Political Economy*, *117*, 745–783. <u>https://doi-org.ccl.idm.oclc.org/10.1086/605604</u>
- Cilliers, P. (1998). *Complexity and postmodernism: Understanding complex systems*. New York: Routledge.
- Coburn, C. E. (2001). Collective sensemaking about reading: How teachers mediate reading policy in their professional communities. *Educational Evaluation and Policy Analysis*, 23(2), 145–170.
- Coburn, C. E. (2005). Shaping teacher sensemaking: School leaders and the enactment of reading policy. *Educational Policy*, *19*(3), 476–509. <u>https://doi.org/10.1177/0895904805276143</u>
- Colombo, A. (2008). The 'Lombardy Model': Subsidiarity-informed regional governance. *Social Policy & Administration*, 42(2), 177–196.
- Colombo, M. (2013). Pluralism in education and implications for analysis. *Italian Journal of Sociology of Education*, 5(2), 1-16.
- Corcoran, T., & Goertz, M. (1995). Instructional capacity and high performance schools. *Educational Researcher*, 24(9), 27. <u>https://doi.org/10.2307/1177269</u>
- Craig, G. (2007). Community capacity-building: Something old, something new . . .? *Critical Social Policy*, 27(3), 335–359. <u>https://doi.org/10.1177/0261018307078846</u>
- Creswell, J.W. (2003) Research Design: Qualitative, Quantitative, and Mixed Method Approaches. Sage Publications, Thousand Oaks.

- Creswell, J. W., Plano Clark, V. L., Gutmann, M. L., & Hanson, W. E. (2010). Chapter 8: Advanced mixed methods research design. In A. Tashakkori & C. Teddlie (Eds.), *Sage handbook of mixed methods in social & behavioral research* (2nd ed). Los Angeles: SAGE Publications.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed). Los Angeles: SAGE Publications.
- Darling-Hammond, L., & McLaughlin, M. (1995). Policies that support professional development in an era of reform. *Phi Delta Kappan*, 76(8), 597–604.
- David, J. L. (1989). Synthesis of research on school-based management. *Educational Leadership*, 46(8), 45–53.
- Davis, B., & Sumara, D. J. (2006). *Complexity and education: Inquiries into learning, teaching, and research*. Mahwah, N.J: Lawrence Erlbaum Associates.
- Deem, J., Hollander, R., & Brown, A. J. (2015). Subsidiarity in the Australian public sector: Finding pragmatism in the principle. *Australian Journal of Public Administration*, 74(4), 419–434. <u>https://doi.org/10.1111/1467-8500.12175</u>
- Department of Education. (1996). School-based management: Changing roles for principals. Retrieved from Assessment of School-Based Management website: https://www2.ed.gov/pubs/SER/SchBasedMgmt/roles.html
- Drew, J., & Grant, B. (2017). Subsidiarity: More than a principle of decentralization-A view from local government. *Publius: The Journal of Federalism*, 47(4), 522–545. https://doi.org/10.1093/publius/pjx039
- Education Trust-West (2020). Dispelling the myths: Providing opportunity for all through Prop 16. K-12 Education Issues. Retrieved from https://west.edtrust.org/wp-content/uploads/2017/11/ETW-K-12-8.17.pdf

- Elmore, R., & McLaughlin, M. (1981). *Reform and Retrenchment: The Politics of California School Finance Reform*. RAND.
- Elacqua, G., Munevar, I., Sanchez, F., & Santos, H. (2021). The impact of decentralized decisionmaking on student outcomes and teacher quality: Evidence from Colombia. World Development, 141, 105378. <u>https://doi.org/10.1016/j.worlddev.2020.105378</u>
- Eoyang, G. (2006). Human systems dynamics: Complexity-based approach to a complex evaluation.In B. Williams & I. Imam (Eds.), *Systems Concepts in Evaluation: An Expert Anthology*. PointReyes, CA: EdgePress of Inverness American Evaluation Association (AEA).
- Faguet, J. (2004). Does decentralization increase government responsiveness to local needs? *Journal of Public Economics*, 88(3–4), 867–893. <u>https://doi.org/10.1016/S0047-2727(02)00185-8</u>
- Falch, T., & Fischer, J. A. V. (2012). Public sector decentralization and school performance: International evidence. *Economics Letters*, 114(3), 276–279. https://doi.org/10.1016/j.econlet.2011.10.019
- Fetters, M. D., Curry, L. A., & Creswell, J. W. (2013). Achieving Integration in Mixed Methods Designs—Principles and Practices. *Health Services Research*, 48(6 Pt 2), 2134-2156. https://doi.org/10.1111/1475-6773.12117
- Fidan, T., & Balcı, A. (2017). Managing schools as complex adaptive systems: A strategic perspective. *International Electronic Journal of Elementary Education*, 10(1), 11–26. <u>https://doi.org/10.26822/iejee.2017131883</u>
- Follesdal, A. (2013). The principle of subsidiarity as a constitutional principle in international law. *Global Constitutionalism*, 2(01), 37–62. <u>https://doi.org/10.1017/S2045381712000123</u>
- Fukuda-Parr, S., Lopes, C., & Malik, K. (Eds.). (2002). Capacity for development: New solutions to old problems. Earthscan Publications.

- Galiani, S., & Schargrodsky, E. (2002). Evaluating the impact of school decentralization on educational quality. *Economía*, 2(2), 275–314. <u>https://doi.org/10.1353/eco.2002.0004</u>
- Gallegos, E., Fensterwald, J., & Willis, D. (2023). Advocates propose an alternative to refocus budget on Black students. *EdSource*. <u>https://edsource.org/2023/advocates-propose-an-alternative-to-</u> refocus-budget-on-black-students/686668
- Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago, IL: Aldine.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough?: An experiment with data saturation and variability. *Field Methods*, *18*(1), 59–82.

https://doi.org/10.1177/1525822X05279903

- Hagaman, A. K., & Wutich, A. (2017). Cross-cultural research? Another perspective on Guest, Bunce, and Johnson's (2006) landmark study. *Field Methods*, 29(1), 23–41.
- Hall, P. A., & Simeral, A. (2017). *Creating a culture of reflective practice: Capacity-building for schoolwide success*. ASCD.
- Hanushek, E., Link, S., & Woessmann, L. (2013). Does school autonomy make sense everywhere? Panel estimates from PISA. *Journal of Development Economics*, *104*, 212–232.
- Hawkins, M., & James, C. (2018). Developing a perspective on schools as complex, evolving, loosely linking systems. *Educational Management Administration & Leadership*, 46(5), 729–748.
 https://doi.org/10.1177/1741143217711192
- Hega, G. M. (2000). Federalism, subsidiarity and education policy in Switzerland. *Regional & Federal Studies*, 10(1), 1–35. <u>https://doi.org/10.1080/13597560008421107</u>
- Hennink, M. M., Kaiser, B. N., & Marconi, V. C. (2016). Code saturation versus meaning saturation:How many interviews are enough? *Qualitative Health Research*, 27(4), 591–608.

- Herbert, L. J. (2011). Tocqueville's "Administrative decentralization" and the Catholic principle of subsidiarity. *Catholic Social Science Review*, *16*, 241–258.
- Hoffman, N., & Schwartz, R. (2015). *Gold standard: The Swiss vocational education and training system*. Center on International Education Benchmark.

Holland, J. H. (1992). Complex adaptive systems. Daedalus, 121(1), 17-30.

- Holland, J. H. (2006). Studying complex adaptive systems. *Journal of Systems Science and Complexity*, *19*(1), 1–8. <u>https://doi.org/10.1007/s11424-006-0001-z</u>
- Holland, J. H. (2014). *Complexity: A very short introduction* (First edition). Oxford, United Kingdom: Oxford University Press.
- Huffman, D., Thomas, K., & Lawrenz, F. (2008). A collaborative Immersion approach to evaluation capacity building. *American Journal of Evaluation*, 29(3), 358–368. <u>https://doi.org/10.1177/1098214008318798</u>
- Humphrey, D. C., & Koppich, J. E. (2014). *Toward a grand vision: Early implementation of California's Local Control Funding Formula*. Policy Analysis for California Education.
- Humphrey, D. C., & O'Day, J. (2019). *The early implementation of California's system of support*.
 (pp. 1–30). Policy Analysis for California Education. <u>https://edpolicyinca.org/publications/early-implementation-californias-system-support</u>
- Irvine, S., & Price, J. (2014). Professional conversations: A collaborative approach to support policy implementation, professional learning and practice change in ECEC. *Australasian Journal of Early Childhood*, 39(3), 85–93.
- Jacobson, M. J., & Wilensky, U. (2006). Complex systems in education: Scientific and educational importance and implications for the learning sciences. *Journal of the Learning Sciences*, 15(1), 11–34. <u>https://doi.org/10.1207/s15327809jls1501_4</u>

- Jacobson, M. J., & Kapur, M. (2012). Learning environments as emergent phenomena: Theoretical and methodological implications of complexity. In D. Jonassen & S. Land (Eds.), *Theoretical* and foundations of learning environments (Second ed., pp. 303–334). New York: NY: Routledge.
- Johnson, R. C., & Tanner, S. (2018). Money and freedom: The impact of California's school finance reform (pp. 1–12). Retrieved from Learning Policy Institute website: <u>https://learningpolicyinstitute.org/sites/default/files/product-</u> files/Money_Freedom_CA_School_Finance_Reform_BRIEF.pdf
- Kellert, S. R., Mehta, J. N., Eddin, S., & Lichtenfeld, L. L. (2000). Community natural resources management: Promise, rhetoric, and reality. *Society and Natural Resources*, *13*, 705–715.
- Keshavarz, N., Nutbeam, D., Rowling, L., & Khavarpour, F. (2010). Schools as social complex adaptive systems: A new way to understand the challenges of introducing the health promoting schools concept. *Social Science & Medicine*, 70(10), 1467–1474.
- King, M. B., & Newmann, F. M. (2004). Successful professional development must consider school capacity. *Journal of Staff Development*, 25(1), 26–30.
- Klein, E. D. (2017). Autonomy and accountability in schools serving disadvantaged communities. *Journal of Educational Administration*, 55(5), 589–604.
- Koppich, J. E. (2019). Principals' perceptions: Implementing the Local Control Funding Formula.
 (Local Control Funding Formula Research Collaborative, pp. 1–25). Policy Analysis for
 California Education.

https://edpolicyinca.org/sites/default/files/Report_PrincipalsPerceptions_Jan-19.pdf

Krathwohl, D. R. (2009). *Methods of educational and social science research: The logic of methods* (3rd ed). Long Grove, IL: Waveland Press.

