



Stanford | SCALE Initiative



STUDYING THE SUPERINTENDENCY: A CALL FOR RESEARCH

Nathaniel Schwartz Brown University

Hanseul Kang Yale University

Susanna Loeb Stanford University

Jason Grissom Vanderbilt University **Brendan Bartanen** University of Virginia

Jennifer Cheatham Harvard University

Olivia Chi Boston University

Morgaen Donaldson University of Connecticut Renata Freitas Lemos World Bank

Greer Mellon Columbia University

Susan Moffitt Brown University

Aizat Nurshatayeva Brown University Jayanti Owens Yale University

Edieal Pinker Yale University

Rachel White University of Tennessee

Seth Zimmerman Yale University **Decisions about who is in charge of school systems often make the news.** High-profile cases such as the recent takeover of the Houston Independent School District by the State of Texas—where one of the first steps by state leaders was to replace the superintendent—highlight the central importance of district leadership as well as the public perception of superintendents as critical contributors to the quality of a school system.

Yet decision-makers who want to rely on research-based evidence about who to select or even how to conceptualize the characteristics required to be successful as superintendents have relatively little to draw on in the education research literature. While several case studies identify district leadership as affecting district performance and a handful of review articles offer frameworks for understanding superintendent leadership, empirical evidence on the superintendency remains scarce.

The nature of superintendents' work makes research in this area challenging. Not only is the work broad in scope and several steps removed from the student outcomes that define success, but the job also varies tremendously across contexts, with some superintendents playing roles more similar to principals and others at the helm of massive districts staffed by tens of thousands of employees.

Studies of district-level effects on student achievement have suggested that districts account for somewhere between one and ten percent of the variation in student achievement; however, how or whether to attribute these effects to leadership is unclear (Blazar & Schueler, 2022). Superintendent actions trickle down indirectly to the classroom level, blurring the relationship between leadership actions and typical measures of student and school success. Moreover, even though the U.S. includes around fourteen thousand school districts, the geographic dispersal means that state- or local-level studies of the superintendency tend to draw on small sample sizes that are difficult to generalize.

In the spring of 2023, The Broad Center at the Yale School of Management partnered with the Annenberg Institute at Brown University to bring together a group of scholars who have made recent contributions to research on superintendency and to educational leadership more broadly. The small group, which included researchers from a wide variety of disciplines and methodological approaches, spent two packed days together, discussing the state of the field, the key unanswered questions, and what it might take to move the work further, faster.

These conversations resulted in a strong consensus on the need for a renewed push to build knowledge around specific aspects of the superintendency, anchored in new data that broaden the research that is possible in

the field. Future research, in particular, could inform the field by investigating superintendents' roles, including their time use, decision-making, priorities, management styles, and behaviors; the routes to the superintendency and factors associated with retention; how and why superintendents improve; and the causal impact of superintendents on key outcomes. For the research to be useful it will need to pay attention to district context and capacity and to the dynamic nature of superintendents' effects by following superintendents longitudinally.

Given the range of student needs and the political battles being waged about education, school governance is both a key lever and a central concern. By investing in research on the superintendency, we can uncover insights to inform practice and policy, strengthening outcomes for students and building toward a more robust system of school governance. By investing in research on the superintendency, we can uncover insights to inform practice and policy, strengthening outcomes for students and building toward a more robust system of school governance.

AREAS OF NEED

Participants in the Broad-Annenberg convening spoke to what we already know about the superintendency and where our current research falls short. The group highlighted three areas of need:

- **1. THE ROLE:** How do superintendents spend their time, how does time use vary across contexts, and what knowledge, skills, and dispositions do superintendents need to succeed in these tasks?
- **2. THE PEOPLE:** How can districts and states attract, identify, support, and retain the most effective leaders, including female leaders and leaders of color?
- 3. THE OUTCOMES: How can districts and states best assess effectiveness and monitor results?