- Kubal, M. (2006). Contradictions and constraints in Chile's health care and education decentralization. *Latin American Politics and Society*, 48(4), 105–IV.
- Lawrenz, F., Kollmann, E. K., King, J. A., Bequette, M., Pattison, S., Nelson, A. G., ... Francisco, M. (2018). Promoting evaluation capacity building in a complex adaptive system. *Evaluation and Program Planning*, *69*, 53–60. <u>https://doi.org/10.1016/j.evalprogplan.2018.04.005</u>
- Leer, J. (2016). After the Big Bang: Estimating the effects of decentralization on educational outcomes in Indonesia through a difference-in-differences analysis. *International Journal of Educational Development*, 49, 80–90.
- Leithwood, K., Seashore Louis, K., Anderson, S., & Wahlstrom, K. (2004). *Review of research: How leadership influences student learning* (pp. 1–87). Retrieved from The Wallace Foundation website: <u>https://www.wallacefoundation.org/knowledge-center/Documents/How-Leadership-Influences-Student-Learning.pdf</u>
- Levin, S., & Bradley, K. (2019). Understanding and addressing principal turnover: A review of the research. (pp. 1–27). Learning Policy Institute.
- Luppescu, S., Allensworth, E. M., Moore, P., de la Torre, M., & Murphy, J. (2011). Trends in Chicago's schools across three eras of reform. (pp. 1–112). Consortium on Chicago School Research. <u>https://consortium.uchicago.edu/sites/default/files/2018-</u>

10/Trends_CPS_Full_Report.pdf

- Mann, B. (2014). *Equity and equality are not equal*. The Education Trust. <u>https://edtrust.org/the-equity-line/equity-and-equality-are-not-equal/</u>
- Marshall, G. R. (2007). *Nesting, subsidiarity, and community-based governance beyond the local level.* Institute for Rural Futures.

- Martin, J. (2019). Higher education as a complex adaptive system: Considerations for leadership and scale. In R. Hartzler & R. Blair (Eds.), *Emerging issues in mathematics pathways: Case studies, scans of the field, and recommendations. (Chapter 6).* Charles A. Dana Center at The University of Texas at Austin.
- Martinez-Vazquez, J., Lago-Peñas, S., & Sacchi, A. (2017). The impact of fiscal decentralization: A survey. *Journal of Economic Surveys*, *31*(4), 1095–1129. <u>https://doi.org/10.1111/joes.12182</u>
- Merrouche, O. (2007). *The long term effect of education spending decentralization on human capital in Spain.* (No. 2007:3). Department of Economics, Uppsala University.
- Mischen, P. A., & Jackson, S. K. (2008). Connecting the dots: Applying complexity theory, knowledge management and social network analysis to policy implementation. *Public Administration Quarterly*, 32(3), 314–338.
- Mitleton-Kelly, E. (Ed.). (2003). *Complex systems and evolutionary perspectives on organisations: The application of complexity theory to organisations* (1st ed). Amsterdam: Pergamon.
- Moran, T. (2014). Rebalancing government in Australia to save our federation. Retrieved March 26, 2017, from The Conversation website: <u>https://theconversation.com/rebalancing-government-in-australia-to-save-our-federation-33365</u>
- Morrison, K. (2002). School Leadership and Complexity Theory. United Kingdom: Taylor & Francis. http://site.ebrary.com/id/10639025
- Morrison, K. (2010). Complexity theory, school leadership and management: Questions for theory and practice. *Educational Management Administration & Leadership*, *38*(3), 374–393. https://doi.org/10.1177/1741143209359711
- Mowbray, M. (2005). Community capacity building or state opportunism? *Community Development Journal*, 40(3), 255–264. <u>https://doi.org/10.1093/cdj/bsi040</u>

- Muta, H. (2000). Deregulation and decentralization of education in Japan. *Journal of Educational Administration*, *38*(5), 455–467. <u>https://doi.org/10.1108/09578230010378359</u>
- Myers, D., & Stonehill, R. (1993). School-based management. *Education Research Consumer Guide*, 4.
- *National Teacher and Principal Survey*. (2017). National Center for Education Statistics. <u>https://nces.ed.gov/surveys/ntps/tables/ntps1718_2019082205_a12n.asp</u>
- Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, *37*(3), 1120–1149.
- Oday, J. A. (2002) Complexity, accountability, and school Improvement. Harvard Educational Review, 72(3).
- Odden, A., & Clune, W. (1995). Improving educational productivity and school finance. *Educational Researcher*, 24(9), 6–22. <u>https://doi.org/10.3102/0013189X024009006</u>
- Oswald, L. J. (1995). School-based management. In S.C. Smith & P. K. Piele (Eds.) *School Leadership: Handbook for Excellence*. University of Oregon: Eric Clearinghouse and Educational Management.
- Palmberg, K. (2009). Complex adaptive systems as metaphors for organizational management. *The Learning Organization*, *16*(6), 483–498. <u>https://doi.org/10.1108/09696470910993954</u>
- Parry, T. R. (1997). Achieving balance in decentralization: A case study of educational decentralization in Chile. World Development, 25(2), 211–225.
- Perry, M., Myung, J., & Hough, H. J. (2020). What's next for California schools? A progress report one year after Getting Down to Facts II. (Getting Down to Facts II, pp. 1–24). Policy Analysis for California Education. <u>https://edpolicyinca.org/sites/default/files/2020-</u> 01/r_perry_feb20_1.pdf

Public Advocates (2019). California School Dashboard. Retrieved from https://publicadvocates.org/wp-content/uploads/ca-dashboard-handout-6.18.pdf

- Romney, A. K., Weller, S. C., & Batchelder, W. H. (1986). Culture as consensus: A theory of culture and informant accuracy. *American Anthropologist*, 88(2), 313–338.
- Rossman, G. B., & Wilson, B. L. (1985). Numbers and words: Combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review*, *9*(5), 627-643.

Schools and staffing survey: Table 6. (2011). National Center for Education Statistics. https://nces.ed.gov/surveys/sass/tables/sass1112_2013313_p1s_006.asp

- Schneider, M., & Somers. (2006). Organizations as complex adaptive systems: Implications ofComplexity Theory for leadership research. *The Leadership Quarterly*, *17*(4), 351–365.
- Sebastian, J., Huang, H., & Allensworth, E. (2017). Examining integrated leadership systems in high schools: Connecting principal and teacher leadership to organizational processes and student outcomes. *School Effectiveness and School Improvement*, 28(3), 463–488. https://doi.org/10.1080/09243453.2017.1319392
- Sharpe, F. G. (1996). Towards a research paradigm on devolution. *Journal of Educational Administration*, *34*(1), 4–23. https://doi.org/10.1108/09578239610107138
- Smylie, M. A., & Wenzel, S. A. (2003). The Chicago Annenberg Challenge: Successes, failures, and lessons for the future. (Final technical report of the Chicago Annenberg Research Project).
 Consortium on Chicago School Research.
- Spillane, J. P., Reiser, B. J., & Reimer, T. (2002). Policy implementation and cognition: Reframing and refocusing implementation research. *Review of Educational Research*, 72(3), 387–431.
- Stacey, R. (2010). *Complexity and organizational reality: Uncertainty and the need to rethink management after the collapse of investment capitalism* (2nd ed). New York: Routledge.

- Steen., M., Twist, M., Fenger, M., & Le Cointre, S. (2013). Complex causality in improving underperforming schools: A complex adaptive systems approach. *Policy and Politics*, 41(4), 551–567.
- Sullivan, T. (2011). Embracing complexity. Harvard Business Review, 89(9), 89-92.
- Sutcher, L., Podolsky, A., Kini, T., & Shields, P. M. (2018). *Learning to lead: Understanding California's learning system for school and district leaders* (pp. 1–76). Learning Policy Institute.
- Tiebout, C. M. (1956). Pure theory of local expenditures. Journal of Political Economy, 64, 416–424.
- Timar, T. B. (1994). Politics, policy, and categorical aid: New inequities in California school finance. *Educational Evaluation and Policy Analysis*, *16*(2), 143–160.
- The World Bank. (2017). Intergovernmental Fiscal Relations. Retrieved from The World Bank Group website: http://www1.worldbank.org/publicsector/decentralization/fiscal.htm
- Turcotte, M. F., & Pasquero, J. (2001). The paradox of multi-stakeholder collaborative roundtables. *Journal of Applied Behavioural Science*, *37*, 447–464.
- Van Meter, D. S., & Van Horn, C. E. (1975). The policy implementation process: A conceptual framework. *Administration & Society*, 6(4), 445–483.
- Varga, L. (2018). Chapter 25: Mixed methods research: A method for complex systems. In E.
 Mitleton-Kelly, A. Paraskevas, & C. Day (Eds.), *Handbook of research methods in complexity science: Theory and applications*. Retrieved from

http://search.ebscohost.com/login.aspx?direct=true&scope=site&db=nlebk&db=nlabk&AN=169
6112

Wahlstrom, K., Seashore, K., Leithwood, K., & Anderson, S. (2010). *Investigating the link to improved student learning: Executive summary of research findings* (pp. 1–34). Retrieved from The Wallace Foundation website: <u>http://hdl.handle.net/11299/140884</u>

- Weick, K. E. (1982). Administering education in loosely coupled schools. *The Phi Delta Kappa International*, *63*(10), 673–676.
- Winkler, D. R., & Gershberg, A. I. (2000). Educational decentralization in Latin America: The effects on the quality of schooling. (No. LCSHD Paper Series No. 59). The World Bank.
- Wissler, D., & Ida Ortiz, F. (1986). The decentralization process of school systems: A review of the literature. Urban Education, 21(3), 280–204.
- Wohlstetter, P., & Buffett, T. (1992). Decentralizing dollars under school-based management: Have policies changed? *Educational Policy*, *6*(1), 35–54.
- Wohlstetter, P., & Mohrman, S. A. (1995). Assessment of School-Based Management. *Department of Education*.
- Wößmann, L. (2003). Schooling resources, educational institutions and student performance: The international evidence. Oxford Bulletin of Economics and Statistics, 65(2), 117–170. https://doi.org/10.1111/1468-0084.00045
- Ylimaki, R. M., Jacobson, S., Johnson, L., Klar, H. W., Nino, J., Orr, M. T., & Scribner, S. (2022). Successful principal leadership in challenging American public schools: A brief history of ISSPP research in the United States and its major findings. *Journal of Educational Administration*, 60(1), 101–117. <u>https://doi.org/10.1108/JEA-04-2021-0087</u>

Zimmermann, A. (2014). Subsidiarity and a free society. *Policy*, 30(4), 15–18.

Appendix A

Survey

You are invited to participate in this research project. Volunteering will not benefit you directly, but you will further our collective understanding of how local control influences school site principals' decision-making. If you decide to volunteer, you will complete an online questionnaire and volunteer for a virtual interview. The online survey will take approximately 20 minutes. If you volunteer for the interview, it will be scheduled at your convenience and will take 30-45 minutes of your time. Volunteering for this study involves no more risk than what a typical person experiences on a regular day. Your involvement is entirely up to you. You may withdraw at any time for any reason.

Consent: Selecting yes means that you understand the survey consent information and you voluntarily agree to participate in this portion of the study.

*I agree to participate in the research study. I understand the purpose and nature of this study, and I am participating voluntarily. I know that I can withdraw from the study at any time without penalty or consequences.

1. No

2. Yes

Condition: No Is Selected. Skip To: End of Survey.

End of Survey Message:

Thank you for your participation. If you have any questions, please email the researcher at **adrienne.ortega@cgu.edu**.

Survey Flow

Block: Consent (1 Question) Standard: Demographics (6 Questions) Standard: Distributive Leadership & Local Decision-Making (24 Questions) Standard: Principal Leadership (12 Questions) Standard: Clearly Defined Responsibilities (7 Questions) Standard: Stable Institutions and Structure (14 Questions) Standard: Capacity Building (11 Questions) Standard: End of Survey (3 Questions)

Page Break

Start of Block: Consent

Q1.1 Thank you for your interest in volunteering for this research. Volunteering will further our collective understanding of how local control influences school site principals' decision-making. If you volunteer, there is an on-line survey and the opportunity to volunteer for a virtual interview.

This survey will take approximately 20-25 minutes. Volunteering for this study involves no more risk than what a typical person experiences on a regular day. Your involvement is entirely up to you. You may withdraw at any time for any reason.

Consent: Selecting yes means that you understand the survey consent information, and you voluntarily agree to participate in this portion of the study.

I agree to participate in the research study. I understand the purpose and nature of this study, and I am participating voluntarily. I know that I can withdraw from the study at any time without penalty or consequences.

• No (1)

• Yes (2)

Skip To: End of Survey If Q1.1 = 1

End of Block: Consent

Start of Block: Demographics

Q2.1 Which category includes your age?

20-29 (1)
30-39 (2)
40-49 (3)
50-59 (4)
60-69 (5)
70 or older (6)

Q2.2 What is your gender?

- Male (1)
- Female (2)

• Other (specify) (3) _____

• Prefer not to say (4)

Q2.3 What is the highest level of school you have completed or the highest degree you have attained?

• Bachelor's Degree (e.g., BA, BS) (1)

• Graduate Degree (e.g., MA, MS) (2)

• Doctorate (e.g., PhD, EdD) (3)

• Other (please specify) (4) _____

Q2.4 How many years of work experience do you have?

• As an educator: (1) _____

• In your current school district: (3)

• Working as a principal at your current school: (2)

• Working as a principal in California: (4)

Q2.5 I am currently the Principal at a/an: • Elementary School (4) • Middle School / Junior High (5) • High School (6) • Other: (7)

Q2.6 I am the Principal at:

End of Block: Demographics

Start of Block: Distributive Leadership & Local Decision-Making

Q3.1 California's accountability system is helping our district refine improvement strategies.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.2 My district has moved away from hierarchical models of management.

• Strongly disagree (1)

- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
- Q3.3 District office personnel (i.e., coordinators, directors, assistant superintendents) actively solicits input from school site principals before major decisions are made.
 - Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q3.4 The communication between the school district office and the school site is open.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q3.5 My school district is supportive of change.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q3.6 All district employees are encouraged to take initiative and make decisions on their own.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)

• Strongly agree (5)

Q3.7 Changes suggested by site employees to the district office are regularly implemented.

Strongly disagree (1)
Somewhat disagree (2)
Neither agree nor disagree (3)
Somewhat agree (4)

• Strongly agree (5)

Q3.8 My district encourages alternative ways of policy implementation, based on the needs for my school site.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.9 My school district encourages and nurtures innovative thinking.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.10 Principals are encouraged to make suggestions for improvement.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.11 In my district, there are systems in place that provide the opportunity for knowledge to be shared across organizational levels.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.12 My district encourages alternative ways of policy implementation, based on the needs for my school site.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.13 To what extent do you regularly engage in the following:

| | Never (1) | Rarely (2) | About half the time (3) | Most of the time (4) | A great deal (5) |
|----------------------------------------------------------|--------------|------------|----------------------------|-------------------------|---------------------|
| Development of the SPSA (1) | 0 | 0 | 0 | 0 | 0 |
| Participation in committees for district planning (2) | 0 | 0 | 0 | 0 | 0 |
| Development of the LCAP (3) | 0 | 0 | 0 | 0 | 0 |

Q3.14 Who is the primary decision-maker in each area where the primary decision-maker is defined as the one who makes the final decision?

| | You, as principal (1) | Members of the school leadership team (2) | Teachers or Other Staff (not part of the leadership team) (3) | District-level personnel (i.e., Coordinators, Directors, Assistant Superintendents, or Superintendent) (5) | School governing board (i.e., Board of Education or Board of Trustees) (7) |
|---------------------------------------------------------------------------|-----------------------------|----------------------------------------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| School vision or mission statements (1) | 0 | 0 | 0 | 0 | 0 |
| Appointing, hiring, or dismissing teachers (2) | 0 | 0 | 0 | 0 | 0 |
| Appointing, hiring, or dismissing other staff (3) | 0 | 0 | 0 | 0 | 0 |
| Designating grade level assignments (4) | 0 | 0 | 0 | 0 | 0 |
| Allocating school site budget funds (5) | 0 | 0 | 0 | 0 | 0 |
| Creation of professional development plan for school site (6) | 0 | 0 | 0 | 0 | 0 |

Q3.15 Who is the primary decision-maker in each area where primary decision-maker is defined as the one who makes the final decision?

| | You, as principal (1) | Members of the school leadership team (2) | Teachers or Other Staff (not part of the leadership team) (3) | District-level personnel (i.e., Coordinators, Directors, Assistant Superintendents) (5) | School governing board (i.e., Board of Education or Board of Trustees) (7) |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------|------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Determining course content (1) | 0 | 0 | 0 | 0 | 0 |
| Deciding on curriculum or supplementary materials (2) | 0 | 0 | 0 | 0 | 0 |
| Establishing student assessment policies (3) | 0 | 0 | 0 | 0 | 0 |
| Instituting interventions for students (4) | 0 | 0 | 0 | 0 | 0 |
| Determining improvements or renovations to the campus infrastructure (e.g., classrooms, restrooms) (5) | 0 | 0 | 0 | 0 | O |

Q3.16 I provide staff with opportunities to actively participate in decision-making.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q3.17 I feel prepared to work with my site's leadership team to facilitate decision-making together.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q3.18 I communicate regularly with my staff about the school vision, objectives, and initiatives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q3.19 I actively solicit input or feedback from my staff before major decisions are made.

Strongly disagree (1)
Somewhat disagree (2)
Neither agree nor disagree (3)
Somewhat agree (4)
Strongly agree (5)

Q3.20 I communicate regularly with my staff about the school vision, objectives, and initiatives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)
- Q3.21 I encourage and nurture innovative thinking amongst my staff.
 - Strongly disagree (1)
 - Somewhat disagree (2)
 - Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.22 I feel supported by my supervisor(s) to experiment with policies or procedures to support student outcomes.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q3.23 When I receive feedback from my supervisor(s) this information influences my decisionmaking.

> • Strongly disagree (1) • Somewhat disagree (2) • Neither agree nor disagree (3) • Somewhat agree (4) • Strongly agree (5)

| Q3.24 To what extent do the following factors limit or support you in your decision-making? | | | | | | |
|---------------------------------------------------------------------------------------------|--------------|------------------------|--------------------------|-----------------|--|--|
| | Limit (1) | Somewhat limits (2) | Somewhat supports (3) | Supports (4) | | |
| School budget (1) | 0 | 0 | 0 | 0 | | |
| School board policy (2) | 0 | 0 | 0 | 0 | | |
| State or federal regulation and policy (3) | 0 | 0 | 0 | 0 | | |
| | | | | | | |

0

0

0

0

Classified or credentialed staff -union

contracts (4)

| Professional development opportunities for myself (6) | 0 | 0 | 0 | 0 |
|-----------------------------------------------------------------|---|---|---|---|
| Professional development opportunities for my staff (7) | 0 | 0 | 0 | 0 |
| High workload and level of responsibility in my position (8) | 0 | 0 | 0 | 0 |
| Shared leadership (9) | 0 | 0 | 0 | 0 |
| Staff evaluation processes (10) | 0 | 0 | 0 | 0 |
| School district goals or vision (11) | 0 | 0 | 0 | 0 |
| District office mandates (12) | 0 | 0 | 0 | 0 |
| Shortage of qualified and/or high- performing teachers (13) | 0 | 0 | 0 | 0 |
| Shortage of support personnel (14) | 0 | 0 | 0 | 0 |
| Feedback from direct supervisor(s) (15) | 0 | 0 | 0 | 0 |

Inadequate or poor-quality infrastructure (e.g., building, campus size, lighting) (16)

End of Block: Distributive Leadership & Local Decision-Making

0

0

0

0

Start of Block: Principal Leadership

Q4.1 Do you have a school site leadership team, outside of a school site council that is responsible for leading the school decisions involving resources, curriculum, assessment or other strategic decisions?

0 No (1)

• Yes (2)

Skip To: Q4.5 If Q4.1 = 1

Q4.2 How are the members of the school management or leadership team appointed? (Select all that apply).

| □ Volunteered | l to be | on the | team | (1) |) |
|---------------|---------|--------|------|-----|---|
|---------------|---------|--------|------|-----|---|

Asked by site administration to be a part of the team (2)

Required to be on the team (3)

Q4.3 On average, how often does the leadership team meet?

Other: (4) _____

• Less than once a month (1)

• 1 time a month (2)

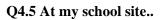
• 2-3 times a month (5)

• Weekly (3)

• More than once a week (4)

Q4.4 Which of the following best describes your role(s) on the leadership team? (Choose all that apply.)

| | Never (1) | Sometimes (2) | About half the time (3) | Most of the time (4) | Always (5) |
|---------------------------------------------------------------------------------------------------------------|--------------|---------------|-------------------------------|----------------------------|---------------|
| Manager or supervisor: Responsible for overseeing all activities within a team. (1) | 0 | 0 | 0 | 0 | 0 |
| Strategist: Responsible for deciding how to approach tasks and develop a plan to accomplish them. (2) | 0 | 0 | 0 | 0 | 0 |
| Communicator: Responsible for distributing information to team members and stakeholders. (3) | 0 | 0 | 0 | 0 | 0 |
| Organizer: Responsible for keeping track of and structuring various tasks, employees and documents. (4) | 0 | 0 | 0 | 0 | 0 |
| Goal setter: Responsible for determining the goals that members will work toward. (5) | 0 | 0 | 0 | 0 | 0 |



| | Strongly disagree (1) | Somewhat disagree (2) | Neither agree nor disagree (3) | Somewhat agree (4) | Strongly agree (5) |
|------------------------------------------------------------|--------------------------|--------------------------|--------------------------------------|-----------------------|-----------------------|
| we have a collaborative decision-making culture. (1) | 0 | 0 | 0 | 0 | 0 |
| there is a culture of sharing successes. (2) | 0 | 0 | 0 | 0 | 0 |

Q4.6 I am confident in supporting my teachers in reaching school and district goals.