THE ROLE

Existing frameworks for characterizing the work of the superintendency provide a solid starting place for building our understanding. Johnson (1996), for example, categorizes the work of the superintendent into three large buckets—instructional leadership (such as shaping student outcomes through teacher development), managerial leadership (such as strategy development, team development, and performance management), and political leadership (such as navigating context and mapping constituencies).¹

Recent studies have expanded knowledge in each of these leadership areas. District-level instructional leadership has come to include principal support and supervision (Cochran et al., 2020; Goldring et al., 2018; Honig & Rainey, 2020). Other studies highlight superintendents' role in crisis management and communications in political leadership (Björk et al., 2014; Hemmer & Elliff, 2020; Grissom & Condon, 2021). Further, we have come to recognize the significance of superintendents' culturally responsive and equity-oriented political leadership (Galloway & Ishimaru, 2017; Khalifa, 2018), social networking (Daly, 2010), and political organizing.

Much of this work derives from self-reports rather than from direct data collection on what superintendents do during their time in the role. While interviews can provide depth and insight, self-reports of time use and motivations are notoriously imprecise. Very little research offers direct evidence on the day-to-day activities of superintendents or the factors or processes that drive decision-making in key areas of practice.

A better understanding of the tasks involved in the superintendency would provide insights into the attributes superintendents need to be effective, as well as the contextual factors that could facilitate or hinder success. Studies of principal time use suggest the ways that different constraints and priorities shape the types of work that principals can accomplish across the course of weeks and months (Loeb, Horng, & Klasik, 2010; Grissom, Loeb, & Master, 2013). These, in turn, have helped to build a knowledge base around the avenues for instructional and non-instructional leadership available to principals and the ways that these choices play out concretely in school functions (Grissom, Egalite, & Lindsay, 2021). This type of time-use information is not yet available for superintendents.

Knowing what superintendents do is an important step toward understanding the job, but knowing what they do is not equivalent to knowing what they should do to run effective schools and school districts. Existing research suggests that there is considerable heterogeneity in the leadership and management approaches that superintendents prioritize, even among superintendents who manage similarly sized districts.

¹ Other such frameworks can be found in the World Management Survey (https://worldmanagementsurvey.org), which focuses on the managerial elements of the superintendency, and Hill & Jochim (2018), which highlights the political nature of the role.

For example, superintendents tend to vary in how much they directly engage in the management of district-wide instructional improvement programs (Honig et al., 2017), their implementation of principal evaluation programs and adherence to state guidelines (Donaldson et al., 2021), their ability to develop trust within their districts and work effectively with principals to implement reforms (Leithwood, 2010; Ragland et al., 1999; Togneri & Anderson, 2003), and their engagement with state boards of education and state policy-making processes (White, 2021).

Research on the roles of leaders in other industries can provide insights into effective management practices for superintendents. For example, research on business management has given far more attention to the relationship between CEOs and their boards of directors than education researchers have to the superintendent-school board relationship. Moreover, this research shows that better management practices are positively correlated with improved performance in certain contexts (Bloom et al., 2013; Bloom et al., 2016; Bloom & Van Reenen, 2010; Carter et al., 2019; McCormack et al., 2014). Further, evidence from non-US contexts suggests that superintendent leadership and management practices may improve a range of critical outcomes (Adelman & Lemos, 2021; Adelman et al., 2018; de Barros et al., 2018; Lavy & Boiko, 2017; Sabarwal et al., 2020). This research not only adds substantively to our understanding of leadership and management but also serves as a potential model for the kinds of investigations that could build useful knowledge on the superintendency.

CALL FOR RESEARCH

THE ROLE OF THE SUPERINTENDENT

- One key focus of ongoing research should be to better understand how superintendents spend their time and how and why time use changes, both across the length of an individual's tenure and across contexts and external constraints.
- A second area of exploration should address the specific dimensions of effective superintendent leadership and management, analyzing the management styles and behaviors that facilitate superintendent success, specifically including effective relationship-building with school boards and teacher unions.

THE PEOPLE

The demographic characteristics of superintendents are relatively well-documented. The average age of superintendents is about 52 years (Thomas et al., 2023). Despite a growing number of female and minority superintendents, most leaders in the role are male and White (Nash & Grogan, 2022). According to recent data, only 28 percent of superintendents are women (White, 2023), while 55 percent of principals and 75 percent of teachers are female (National Center for Education Statistics, 2022). Only one out of ten superintendents nationally are people of color (Tienken & Domenech, 2021) as compared with six out of ten students in the public school system (Irwin et al., 2023).²

At the same time, the structures and processes that produce the nation's current group of superintendents have been left relatively unexplored. A handful of papers have helped to trace the job positions that tend to lead toward appointment as a superintendent. While superintendents generally enter their positions from a principalship or another central office position, such as assistant superintendent, the career paths leading to the While superintendents generally enter their positions from a principalship or another central office position, such as assistant superintendent, the career paths leading to the superintendency can vary based on gender, race, and location.

superintendency can vary based on gender, race, and location. For example, female educators and educators of color are more likely to become superintendents after spending more time in assistant superintendent positions, apparently jumping through "more hoops" compared to White male educators who are more likely to become superintendents directly from a principal position (Brunner & Grogan, 2007; Davis & Bowers, 2019).