Strongly disagree (1)
Somewhat disagree (2)
Neither agree nor disagree (3)
Somewhat agree (4)
Strongly agree (5)

Q4.7 I am able to allocate human, financial, and physical resources equitably at my school site.

- Strongly disagree (1)
 Somewhat disagree (2)
 Neither agree nor disagree (3)
 Somewhat agree (4)
 - Strongly agree (5)

Q4.8 I am comfortable including stakeholders in all decision-making opportunities.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q4.9 I feel prepared to make decisions related to student achievement.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q4.10 I have the support to make decisions necessary for accomplishing tasks.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q4.11 Briefly describe any innovative and effective instructional initiatives you are or have implemented within the past two years.

Q4.12 In the past month, on average, how often have other principals sought your advice when making decisions about their school site?

- Almost never (1)
- A few times a month (2)
- A few times each week (3)
 - Almost daily (4)

End of Block: Principal Leadership

Start of Block: Clearly Defined Responsibilities

Q5.1 Are the district-wide accountability measures and goals clearly defined throughout your district, such as those listed in your district's LCAP?

• No (1)

• Yes (2)

Display This Question: If O5.1 = 2 Q5.2 Briefly describe your district's accountability measures and goals.

Q5.3 There is alignment among district goals, strategies, and resource allocation.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q5.4 In your role as principal, on average yearly, what percentage of your time is spent on the following tasks? (Responses should add to 100%.) Administrative tasks and meetings (i.e., reports, compliance items, student discipline, schedules/timetables, classified staff evaluations). : (1) Organizational management tasks and meetings (i.e., strategic planning, school budget, hiring personnel, monitoring safe school environment) : (2) Day-to-day instruction (i.e., coaching teachers, evaluating teachers, implementing professional development) : ____ (3) Instructional program evaluation (i.e., evaluating curriculum, planning professional development, use assessment for planning instruction) : _____ (4) Interactions with internal school members (i.e., parent meetings, SSC/ELAC, PTSA, parent nights) :_____(5) Interactions with external school members (i.e., communicating with district office to obtain resources): (6)

Total : _____

Display This Question: If If How many years of work experience do you have? Working as a principal in California: Is Greater Than or Equal to 7 Carry Forward All Choices - Displayed & Hidden from ''Q5.4''

Q5.5 How has the amount of time spent on these tasks changed since the LCFF has been implemented?

| | None at all (30) | A little (31) | A moderate amount (32) | A lot (33) | A great deal (34) |
|--|---------------------|---------------|---------------------------|---------------|-------------------------|
|--|---------------------|---------------|---------------------------|---------------|-------------------------|

| Administrative tasks and meetings (i.e., reports, compliance items, student discipline, schedules/timetables, classified staff evaluations). (x1) | 0 | 0 | 0 | 0 | 0 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| Organizational management tasks and meetings (i.e., strategic planning, school budget, hiring personnel, monitoring safe school environment) (x2) | 0 | 0 | 0 | 0 | 0 |
| Day-to-day instruction (i.e., coaching teachers, evaluating teachers, implementing professional development) (x3) | 0 | 0 | 0 | 0 | 0 |
| Instructional program evaluation (i.e., evaluating curriculum, planning professional development, use assessment to for planning instruction) (x4) | 0 | 0 | 0 | 0 | 0 |
| Interactions with internal school members (i.e., parent meetings, SSC/ELAC, PTSA, parent nights) (x5) | 0 | 0 | 0 | 0 | 0 |

Interactions with external school members (i.e., communicating with district office to obtain resources) (x6)

Q5.6 My district has defined processes and tools to address the top priorities in the district.

• Strongly disagree (1)

0

0

0

0

0

- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q5.7 Given my district's priorities, it is clear who is responsible and who has the authority to make certain decisions.

Strongly disagree (1)
Somewhat disagree (2)
Neither agree nor disagree (3)
Somewhat agree (4)
Strongly agree (5)

End of Block: Clearly Defined Responsibilities

Start of Block: Stable Institutions and Structure

Q6.1 The district holds all employees accountable to its vision or mission.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.2 School site funding is equitable across schools in my district.

• Strongly disagree (1)

- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q6.3 My district has a sustained vision for school development.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.4 My district engages stakeholders at all levels to promote coherence on initiatives.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q6.5 My district uses data to improve practice throughout every department.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.6 My district collects data on a variety of practices, in addition to state accountability measures.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.7 My district has clearly defined formalized feedback loops.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.8 My district obtains external resources to further support district initiatives.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.9 My district attempts to manage external influences to support continued internal development.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.10 My school site's goals and measures align with the district priorities.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q6.11 I am held accountable by my supervisor(s) for decisions made for my school site.

• Strongly disagree (1)

- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

| Q6.13 My suj | Strongly disagree (1) | Somewhat disagree (2) | Neither agree nor disagree (3) | Somewhat agree (4) | Strongly agree (5) |
|-------------------|--------------------------|--------------------------|-----------------------------------|-----------------------|-----------------------|
| Budgets (1) | 0 | 0 | 0 | 0 | 0 |
| Curriculum (2) | 0 | 0 | 0 | 0 | 0 |
| Staffing (3) | 0 | 0 | 0 | 0 | 0 |
| Goals (4) | 0 | 0 | 0 | 0 | 0 |
| Outcomes (5) | 0 | 0 | 0 | 0 | 0 |

| Q6.14 How long after an important decision for your school site is made, do you debrief the |
|---------------------------------------------------------------------------------------------|
| outcome with the following personnel? |

| | Never | 1 week later | 1 month | 1 year | More than 1 year |
|-----------|-------|--------------|---------|--------|------------------|
| | (4) | (5) | (6) | (7) | later (8) |
| Staff (1) | 0 | 0 | 0 | 0 | 0 |

| Supervisor(s) (2) | 0 | 0 | 0 | 0 | 0 |
|-------------------------------|---|---|---|---|---|
| District Office Personnel (3) | 0 | 0 | 0 | 0 | 0 |
| Superintendent (4) | 0 | 0 | 0 | 0 | 0 |

Q6.15 How would you best describe the work environment at your school site?

• Chaotic: constant change, no manageable pattern exists (1)

• Complex: adapting to changing and evolving situations, where agents interact and systemwide patterns emerge (2)

• Complicated: clear cause/effect relationships, predictable, problems solved with systems and processes (3)

End of Block: Stable Institutions and Structure

Start of Block: Capacity Building

| | ionowing topics: | | | | | | | | |
|---------------------------------------|-----------------------------|--------------------------|--------------------------------------|-----------------------|-----------------------|--|--|--|--|
| | Strongly disagree (1) | Somewhat disagree (2) | Neither agree nor disagree (3) | Somewhat agree (4) | Strongly agree (5) | | | | |
| Board policies and regulations (1) | 0 | 0 | 0 | 0 | 0 | | | | |
| Union contracts (2) | 0 | 0 | 0 | 0 | 0 | | | | |
| State statutes (3) | 0 | 0 | 0 | 0 | 0 | | | | |

Q7.1 My district provides regular professional development opportunities for administrators on the following topics:

| The Local Control Accountability Plan (LCAP) and the Local Control Funding Formula (LCFF) (4) | 0 | 0 | 0 | 0 | 0 |
|--------------------------------------------------------------------------------------------------------|---|---|---|---|---|
| Decision-making skills and strategies (5) | 0 | 0 | 0 | 0 | 0 |
| Collaborative approaches (6) | 0 | 0 | 0 | 0 | 0 |
| Instructional Leadership (7) | 0 | 0 | 0 | 0 | 0 |
| Operational Leadership (8) | 0 | 0 | 0 | 0 | 0 |

Q7.2 My district values staff development at all levels.

- Strongly disagree (1)
- Somewhat disagree (2)
- Neither agree nor disagree (3)
 - Somewhat agree (4)
 - Strongly agree (5)

Q7.3 My district encourages staff development for all administrators.

• Strongly disagree (1)

- Somewhat disagree (2)
- Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q7.4 My district provides incentives and encouragement to develop knowledge and skills.

• Strongly disagree (1)

• Somewhat disagree (2)

• Neither agree nor disagree (3)

• Somewhat agree (4)

• Strongly agree (5)

Q7.5 Capacity building opportunities within the district are relevant to my goals.

Strongly disagree (1)
Somewhat disagree (2)
Neither agree nor disagree (3)
Somewhat agree (4)
Strongly agree (5)

Q7.6 My district provides regular time for principals to meet and collaborate on various issues affecting our school sites.

o No (24)

• Yes (25)

Skip To: Q7.8 If Q7.6 = 24

Q7.7 How often does your district provide time for principals to collaborate?

• Less than once a month (1)

• Once a month (2)

• 2-3 times a month (3)

• Once a week (4)

• Other: (5) ____

Q7.8 Principals in my district meet to collaborate independently outside of scheduled district administration meetings.

o No (24)

• Yes (25)

Skip To: Q7.10 If Q7.8 = 24

Q7.9 How often do principals collaborate outside of scheduled district meetings?

• Less than once a month (1)

• Once a month (2)

• 2-3 times a month (3)

• Once a week (4)

• Other: (5) _____

Q7.10 From which sources do you most often seek information when making decisions for your school site (select all that apply):

| | School | site | leadership | team | (1) |
|--|--------|------|------------|------|-----|
|--|--------|------|------------|------|-----|

Other school site staff members (2)

□ My supervisor(s) (3)

District office personnel (4)

District website (i.e., board policy, department information) (5)

The Local Control Accountability Plan (LCAP) (6)

The Single Plan for Student Achievement (SPSA) (7)

- Other principals in my district (8)
 - □ Mentor or coach (9)

□ Professional organizations (i.e., ACSA) (10)

Professional development opportunities or conferences (17)

- **Research articles or books (11)**
- □ University experts (12)
- □ Social media (i.e., Facebook, Twitter) (13)
- **Education news (i.e., EdWeek, EdSource) (14)**

Other: (15)

None (16)

Carry Forward Selected Choices from "Q7.10"

Q7.11

| On average, how | Once a year (1) | Every few months (2) | Monthly (3) | Weekly (4) | Two or more times a week (5) |
|--------------------------------------------------------------------------|--------------------|-------------------------|----------------|---------------|------------------------------------|
| School site leadership team (x1) | 0 | 0 | 0 | 0 | 0 |
| Other school site staff members (x2) | 0 | 0 | 0 | 0 | 0 |
| My supervisor(s) (x3) | 0 | 0 | 0 | 0 | 0 |
| District office personnel (x4) | 0 | 0 | 0 | 0 | 0 |
| District website (i.e., board policy, department information) (x5) | 0 | 0 | 0 | 0 | 0 |
| The Local Control Accountability Plan (LCAP) (x6) | 0 | 0 | 0 | 0 | 0 |

| The Single Plan for Student Achievement (SPSA) (x7) | 0 | 0 | 0 | 0 | 0 |
|-------------------------------------------------------------------|---|---|---|---|---|
| Other principals in my district (x8) | 0 | 0 | 0 | 0 | 0 |
| Mentor or coach (x9) | 0 | 0 | 0 | 0 | 0 |
| Professional organizations (i.e., ACSA) (x10) | 0 | 0 | 0 | 0 | 0 |
| Professional development opportunities or conferences (x17) | 0 | 0 | 0 | 0 | 0 |
| Research articles or books (x11) | 0 | 0 | 0 | 0 | 0 |
| University experts (x12) | 0 | 0 | 0 | 0 | 0 |
| Social media (i.e., Facebook, Twitter) (x13) | 0 | 0 | 0 | 0 | 0 |
| Education news (i.e., EdWeek, EdSource) (x14) | 0 | 0 | 0 | 0 | 0 |
| Other: (x15) | 0 | 0 | 0 | 0 | 0 |
| None (x16) | 0 | 0 | 0 | 0 | 0 |

End of Block: Capacity Building

Start of Block: End of Survey

Q8.1 Thank you for your time in completing this survey!

You are now invited to participate in a follow-up interview. Phase 2 includes virtual interviews with sitting principals to expand on some of this study's themes, such as what successful implementation of the LCFF looks like and what benefits or unintended consequences of the LCFF have been.

Participation is completely voluntary. If you decide not to participate, there will be no adverse consequences. You may stop participating at any time. If you volunteer and are selected, it will be scheduled at your convenience and take approximately 30-45 minutes of your time. If you are interested, please select yes for more information. Would you be willing to participate in a virtual interview via Zoom?

> • No (1) • Yes (2)

Display This Question: If O8.1 = 2

Q8.2

Thank you for your willingness to participate in a virtual interview.

By submitting your name, email, and phone number, you indicate that you have read the study's description, and you agree to the researcher contacting you. The researcher will maintain the confidentiality of the data.

Please include your email and phone number below.

• Name: (4) _____

• Email: (1) _____

• Phone Number: (2) _____

Display This Question: If O8.1 = 1

Q8.3 Thank you for your participation. If you have any questions, please email the researcher at adrienne.ortega@cgu.edu.

Q1 You have agreed to participate in an interview as a part of this research project. Volunteering will not benefit you directly, but you will help the investigator improve our collective understanding of how local control influences school principals' decision-making. If you decide to volunteer, the virtual interview will be scheduled at your convenience and take approximately 30-45 minutes of your time. Volunteering for this study involves no more risk than what a typical person experiences on a regular day. Your involvement is entirely up to you. You may withdraw at any time for any reason.

I agree to participate in the research study. I understand the purpose and nature of this study, and I am participating voluntarily. I understand that I can withdraw from the study at any time without any penalty or consequences.

1. o No (1)

2. o Yes (2)

Skip To: End of Survey If You have agreed to participate in an interview as a part of this research project. Volunteering w... = 1

Q2 I grant permission for the interview session to be recorded and saved for the purpose of review by the researcher.

1. o No (1)

2. o Yes (2)

Skip To: End of Survey If I grant permission for the interview session to be recorded and saved for the purpose of review... = 1

Q3 I grant permission for the data generated from this interview to be used in the researcher's publications on this topic with all names and identifying information removed.

1. o No (1) 2. o Yes (2)

Skip To: End of Survey If I grant permission for the data generated from this interview to be used in the researcher's publications = 1

Q5 Please type your full name in the box below to indicate agreement to participate in this study.

End of Survey Message:

Thank you for your willingness to participate.

Please click on this link to schedule an interview [Insert Link Here]

If you have any questions, please email the researcher at adrienne.ortega@cgu.edu.

Appendix B

Semi-structured Interview Questions for School Principals

Questions for the semi-structured interview will be created based on quantitative results with questions developed in such areas as knowledge of local control, decision-making, and CAS.

Background Information

Please state your name, current position, school, and school district. How long have you been in this position?

Decentralization and Local Control

How would you describe the school district you work in, as centralized, decentralized or a mix of decision-making processes?

What types of decisions, at your school site, do you feel you have the most control or authority over and why? Additional questioning in this area would probe specific responses, such as hiring, professional development, etc.

How would you define the LCFF and what does successful implementation of the LCFF look like?

What does local control, in the context of the Local Control Funding Formula and Local Control Accountability Plan mean to decisions you make at your site?

If you weren't a principal before the LCFF, but worked in schools, please describe shifts you have seen since the LCFF, based on your observations during those school-based experiences. Has the LCFF targeting specific student populations, shifted any parts of your role as a principal? Has the LCFF and the LCAP process of collaboratively building a local plan shifted your role as a principal in the development of the district plan or in your own planning?

Have the LCFF and the LCAP processes led to changes in how you make decisions about planning, hiring, instruction or other areas for your site?

Has the model changed with the implementation of the LCFF? And how?

What challenges do you continue to face with this reform? And what solutions would you recommend?

Principal Roles and Barriers

Who at your school site has significant responsibility for decision-making in regards to budget allocation, staffing decisions, short or long-term goals?

Please describe a time when you faced a significant organizational barrier to succeeding with an important project or activity at the school site. Describe the barrier and the process you used to arrive at your solution.

How has the degree to which you are held accountable or responsible for decisions changed since the LCFF (since 2013)?

Complex Adaptive Systems-Feedback loops, Self-organization, and Emergence

Based on your experience as a principal, describe a complex situation needing a resolution at your school site? What factors affect the level of complexity of the situation? What factors were more important than the others?

How do you get feedback on work and progress at the school site? And from whom do you receive this feedback and how does it influence your decision-making processes? How do you describe your experience with the LCFF? What are the benefits you have observed or what have you seen emerge from this legislation? What are the unintended consequences? What recommendations do you have for future implementation?

Appendix C

Semi-structured Interview Questions for District Staff

Questions for the semi-structured interview will be created based on quantitative results with questions developed in such areas as knowledge of local control, decision-making, and CAS.

Background Information

Please state your name, current position, and school district. How long have you been in this position? What other position did you hold prior to this one?

Decentralization and Local Control

How would you describe the longevity of the superintendent, union governance, school board, and site administration in this district?

How would you describe the school district you work in, as centralized, decentralized, or a mix of decision-making processes? Why do you describe your organization as centralized/decentralized or both?

(For those who have been in the position before the LCFF implementation) Has the model changed with the implementation of the LCFF? And how?

What types of decisions do you feel you have the most control or authority over and why? How would you define the LCFF, and what does successful implementation of the LCFF look like?

In the context of the Local Control Funding Formula and Local Control Accountability Plan, what does local control mean to decisions you make at the district level?

What role do principals play in the LCAP planning process?

What challenges do you continue to face with this reform? And what solutions would you recommend?

Complex Adaptive Systems: Feedback Loops, Self-Organization and Emergence

Based on your experience in your current role, describe a complex situation needing a resolution? What factors affect the level of complexity of the situation? What factors were more important than the others?

How do you get feedback on work and progress related to the LCFF? And from whom do you receive this feedback and how does it influence your decision-making processes?

How do you describe your experience with the LCFF? What are the benefits you have observed or what have you seen emerge from this legislation? What are the unintended consequences? What recommendations do you have for future implementation?

Appendix D

IRB Approval



AGREEMENT TO PARTICIPATE IN AN INQUIRY INTO THE DECISION- MAKING OF CALIFORNIA'S PRINCIPALS (IRB # 3894)

You are invited to participate in a research project. Volunteering will further our collective understanding of how local control influences school site principals' decision making. The online survey will take approximately 20-25 minutes of your time. If you decide to volunteer, you will be asked to complete an online questionnaire and volunteer for a follow-up interview. If you volunteer for the interview, it will be scheduled at your convenience and will take 30-45 minutes. Volunteering for this study involves no more risk than what a typical person experiences on a regular day. Your involvement is entirely up to you. You may withdraw at any time for any reason. Please continue reading for more information about the study.

STUDY LEADERSHIP: This research project is led by Adrienne Ortega-Magallanes of the Claremont Graduate University, who is being supervised by Dr. Thomas Luschei, Professor at Claremont Graduate University.

PURPOSE: The purpose of this study is to understand in what ways local control, as envisioned by the Local Control Funding Formula (LCFF), influences school site principals' decision making and the perceptions they have of their decision-making authority or processes.

ELIGIBILITY: You must be a public school principal, currently holding a principalship in the state of California.

PARTICIPATION: During the first phase of the study, you will be asked to complete an online survey. The online survey will take about 20-25 minutes.

RISKS OF PARTICIPATION: The risks that you run by taking part in this study are minimal. If you feel discomfort at responding to some questions, please feel free to skip the question.

BENEFITS OF PARTICIPATION: I do not expect the study to benefit you personally. This research will lead to a better understanding of the ways local control influences school site principals' decision making and the perceptions they have of their decision making authority or processes, and how principals may be empowered to be active participants in LCFF implementation.

COMPENSATION: You will not be directly compensated for participating in this study.

VOLUNTARY PARTICIPATION: Your participation in this study is entirely voluntary and confidential. You may stop or withdraw from the study or refuse to answer any particular question for any reason at any time without any repercussions. Your decision whether or not to participate will not affect your current or future connection with anyone at CGU.

CONFIDENTIALITY: Your privacy will be protected in all papers, books, talks, posts, or stories resulting from this study. All survey data will be reported in aggregate, with no individual results being reported. To protect the confidentiality of your responses, I will delete all answers from the online survey database once the study is complete. The data file will be stored on a password-protected computer, and any backup data files will be held in a secure location, without identifying information.