While there is some evidence on pathways into the superintendency, extant work in this area tends to be statespecific and not well-scaffolded by prior studies. Moreover, we know very little about how school board policies and preferences interact with candidate preferences to create the current crop of superintendents. Indeed, no research that we know of has evaluated the pools of candidates that school boards considered before settling on individual hires or the recruitment processes that most school boards used to attract candidates, although anecdotal evidence suggests the heavy use of search firms in this process.³

Entry into the position is just the first step. Once in the job, superintendents learn, switch positions, and eventually leave the superintendency. We have some evidence on the background characteristics of principals who tend to leave, as well as the characteristics of districts that tend to have higher superintendent turnover. The typical superintendent tenure is around 6 to 7 years, although tenure varies considerably across contexts (Grissom & Mitani, 2016; Natkin et al., 2003; The Broad Center, 2018). Turnover is higher in larger districts with more students eligible for free and reduced-price lunch and students of color and in districts with lower wages (Grissom & Andersen, 2012; Grissom & Mitani, 2016; White, 2023). Superintendents who move across districts often move to larger districts with larger budgets and higher salaries (Grissom & Andersen, 2012; Grissom & Mitani, 2016). Turnover rates also tend to be lower for female superintendents (White, 2023) and higher for superintendents of color as well as for those who have been appointed from outside the district rather than being promoted internally (Grissom & Andersen, 2012).

² This statistic is based on a survey of approximately 2,000 superintendents, accounting for around 12-15% of the total. More comprehensive data on the race and ethnicity of superintendents would help to provide a fuller understanding of the current landscape.

³ The lack of transparency in superintendent search pools poses a significant challenge. "Lone finalist" announcements may provide anonymity for individuals applying for superintendent positions but hinder researchers' ability to assess the diversity of the candidate pool, making it difficult to determine if the issue lies with the supply or demand for diverse superintendents.

Researchers have documented these patterns of turnover, but we know less about how malleable they are and what factors can affect them. While districts with a higher concentration of students in poverty have higher turnover, there is still considerable variability in superintendent turnover patterns across districts after controlling for student demographics. Researchers have identified several factors aside from student demographics and superintendent pay—including, for example, the relationship between the superintendent and the school board—that are tied to superintendent job satisfaction and retention (Grissom & Andersen, 2012; White et al., 2023). However, we know little about how to create environments within districts that are conducive to superintendent retention. Similarly, comparative studies tell us little about how different statelevel retirement policies and pension plans affect superintendent satisfaction and turnover, given that many superintendents enter their positions toward the end of their careers (Grissom & Mitani, 2016).

Research knowledge about what it takes to support and improve effective superintendents is limited. Pre-service requirements aim to ensure that superintendents have at least a baseline capacity for the job on entry. The requirements to become a school superintendent vary across states and districts. Most states require a minimum of a master's degree in education administration or a related field. Some states also require a minimum number of years of experience as a teacher or school administrator or completion of a certification program. Most states also require candidates for superintendent positions to pass an examination or series of examinations, such as the School Leaders Licensure Assessment (SLLA) or the Educational Leadership: Administration and Supervision (ELAS) exam. In addition, roughly half of superintendents hold doctoral degrees (Kowalski et al., 2010). We have no reliable evidence on the effectiveness of setting or waiving these requirements—most of which are costly to the individual—in improving performance on the job. Once in the position, superintendents continue to invest in professional development in a wide range of areas, from leadership to financial management to technology to equity and inclusion. Professional development providers have little research to turn to in developing effective programs or targeting programs to the specific needs of superintendents in different contexts.

Building the individual capacity of superintendents is just one way of improving superintendent performance. Superintendents' access to knowledge, such as through connections to networks of experts; their access to resources and the flexibility to use those resources; and the incentives created by their school board, their governance constraints, and their community can all affect their productivity and ability to face a range of challenges. While researchers and scholars have theorized about how to best support superintendents, no convincingly causal studies have addressed this key question (English, 2011; Grogan, 2003; Howley et al., 2014).

CALL FOR RESEARCH

THE CAPABILITIES OF CURRENT AND PROSPECTIVE SUPERINTENDENTS

- Ongoing research efforts should aim to better understand routes into the superintendency, how these routes shape the supply and demand of candidates, and how pathways and dynamics vary across districts and contexts.
- Researchers should also work to identify the malleable factors that improve retention of effective superintendents in order to increase school district stability and, as a result, strengthen their ability to sustain improvement over time.
- Finally, more research is needed into the capacities that superintendents need for their work and the types of opportunities that support development of these capacities as well as the types of support that help superintendents, and ultimately their districts, to thrive.

THE OUTCOMES

A primary challenge for causal research on the superintendency is the insufficiency of current methods to measure the impact of superintendents on district and student outcomes.

Some studies have attempted to tie superintendents directly to student achievement. For example, evidence from Israel's primary and middle schools suggests that an increase in superintendent value-added by one standard deviation led to an approximate 0.04 standard deviation increase in test scores (Lavy & Boiko, 2017). Similarly, recent Mellon (2023a) findings indicate that superintendents may positively affect student achievement. Yet cross-sectional studies have yielded inconsistent findings on the relationship between superintendent characteristics and district performance (Ehrenberg et al., 1988; Meier & O'Toole, 2002). More recently, Chingos et al. (2014) found that superintendents only account for a minimal percentage (less than 1 percent) of the variation in student achievement.

The difficulty of linking superintendents to student learning gains is not surprising. Ongoing debates in the field about the more straightforward issue of how to measure a principal's "value-added" to student test scores suggest that the methodological challenges around the calculation of superintendent effects on students are unlikely to be easily solved (Grissom, Kalogrides, & Loeb, 2015). In particular, researchers will have difficulty distinguishing what portion of change in a district—whether it be in teacher turnover, student learning, parent satisfaction, or a wide range of other potential outcomes—is due to the superintendent rather than to changes that were the result of factors prior to, concurrent with, or orthogonal to the superintendent. The more detailed information researchers have on the district, the better able they will be to separate the superintendent effect from alternative explanations, but empirical techniques alone—such as those used to estimate teacher effectiveness—without rich data are unlikely to uncover the causal effect.

At the same time, while we cannot accurately measure the effectiveness of every superintendent, we can accurately estimate the effectiveness of some of the specific strategies that superintendents have initiated and, in that way, demonstrate that superintendents can meaningfully affect student learning. For example, recent studies have found strong evidence of achievement gains tied to the IMPACT policies in Washington D.C. Public Schools (Dee & Wyckoff, 2015).

The difficulty in measuring effectiveness for all superintendents with readily available data combined with the clear importance of measuring superintendent impact points to the need to collect richer data. These data would allow researchers to distinguish effective superintendents and then use that information to identify promising approaches for improving the recruitment, retention, improvement, and support of superintendents. While some of this research could leverage rich cross-sectional data, longitudinal research that examines the ways that districts change after a superintendent leaves the role could provide important insights into the ways that superintendents shift organizational dynamics within school districts.

CALL FOR RESEARCH

MEASURING IMPACT

Researchers should continue efforts to tie superintendent actions to district outcomes, but continued research into superintendent effectiveness should be built on a broader conception of the mechanisms and intermediate outcomes through which superintendents could build toward systemic improvement, ranging from hiring decisions, district-level turnover and satisfaction, to measures of organizational health.

DATA COLLECTION TO ENABLE THE WORK

What would it take to overcome some of the challenges that have slowed research on the superintendency and to make progress on the key issues raised in the previous sections? Advancing the field likely hinges on new kinds of data collection, providing insights into the superintendency that researchers could be use to generate new evidence and insights.