FURTHER INFORMATION: If you have any questions or would like additional information about this study, please contact Adrienne Ortega-Magallanes at adrienne.ortega@cgu.edu. You may also contact Dr. Tom Luschei at Thomas.Luschei@cgu.edu. The CGU Institutional Review Board has certified this project as exempt. If you have any ethical concerns about this project or your rights as a human subject in research, you may contact the CGU IRB at (909) 607-9406 or at irb@cgu.edu. A copy of this form will be given to you if you wish to keep it.

CONSENT: Please follow this link to give your consent and complete the survey. [Insert Link Here]



Appendix E

Letter of Introduction

Re: Permission to Conduct Research Study

Dear [Name of Superintendent]:

I am writing to request permission to conduct a research study in your school district. I am currently enrolled in the Ph.D. program in Education Policy, Evaluation and Reform at Claremont Graduate University (CGU), and I am in the process of conducting research for my Doctoral Dissertation under the supervision of Dr. Kyo Yamashiro, Assistant Professor in the Department of Educational Leadership and Administration at Loyola Marymount University. My study is entitled "A Quantitative and Qualitative Inquiry into the Decision Making of Public School Principals During the Era of Local Control in California." This research aims to understand in what ways local control, as envisioned by the Local Control Funding Formula (LCFF), influences school site principals' decision making and the perceptions they have of their decision making authority or processes. The benefit of this research may be that we have a better understanding of how to empower principals and staff to be active participants in LCFF implementation.

I hope that you will allow me to recruit school site principals to complete an online survey and possibly an interview. Interested principals will be given a consent form at the beginning of the survey process detailing the purpose, risks, benefits, and confidentiality of the study. If participants agree, they may also participate in an interview in the second phase of the study. The results will be collected and analyzed for my dissertation, and the individual results of this study will remain confidential. Should this study be published, no identifying information will be used. No costs will be incurred by your school district or the individual participants.

Your approval to conduct this study would be much appreciated. I have included a copy of my proposal abstract as well as a copy of the approval letter, which I received from CGU's Institutional Review Board. I will follow up with a telephone call next week and would be happy to address any questions or concerns you may have. You may also contact me at (909) 709-1641 or <u>adrienne.ortega@cgu.edu</u>.

I look forward to hearing about the research protocols set forth by your district so that I can conduct my research. Sincerely,

Adrienne Ortega-Magallanes Ph.D. Candidate Claremont Graduate University

Encl: Dissertation Proposal, IRB Approval Cc: Dr. Kyo Yamashiro, Loyola Marymount University

Appendix F

Email to Participants

[Date]

Dear Principal,

My name is Adrienne Ortega-Magallanes, and I am a graduate student at Claremont Graduate University (CGU). For my dissertation, I am researching the ways local control, as envisioned by the Local Control Funding Formula (LCFF), influence school site principals' decision making. Because you are a school site principal, I am inviting you to participate in this research study by completing an online survey and the possibility of a virtual follow-up interview.

The questionnaire should take no more than 20 minutes to complete. There is no compensation for responding, and there is minimal risk. If you choose to participate in this project, please answer all questions as honestly as possible. Participation is strictly voluntary, and you may refuse to participate at any time. There will be consent information for you to review and agree to before participation. At the end of the survey, information about the follow-up interview will be provided.

Thank you in advance for taking the time to assist me in my doctoral research. The data collected will provide useful information understanding of how LCFF's local control may empower principals. If you require additional information or have questions, please contact me at the email listed below. If you would like a copy of this study upon its completion, please email me.

Sincerely,

Adrienne Ortega-Magallanes Ph.D. Candidate Claremont Graduate University adrienne.ortega@cgu.edu

Dr. Kyo Yamashiro Supervisor Loyola Marymount Kyo.Yamashiro@lmu.edu

Appendix G

Survey and Research Question Alignment Matrix

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
|----------------------|-----------------------------------------------------|-------------|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------|
| 1 | Clearly Defined Responsibilities | 5.3 | Involv_LCFF_Align_Goals_ Strat_\$\$ | There is alignment among district goals, strategies, and resource allocation. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Clearly Defined Responsibilities | 5.7 | Loc_Cont_Clr_DM_Auth | Given my district's priorities, it is clear who is responsible and who has the authority to make certain decisions. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Clearly Defined Responsibilities | 5.1 | Loc_Cont_Goals_Def | Are the district-wide accountability measures and goals clearly defined throughout your district | 2-point scale | 1=no; 2=yes |
| 1 | Clearly Defined Responsibilities | 5.2_TX T | Loc_Cont_Goals_Def_TXT | (skip logic) Description of district's accountability measures and goals. | | Open-ended |
| 1 | Distributive Leadership/Local Decision-Making | 3.1 | Involv_LCFF_Improv_Strat egies | California's accountability system is helping our district refine improvement strategies. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Principal Leadership | 4.1 | DM_Ldrship_Tm | Do you have a school site leadership team, outside of a school site council that is responsible for leading the school decisions involving resources, curriculum, assessment or other strategic decisions? | 2-point scale | 1=no; 2=yes |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
|----------------------|-------------------------|---------------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------|
| 1 | Principal Leadership | 4.2 | DM_Ldrship_Appted | (skip logic) Appointment of school leadership team members. (select all that apply) Volunteered Asked to be on team Required to be on team Other: | Multiple Choice | Select all that apply |
| 1 | Principal Leadership | 4.3 | DM_Ldrship_Meet | (skip logic) Frequency of meeting | 5-point scale | 1=Less than once a month; 2=1 time a month; 3=2-3 times a month; 4=Weekly; 5=More than once a week |
| 1 | Principal Leadership | 4.6 | Loc_Cont_Rch_Goals | I am confident in supporting my teachers in reaching school and district goals. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Principal Leadership | 4.7 | Loc_Cont_Alloc_Rsrcs | I am able to allocate human, financial, and physical resources equitably at my school site. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Principal Leadership | 4.2_4_T XT | DM_Ldrship_Appted | (skip logic) Appointment of school leadership team members. (select all that apply) Volunteered Asked to be on team Required to be on team Other: | open-ended | 3.00 |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
|----------------------|-------------------------------------|--------|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------|
| 1 | Principal Leadership | 4.4_1 | Loc_Cont_Team_Super | (skip logic) Which of the following best describes your role(s) on the leadership team? *chose all that apply 1=Manager or supervisor: Responsible for overseeing all activities within a team. | 5-point scale | 1=never; 5=always |
| 1 | Stable Institutions & Structures | 6.2 | Loc_Cont_\$\$_Equit | School site funding is equitable across schools in my district. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Stable Institutions & Structures | 6.4 | Loc_Cont_Dis_Eng_Stkhol d | My district engages stakeholders at all levels to promote coherence on initiatives. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Stable Institutions & Structures | 6.1 | Loc_Cont_Dist_Staff_Acco unt | The district holds all employees accountable to its vision or mission. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Stable Institutions & Structures | 6.3 | Loc_Cont_Dist_Sust_Vis | My district has a sustained visions for school development. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Stable Institutions & Structures | 6.8 | Loc_Cont_Ext_\$\$ | My district obtains external resources to further support district initiatives. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Stable Institutions & Structures | 6.11 | Loc_Cont_Held_Acct | I am held accountable by my supervisor(s) for decisions made for my school site. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Stable Institutions & Structures | 6.9 | Loc_Cont_Mng_Ext_Influ | My district attempts to manage external influences to support continued internal development. | 5-point scale | 1=strongly disagree; 5=strongly |
| 1 | Stable Institutions & Structures | 6.10 | Loc_Cont_Site_Dist_Goal_ Align | My school site's goals and measures align with the district priorities. | 5-point scale | agree 1=strongly disagree; 5=strongly agree |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
|----------------------|-----------------------------------------------------|--------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------|
| Question | | | | | | |
| 1 | Distributive Leadership/Local Decision-Making | 3.2 | Loc_Contr_Hier | My district has moved away from hierarchical models of management. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Distributive Leadership/Local Decision-Making | 3.3 | Loc_Cont_Prin_Input | District office personnel (i.e., coordinators, directors, assistant superintendents) actively solicits input from school site principals before major decisions are made. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Capacity Building | 7.4 | Loc_Cont_Dis_Incent_Skil | My district provides incentives and encouragement to develop knowledge and skills. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Distributive Leadership/Local Decision-Making | 3.4 | CAS_DO_Site_Comm_Op en | The communication between the school district office and school site is open. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Distributive Leadership/Local Decision-Making | 3.8 | Inolve_LCFF_Alt_Policies | My district encourages alternative ways of policy implementation, based on the needs for my school site. (3) | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Principal Leadership | 4.4_2 | Loc_Cont_Team_Strgst | (skip logic) Which of the following best describes your role(s) on the leadership team? *chose all that apply 2=Strategist: Responsible for deciding how to approach tasks and develop a plan to accomplish them. | 5-point scale | 1=never; 5=always |
| 1 | Principal Leadership | 4.4_3 | Loc_Cont_Team_Comm | (skip logic) Which of the following best describes your role(s) on the leadership team? *chose all that apply 3=Communicator: Responsible for distributing information to team members and stakeholders. | 5-point scale | 1=never; 5=always |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
|----------------------|-----------------------------------------------------|--------|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------|
| 1 | Principal Leadership | 4.4_4 | Loc_Cont_Team_Org | (skip logic) Which of the following best describes your role(s) on the leadership team? *chose all that apply 4=Organizer: Responsible for keeping track of and structuring various tasks, employees and documents. | 5-point scale | 1=never; 5=always |
| 1 | Distributive Leadership/Local Decision-Making | | | I have autonomy of decision-making at my school site. (3) | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Principal Leadership | 4.4_5 | Loc_Cont_Team_GoalStr | (skip logic) Which of the following best describes your role(s) on the leadership team? *chose all that apply 5=Goal setter: Responsible for determining the goals that members will work toward. | 5-point scale | 1=never; 5=always |
| 1 | Principal Leadership | 4.5_1 | DM_Collab_Site_Cult | At my school site we have a collaborative decision-making culture. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 1 | Principal Leadership | 4.5_2 | DM_Share_Succ_Cult | there is a culture of sharing successes. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 2 | Distributive Leadership/Local Decision-Making | 3.10 | Involv_LCFF_Princ_Enc_S ugg | Principals are encouraged to make suggestions for improvement. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 2 | Distributive Leadership/Local Decision-Making | 3.6 | LC_Initiative | All district employees are encouraged to take initiative and make decisions on their own. (1) | 5-point scale | 1=strongly disagree; 5=strongly agree |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
|----------------------|-----------------------------------------------------|--------|--------------------------------|------------------------------------------------------------------------------------------------|---------------|------------------------------------------------|
| 2 | Distributive Leadership/Local Decision-Making | 3.7 | Inolv_LCFF_Change_Imp | Changes suggested by site employees to the district office are regularly implemented. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 2 | Distributive Leadership/Local Decision-Making | 3.13_1 | DM_SPSA | To what extent do you regularly engage in the development of the SPSA | 5-point scale | 1=never; 5=a great deal |
| 2 | Distributive Leadership/Local Decision-Making | 3.13_2 | DM_Dist_Comm | To what extent do you regularly engage in participation in committees for district planning | | |
| 2 | Distributive Leadership/Local Decision-Making | 3.13_3 | DM_LCAP | To what extent do you regularly engage in the development of the LCAP | | |
| 2 | Capacity Building | 7.1_1 | Involv_LCFF_PD_Bd_Pol | My district provides regular professional development opportunities for administrators | 5-point scale | 1=strongly disagree; |
| | | 7.1_2 | Involv_LCFF_PD_Contrct | on the following topics Board policies and regulations (1) | | 5=strongly agree |
| | | 7.1_3 | Involv_LCFF_PD_Sta_Pol | Union Contracts (2) State Statutes (3) | | |
| | | 7.1_4 | Involv_LCFF_PD_LCAP | The Local Control Accountability Plan (LCAP) and the Local Control Funding Formula (LCFF) | | |
| | | 7.1_5 | Involv_LCFF_PD_DM_Skls | (4) Decision-making skills and strategies (5) | | |
| | | 7.1_6 | Involv_LCFF_PD_Collab | Collaborative approaches (6) Instructional leadership (7) | | |
| | | 7.1_7 | Involv_LCFF_PD_Intrc_Lds hp | Operational leadership (8) | | |
| | | 7.1_8 | Involv_LCFF_PD_Op_Ldsh p | | | |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
|----------------------|-----------------------------------------------------|--------|------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|------------------------------------------------|
| 3 | Distributive Leadership/Local Decision-Making | 3.16 | DM_Pro_Staff_Opp | I provide staff with opportunities to actively participate in decision-making. (1) | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Distributive Leadership/Local Decision-Making | 3.17 | Loc_Cont_Facil_DM | I feel prepared to work with my site's leadership team to facilitate decision-making together. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Distributive Leadership/Local Decision-Making | 3.18 | CAS_Comm_Staff_Obj_1 | I communicate regularly with my staff about the school vision, objectives, and initiatives. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Principal Leadership | 4.1 | DM_Suprt_Tasks | I have the support to make decisions necessary for accomplishing tasks. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Principal Leadership | 4.8 | DM_Incl_Stk_Hldr | I am comfortable including stakeholders in all decision-making opportunities. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Principal Leadership | 4.9 | DM_Prp_StuAchv | I feel prepared to make decisions related to student achievement. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Distributive Leadership/Local Decision-Making | 3.19 | DM_Solicit_Staff_Input | I actively solicit input or feedback from my staff before major decisions are made. (2) | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Distributive Leadership/Local Decision-Making | 3.21 | CAS_Innov_Staff_Site | I encourage and nurture innovative thinking amongst my staff. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Distributive Leadership/Local Decision-Making | 3.22 | CAS_Super_Supp_Experi | I feel supported by my supervisor(s) to experiment with policies or procedures to support student outcomes. | 5-point scale | 1=strongly disagree; 5=strongly agree |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 3 | Distributive Leadership/Local Decision-Making | 3.23 | Loc_Cont_Super_Feedb | When I receive feedback from my supervisor(s) and this information influences my decision-making. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 3 | Clearly Defined Responsibilities | 5.4_1 | DM_Admin_Tasks | Time spent on tasks (responses add to 100%) | Text Entry | Text Entry |
| | | 5.4_2 | DM_Org_Mgmt | Administrative tasks and meetings (i.e., reports, compliance items, student discipline, | | |
| | | 5.4_3 | DM_Instr | schedules/timetables, classified staff evaluations). : (1) | | |
| | | 5.4_4 | DM_Prgrm_Eva | Organizational management tasks and meetings (i.e., strategic planning, school | | |
| | | 5.4_5 | DM_Int_Scl_Mem | budget, hiring personnel, monitoring safe school environment) : (2) | | |
| | | 5.4_6 | DM_Ext_Scl_Mem | Day-to-day instruction (i.e., coaching teachers, evaluating teachers, implementing professional development) : (3) Instructional program evaluation (i.e., evaluating curriculum, planning professional development, use assessment to for planning instruction) : (4) Interactions with internal school members (i.e., parent meetings, SSC/ELAC, PTSA, parent nights) : (5) Interactions with external school members (i.e., communicating with district office to obtain resources) : (6) | | |

| | Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 1 | 3 | Clearly Defined Responsibilities | 5.5_1 | DM_Admin_Tasks_CHG | (carry forward) Pre-post LCFF- | 5-point scale | 1=none at all; 2=a little; 3=a |
| | | | 5.5_2 | DM_Org_Mgmt_CHG | How much time on these tasks has changed since the LCFF has been implemented: | | moderate amount; 4=a lot; |
| | | | 5.5_3 | DM_Instr_CHG | | | 5-a great deal |
| | | | 5.5_4 | DM_Prgrm_Eva_CHG | | | |
| | | | 5.5_5 | DM_Int_Scl_Mem_CHG | | | |
| | | | 5.5_6 | DM_Ext_Scl_Mem_CHG | | | |
| | | | | | | | |
| | 3 | Distributive Leadership/Local Decision-Making | 3.5 | DM_District_Support_Chan ge | My school district is supportive of change. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| | 3 | Distributive Leadership/Local Decision-Making | 3.14_1 | Loc_Cont_Vision | Who is the primary decision-maker for School vision or mission statements (1) | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| | 3 | Distributive Leadership/Local Decision-Making | 3.14_2 | Loc_Cont_Hire_Tea | Who is the primary decision-maker for Appointing, hiring, or dismissing teachers (2) | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 3 | Distributive Leadership/Local Decision-Making | 3.14_3 | Loc_Cont_Hire_Tea | Who is the primary decision-maker for Appointing, hiring, or dismissing other staff (3) | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| 3 | Distributive Leadership/Local Decision-Making | 3.14_4 | Loc_Cont_Gr_Assign | Who is the primary decision-maker forDesignating grade level assignments (4) | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| 3 | Distributive Leadership/Local Decision-Making | 3.14_5 | Loc_Cont_\$\$_Alloc | Who is the primary decision-maker for Allocating school site budget funds (5) | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| 3 | Distributive Leadership/Local Decision-Making | 3.14_6 | Loc_Cont_PD Site Plan | Who is the primarycreation of professional development plan for school site | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 3 | Distributive Leadership/Local Decision-Making | 3.15_1 | Loc_Cont_Courses | Who is the primary Determining course content | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| 3 | Distributive Leadership/Local Decision-Making | 3.15_2 | Loc_Cont_Supp_Material | Who is the primarydeciding on curriculum or supplementary materials | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| 3 | Distributive Leadership/Local Decision-Making | 3.15_3 | Loc_Cont_Supp_Material | Who is the primaryestablishing student assessment policies | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| 3 | Distributive Leadership/Local Decision-Making | 3.15_4 | Loc_Cont_Supp_Material | Who is the primaryInstituting interventions for students | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 3 | Distributive Leadership/Local Decision-Making | 3.15_5 | Loc_Cont_Campus_Infr | Who is the primary decision-maker for Determining improvements or renovations to the campus infrastructure (e.g., classrooms, restrooms) (6) | 5-point scale | 1=principal; 2=members of leadership team; 3=others, not part of leadership team; 4=district-level personnel; 5=governing board |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_1 | DM_Budget | To what extent do the following factors limit or support you in your decision-making? School budget (1) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_10 | DM_Distrct_Goals | To what extent do the following factors limit or support you in your decision-making? School district goals or vision (10) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_11 | DM_DO_Mandates | To what extent do the following factors limit or support you in your decision-making? District office mandates (11) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_12 | DM_Qual_Tea | To what extentlimitsupport Shortage of qualified and/or high-performing teachers (12) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_13 | DM_Sppt_Pers | To what extentlimitsupport Shortage of support personnel (13) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 3 | Distributive Leadership/Local Decision-Making | 3.24_14 | DM_Super_Feedbk | To what extentlimitsupport Feedback from direct supervisor(s) (14) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_2 | DM_Board_Policy | To what extentlimitsupport School board policy (2) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_3 | DM_State_Fed_Policy | To what extentlimitsupport State or federal regulation and policy (3) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_4 | DM_Contrts | To what extentlimitsupport Classified or credentialed staff -union contracts (4) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_5 | DM_OwnPD_Opps | To what extentlimitsupportP professional development opportunities for myself (5) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_6 | DM_OwnPD_Opps | To what extentlimitsupport Professional development opportunities for my staff (6) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_7 | DM_Workload | To what extent do the following factors limit or support you in your decision-making? High workload and level of responsibility in my position (7) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 3 | Distributive Leadership/Local Decision-Making | 3.24_8 | DM_Shrd_Leadershp | To what extentlimitsupportShared leadership (8) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 3 | Stable Institutions & Structures | 6.13_1 | CAS_Super_Fdbk_Bdgt | My supervisor(s) provide timely feedback on decisions I make at my school site regarding: | 5-point scale | 1=strongly disagree; |
| | | 6.13_2 | CAS_Super_Fdbk_Curric | Budgets Curriculum | | 5=strongly agree |
| | | 6.13_3 | CAS_Super_Fdbk_Staff | Staffing Goals | | |
| | | 6.13_4 | CAS_Super_Fdbk_Goals | Outcomes | | |
| | | 6.13_5 | CAS_Super_Fdbk_Outcom | | | |
| 3 | Stable Institutions & Structures | 6.14_1 | DM_Debr_Staff | How long after a critical decision for your school site is made, do you debrief the | 5-point scale | 1=never; 2=1 week later; 3=1 |
| | | 6.14_2 | DM_Debr_Superv | outcome with the following personnel? Staff | | month; 4=1 year; 5=more |
| | | 6.14_3 | DM_Debr_DO | Supervisor(s) District Office Personnel | | than one year |
| | | 6.14_4 | DM_Debr_Superin | Superintendent | | |
| 3 | Capacity Building | 7.6 | CAS_Dst_Prin_Mt | Regular time provided for principals to meet and collaborate | 2-point scale | 1=no; 2=yes |
| 3 | Distributive Leadership/Local Decision-Making | 3.24_9 | DM_Staff_Eval | To what extentlimitsupport Staff evaluation processes (9) | 4-point scale | 1=fully limits; 2=limits to some extent; 3=supports to some extent; 4=fully supports |
| 4 | Capacity Building | 7.2 | CAS_Dis_PD_AI | My district values staff development at all levels. | 5-point scale | 1=strongly disagree; 5=strongly agree |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 4 | Distributive Leadership/Local Decision-Making | 3.11 | Involv_LCFF_Princ_Enc_S ugg | In my district, there are systems in place that provide the opportunity for knowledge to be shared across organizational levels. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 4 | Principal Leadership | 4.11 | CAS_Innov_Init_TXT | Briefly describe any innovative and effective instructional initiatives you are or have implemented within the past two years | Open-ended | |
| 4 | Principal Leadership | 4.12 | CAS_Othr_Prin_Adv_Freq | In the past month, on average how often have other principals sought out your advice when making decisions about their school site? | 4-point scale | 1=almost never; 2=a few times a month; 3=a few times each week; 4=almost daily |
| 4 | Principal Leadership | 4.13 | CAS_You_Seek_Prin_Adv _Freq | In the past month, on average, how often have you sought advice from other principals when making decisions? | 4-point scale | 1=almost never; 2=a few times a month; 3=a few times a week; 4=almost daily |
| 4 | Capacity Building | 7.3 | CAS_Dis_PD_Admin | My district encourages staff development for all administrators. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 4 | Distributive Leadership/Local Decision-Making | 3.9 | CAS_DO_Inno_Thinking | My school district encourages and nurtures innovative thinking. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 4 | Capacity Building | 7.5 | CAS_PD_Relev | Capacity building opportunities within the district are relevant to my goals. | 5-point scale | 1=strongly disagree; 5=strongly |
| 4 | Capacity Building | 7.8 | CAS_Prin_Out_Mt | Principals meet to collaborate independently outside of district scheduled meetings. | 2-point scale | agree 1=no; 2=yes |