The Broad-Annenberg group saw promise in four specific types of data collection:

- **1. DAILY ACTIONS**
- 2. DECISION-MAKING AND JOB PRIORITIES
- **3. DISTRICT CONTEXT AND CAPACITY**
- 4. LONGITUDINAL COHORTS

DAILY ACTIONS

Given the lack of empirical data to document the ways that superintendents spend their time, conference participants proposed one strand of work focused on better capturing patterns and variation in how superintendents approach their work. One way to begin data collection would be to explore superintendents' time use by analyzing superintendent calendars and/or smartwatch pings to understand what typical days look like across time and contexts (Goldring et al., 2020; Hochbein et al., 2018). Survey or interview data could provide additional insights into the choices behind particular patterns of action. Walk-through observational data and/or longer-term shadowing could also be helpful, but this type of work would need to account for the likelihood of missing the kinds of unique and rare events that happen unpredictably but can have outsize implications for superintendent practice and impact.

Researchers could then use these data to identify the range of capabilities superintendents need to leverage and how those needs vary across contexts. They could also compare the activities of superintendents within a given context who are more or less effective at achieving positive outcomes in their schools.

DECISION-MAKING AND JOB PRIORITIES

Better data on the key decisions that superintendents make are necessary for researchers to shed light on the superintendency, particularly with respect to the allocation of resources within the district, staffing decisions, approach to community, board, and teacher union relationships, and in response to crisis. These data could begin with new measures based on self-reports from superintendents and, when possible, supplemented with reports from other educators in the district and school board members to assess the validity of superintendent responses.

These data could shed light on superintendent effectiveness by homing in on specific mechanisms, which is important given the difficulty of directly assessing their effects on distal educational outcomes. Researchers could use these data in combination with outcome measures—such as teacher, principal, and central office staff turnover rates, student attendance, and student learning—to see whether the specific decisions they make predict outcomes in compellingly causal ways.

DISTRICT CONTEXT AND CAPACITY

Studies of superintendent time use, decision-making, and priorities could be usefully supported by better data collection on district context and capacity. Superintendents are constrained in their decision-making by the opportunities they have in terms of financial and human resources as well as their political capital. Central to this context is the school board and the power of the school board to facilitate and hinder superintendents' agendas.

Data on school board membership, including school board members' names, length of service, and demographics, is theoretically public information, but these data have not been compiled in ways that allow researchers to understand the relationships between school board membership and priorities. Researchers could build a census of superintendents and school boards at the national level or for a set of largest districts similar to CEO and corporate board data collection efforts such as Compustat and BoardEx.⁴ This effort, led either by an academic institution like The Broad Center or by the National Center for Education Statistics, could jumpstart a new wave of work on the superintendency.

Alongside a school board membership database, participants in the superintendency convening also saw promise in more in-depth data collection to understand how school boards select and hire superintendents. One possibility would be to build a dataset that collected administrative data on finalists in district-level superintendent searches across the country, ideally supplemented with data on the broader pool of applicants. In a number of states, data on superintendent search finalists are public, making it possible to compile a dataset of public records of finalists within a reasonably short period. Ultimately, as an expanded version of the Dee, Loeb, & Shi (2022) paper, researchers could link such data to outcome measures to examine how hiring decisions and superintendent characteristics shape outcomes. Another possibility would be to launch an annual survey either at the state or national level around superintendent hiring procedures and individual school board member preferences and values. Even as school boards serve as a key driver of district policies and superintendent actions, we know relatively little about how school board members approach their decisions or work with their constituencies.

Finally, data from the minutes of public school board meetings could also allow researchers to make sense of superintendent retention decisions, although the actual written meetings vary considerably in their length, detail, and quality. The increasing adoption of standardized software by school boards in the future, and the increasing availability of audio and video-recorded school board meetings, may provide a more uniform basis for analyzing the decision-making processes and actions taken by school boards preceding and following a change in leadership. Research in this area will also depend on state-level policy. In particular, whether school boards are able to discuss superintendent employment decisions in closed executive sessions may affect the quality of public data on superintendent appointment, evaluation, and retention decisions.

Superintendents are constrained in their decision-making by the opportunities they have in terms of financial and human resources as well as their political capital.

4 Recent research by Mellon (2023a, 2023b) and White (2023) are examples of fruitful work based on superintendent census-type data compilation.

LONGITUDINAL COHORTS

A longitudinal data collection strategy that follows a large group of purposefully sampled districts over a period that spans multiple superintendents could lead to better understanding of the phases of a superintendency and how leaders' actions in one period affect outcomes in the next. Ideally, these districts would agree to annual data collection, including surveys of superintendent and school board goals as well as the submission of data points to track both intermediate and long-term district outcomes. With such data, researchers could begin to build knowledge around both key phases of the superintendency—such as the first 100 days, large-scale transition periods, and day-to-day management—as well as capturing work that springs up in reaction to key external challenges. In turn, district leaders that served in this cohort might build their own professional connections and knowledge of how their job looks in different settings by participating in annual network convenings.

Using surveys or instruments from other sectors to generate outcome measures for evaluating superintendents' effectiveness would also be helpful. Such instruments include Gallup's Q12 Employee Engagement Survey, World Management Survey, and other leadership and decision-making surveys. In part, building out this strand of work first requires stronger research in some of the other areas described above so that researchers can better conceptualize what superintendents are trying to achieve and then evaluate them directly on these criteria.

MOVING FORWARD

The US education system is defined by its decentralized approach with little federal intervention or legal control and with states turning over most education decisions to the local level. There, in the district offices, superintendents make decisions about resource allocation, governance, curricular and instructional approaches, response to crisis, and many other consequential actions. Yet we have little generalizable knowledge about the ways that different superintendents choose to allocate their time, the capacities that they need to be effective, and how they influence schools and students. This report provides a brief summary of what we know, where we might set priorities for learning, and how new data collection efforts can facilitate our future understanding.



REFERENCES

Adelman, M., & Lemos, R. (2021). *Managing for learning: Measuring and strengthening education management in Latin America and the Caribbean*. The World Bank.

Adelman, M., Lemos, R., Nayar, R., & Vargas, M. (2018). Managing for learning:(In)coherence in education systems in Latin America. The World Bank.

Björk, L. G., Kowalski, T. J., & Browne-Ferrigno, T. (2014). *The school district superintendent in the United States of America.* Educational Leadership Faculty Publications.

Blazar, D., & Schueler, B. (2022). Why Do School Districts Matter? An Interdisciplinary Framework and Empirical Review. EdWorkingPapers.

Bloom, N., Eifert, B., Mahajan, A., McKenzie, D., & Roberts, J. (2013). Does management matter? Evidence from India. *The Quarterly Journal of Economics*, *128*(1), 1-51.

Bloom, N., Sadun, R., & Van Reenen, J. (2016). *Management as a technology?* National Bureau of Economic Research.

Bloom, N., & Van Reenen, J. (2010). Why do management practices differ across firms and countries? *Journal of Economic Perspectives*, 24(1), 203-224.

Brunner, C. C., & Grogan, M. (2007). Women leading school systems: Uncommon roads to fulfillment. Rowman & Littlefield.

Carter, S. P., Dudley, W., Lyle, D. S., & Smith, J. Z. (2019). Who's the boss? The effect of strong leadership on employee turnover. *Journal of Economic Behavior & Organization*, *159*, 323-343.

Chingos, M. M., Whitehurst, G. J., & Lindquist, K. M. (2014). School superintendents: Vital or irrelevant? Brown Center on Education Policy at Brookings.

Cochran, A., Hart, R., & Casserly, M. (2020). Trends in principal supervisor leadership and support: Results from two surveys of principal supervisors in America's Great City Schools. Council of the Great City Schools.

Daly, A. J. (2010). *Social network theory and educational change.* Harvard Education Press.

Davis, B. W., & Bowers, A. J. (2019). Examining the career pathways of educators with superintendent certification. *Educational Administration Quarterly*, *55*(1), 3-41.

de Barros, R. P., de Carvalho, M., Franco, S., Garcia, B., Henriques, R., & Machado, L. (2018). Assessment of the impact of the Jovem de Futuro program on learning. The World Bank. Dee, T. S., Loeb, S., & Shi, Y. (2022). Public-sector leadership and philanthropy: The case of Broad Superintendents. *Educational Evaluation and Policy Analysis, 8*(1), 1-27.

Dee, T. S., & Wyckoff, J. (2015). Incentives, selection, and teacher performance: Evidence from IMPACT. *Journal of Policy Analysis and Management, 34*(2), 267-297.

Donaldson, M. L., Mavrogordato, M., Youngs, P., Dougherty, S., & Al Ghanem, R. (2021). "Doing the 'real' work": How superintendents' sensemaking shapes principal evaluation policies and practices in school districts. *AERA Open, 7*(1), 1-16.