| Research Question | Theme | ltem # | Code | Variable | Measurement | Coding |
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| 4 | Capacity Building | 7.10 7.10_15 _TXT | DM_Info_Srcs DM_Info_Srcs_TXT | Information Finding: School site leadership team Other school site staff members My supervisor(s) District office personnel District website (i.e., board policy, department information) The Local Control Accountability Plan (LCAP) The Single Plan for Student Achievement (SPSA) Other principals in my district Mentor or coach Professional organizations (i.e., ACSA) Professional development opportunities or conferences Research articles or books University experts Social media (i.e., Facebook, Twitter) Education news (i.e., EdWeek, EdSource) Other: None | 2-point scale | 1=no; 2=yes |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 4 | Capacity Building | 7.11_1 7.11_2 7.11_3 7.11_4 7.11_5 7.11_6 7.11_7 7.11_8 7.11_9 7.11_10 7.11_11 7.11_12 7.11_11 7.11_12 7.11_13 7.11_14 7.11_15 *carry forward from 7.10 | DM_Info_Srcs_Freq_Ldrsh p_Tm DM_Info_Srcs_Freq_Othr_ Stf DM_Info_Srcs_Freq_DO_P ers DM_Info_Srcs_Freq_DO_P ers DM_Info_Srcs_Freq_Dist_ WWW DM_Info_Srcs_Freq_Othr_ DM_Info_Srcs_Freq_Othr_ PM_Info_Srcs_Freq_Othr_ nr DM_Info_Srcs_Freq_Prof_ Crg DM_Info_Srcs_Freq_Prof_ onf DM_Info_Srcs_Freq_PD_C onf DM_Info_Srcs_Freq_PD_C onf DM_Info_Srcs_Freq_Cant DM_Info_Srcs_Freq_SM DM_Info_Srcs_Freq_SM DM_Info_Srcs_Freq_SM DM_Info_Srcs_Freq_Ed_N | (carry forward on information finding) How often | 5-point scale | 1=once a year; 2=every few months; 3=monthly; 4=weekly; 5=two or more times a week |
| | | | | | | |

| Research Question | Theme | Item # | Code | Variable | Measurement | Coding |
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| 4 | Capacity Building | 7.7 *skip to from 7.6 | CAS_Dst_Prin_Mt_Amt | (skip logic from regular time) Frequency of collaboration | 4-points scale | 1=once a week; 2=2-3 times a month; 3=once a month; 4=less than monthly |
| 4 | Capacity Building | 7.7_5_T XT *skip to from 7.6 | CAS_Dst_Prin_Mt_Amt_TX T | Frequency of collaboration: Other | Text Entry | Text |
| 4 | Capacity Building | 7.9 *skip to from 7.8 | CAS_Prin_Out_Mt_Amt | (skip logic from principals meet) Frequency of collaboration | 4-points scale | 1=once a week; 2=2-3 times a month; 3=once a month; 4=less than monthly |
| 4 | Capacity Building | 7.9_5_T XT *skip to from 7.8 | CAS_Prin_Out_Mt_Amt_T XT | Frequency of collaboration: Other | Text Entry | Text |
| 4 | Clearly Defined Responsibilities | 5.6 | CAS_Dist_Proc_Tools | My district has defined processes and tools to address the top priorities in the district. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 4 | Stable Institutions & Structures | 6.6 | CAS_Collcts_Data | My district collects data on a variety of practices, in addition to state accountability measures. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 4 | Stable Institutions & Structures | 6.5 | CAS_Data_Imp | My district uses data to improve practice throughout every department. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 4 | Stable Institutions & Structures | 6.7 | CAS_Dis_Fdbk_Loops | My district has clearly defined formalized feedback loops. | 5-point scale | 1=strongly disagree; 5=strongly agree |
| 4 | Stable Institutions & Structures | 6.15 | CAS_Site_Env | Describe work environment at school site | 3-point scale | 1=chaotic; 2=complex; 3=complicated |
| | 0_Demographics | 2.1 | Demo_Age | Age | 6-point scale | 1=20-29;5=60- 69, 6=70 or older |

| Research | | Item # | Code | Variable | Measurement | Coding |
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| Question | | | | | | |
| | 0_Demographics | 2.3 | Demo_Degree | Highest level of school completed | 4-point scale | 1=Bachelor's; 2=Graduate Degree; 3=Doctorate; 4=Other, please specify |
| | 0_Demographics | 2.2 | Demo_Gender | Gender | 4-point scale | 1=male; 2=female; 3=Other, please specify; 4=prefer not to say |
| | 0_Demographics | 2.4_4 | Demo_Prin_CA | Years of work experience-principal in total | Text Entry | Collapsed into groups: 1=0-5 years; 2=6-10 years; 3=11-15 years; 4=16-20 years; 5=21 or more years |
| | 0_Demographics | 2.4_3 | Demo_Prin_Currt_Dis | Years of work experience-as principal at site | Text Entry | Collapsed into groups: 1=0-5 years; 2=6-10 years; 3=11-15 years; 4=16-20 years; 5=21 or more years |
| | 0_Demographics | 2.5 & 2.5 TXT | Demo_Prinat Demo_Prinat_TXT | Type of school | 4-point scale | 1=elementary; 2=middle school/jr. High; 3=high school; 4=other |
| | 0_Demographics | 2.6 | Demo_Prinat_NAME | Name of School | | |
| | 0_Demographics | 2.4_2 | Demo_YearsinDist | Years of work experience-in current district | Text Entry | Collapsed into groups: 1=0-5 years; 2=6-10 years; 3=11-15 years; 4=16-20 years; 5=21 or more years |

| Research Question | | Item # | Code | Variable | Measurement | Coding |
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| | 0_Demographics | 2.4_1 | Demo_YearsinEd | Years of work experience-as educator | Text Entry | Collapsed into groups: 1=0-5 years; 2=6-10 years; 3=11-15 years; 4=16-20 years; 5=21 or more years |

Appendix H

Consent for Semi-Structured Interview

You are invited to participate in a research project. Volunteering will not benefit you directly, but you will be helping the investigator to understand our collective understanding of how local control influences school site principals' decision-making in a local control context. If you volunteer for this interview, it will be scheduled at your convenience and will take 30-45 minutes of your time. Volunteering for this study involves no more risk than what a typical person experiences on a regular day. Your involvement is entirely up to you. You may withdraw at any time for any reason. Please continue reading for more information about the study.

Study Leadership: This research project is led by Adrienne Ortega-Magallanes of the Claremont Graduate University, who is being supervised by Dr. Kyo Yamashiro, Assistant Professor in the Department of Educational Leadership and Administration at Loyola Marymount University.

Purpose: The purpose of this study is to understand in what ways local control, as envisioned by the Local Control Funding Formula (LCFF), influences school site principals' decision making and the perceptions they have of their decision-making authority or processes.

Eligibility: You must be a public-school principal, currently holding a principalship in the state of California.

Participation: During this phase of the study, you will be interviewed via a web conferencing system. The interview will take about 30-45 minutes of your time.

Risks Of Participation: The risks that you run by taking part in this study are minimal. If you feel discomfort at responding to some questions, please feel free to skip the question.

There is always the possibility of tampering from an outside source when using the internet to collect information. While the confidentiality of your responses will be protected once downloaded from the internet or recorded, there is always the possibility of security breaches that could threaten the confidentiality of your answers. The researcher will select survey software with robust privacy protection protocols, do everything to protect against such breaches, and store data on a password-protected computer that the researcher can only access.

Benefits Of Participation: I do not expect the study to benefit you personally. This research will not provide a direct benefit to you, other than the potential of having your participation lead to a better understanding of the way local control influences school site principals' decision-making, and the perceptions they have of their decision-making authority or processes as well as how principals may be empowered to be active participants in LCFF implementation.

Compensation: You will not be directly compensated for participating in this study.

Voluntary Participation: Your participation in this study is entirely voluntary. You may stop or withdraw from the study or refuse to answer any particular question for any reason at any time without any repercussions. Your decision whether or not to participate will not affect your current or future connection with anyone at CGU.

Confidentiality: Your privacy will be protected in all papers, books, talks, posts, or stories resulting from this study. To protect the confidentiality of your responses, I will delete all recorded interviews once the study is complete. Any quotes or qualitative data used in reporting or publications will be anonymized and stripped of any identifiers that could lead back to the individual (e.g., size of school, county, or other identifying information), that when taken together, may lead to the identification of the school where you work. Data files will be stored on a password-protected computer, and any backup data files will be held in a secure location, without identifying information.

Further Information: If you have any questions or would like additional information about this study, please contact Adrienne Ortega-Magallanes at <u>adrienne.ortega@cgu.edu</u>. You may also contact Dr. Yamashiro at (310) 338-2700 or <u>Kyo.Yamashiro@lmu.edu</u>. The CGU Institutional Review Board has approved this project. If you have any ethical concerns about this project or your rights as a human subject in research, you may contact the CGU IRB at (909) 607-9406 or at <u>irb@cgu.edu</u>. A copy of this form will be given to you if you wish to keep it.

Consent: Please follow this link to the consent form and the online survey. [Insert Link Here]