Ehrenberg, R. G., Chaykowski, R. P., & Ehrenberg, R. A. (1988). Determinants of the compensation and mobility of school superintendents. *Industrial and Labor Relations Review*, *41*(3), 386-401.

English, F. W. (Ed.). (2011). *The Sage handbook of educational leadership: Advances in theory, research, and practice.* Sage Publications.

Galloway, M. K., & Ishimaru, A. M. (2017). Equitable leadership on the ground: Converging on high-leverage practices. *Education Policy Analysis Archives*, *25*, 1-36.

Goldring, E., Grissom, J., Neumerski, C. M., Blissett, R., Murphy, J., & Porter, A. (2020). Increasing principals' time on instructional leadership: Exploring the SAM® process. *Journal of Educational Administration*, *58*(1), 19-37.

Goldring, E. B., Grissom, J. A., Rubin, M., Rogers, L. K., Neel, M., & Clark, M. A. (2018). *A new role emerges for principal supervisors: Evidence from six districts in the principal supervisor initiative.* Mathematica Policy Research.

Grissom, J. A., & Andersen, S. (2012). Why superintendents turn over. *American Educational Research Journal, 49*(6), 1146-1180.

Grissom, J. A., & Condon, L. (2021). Leading schools and districts in times of crisis. *Educational Researcher, 50*(5), 315-324.

Grissom, J. A., Egalite, A. J., & Lindsay, C. A. (2021). *How principals affect students and schools.* Wallace Foundation.

Grissom, J. A., Kalogrides, D., & Loeb, S. (2015). Using student test scores to measure principal Performance. *Education Evaluation and Policy Analysis*, *37*(1), 3-28.

Grissom, J. A., Loeb, S., & Master, B. (2013). Effective instructional time use for school leaders: Longitudinal evidence from observations of principals. *Educational Researcher*, *42*(8), 433-444.

Grissom, J. A., & Mitani, H. (2016). Salary, performance, and superintendent turnover. *Educational Administration Quarterly*, *52*(3), 351-391.

Grogan, M. (2003). Laying the groundwork for a reconception of the superintendency from feminist postmoderm perspectives. In M. D. Young & L. Skrla (Eds.), Reconsidering feminist research in educational leadership (pp. 9-34). SUNY Press.

Hemmer, L., & Elliff, D. S. (2020). Leaders in action: The experiences of seven Texas superintendents before, during, and after Hurricane Harvey. *Educational Management Administration & Leadership, 48*(6), 964-985.

Hill, P., & Jochim, A. (2018). *Unlocking potential: How political skill can maximize superintendent effectiveness.* Center on Reinventing Public Education.

Hochbein, C., Dever, B. V., White, G., Mayger, L., & Gallagher, E. (2018). Confronting methodological challenges in studying school leader time use through technological advancements: A pilot study. *Educational Management Administration & Leadership, 46*(4), 659-678.

Honig, M. I., & Rainey, L. (2020). *Supervising principals for instructional leadership: A teaching and learning approach.* Harvard Education Press.

Honig, M. I., Venkateswaran, N., & McNeil, P. (2017). Research use as learning: The case of fundamental change in school district central offices. *American Educational Research Journal*, *54*(5), 938-971.

Howley, A., Howley, C. B., Rhodes, M. E., & Yahn, J. J. (2014). Three contemporary dilemmas for rural superintendents. *Peabody Journal of Education, 89*(5), 619-638.

Irwin, V., Wang, K., Tezil, T., Zhang, J., Filbey, A., Jung, J., Bullock Mann, F., Dilig, R., and Parker, S. (2023). Report on the Condition of Education 2023 (NCES 2023-144). U.S. Department of Education, National Center for Education Statistics. Retrieved on July 7, 2023, from https://nces.ed.gov/pubsearch/pubsinfo. asp?pubid=2023144.

Johnson, S. M. (1996). *Leading to change: The challenge of the new superintendency.* Jossey-Bass.

Khalifa, M. (2018). *Culturally responsive school leadership*. Harvard Education Press.

Kowalski, Theodore J., Robert S. McCord, George J. Petersen, I. Phillip Young, and Noelle M. Ellerson. 2010. *The American School Superintendent: 2010 Decennial Study.* Rowman & Littlefield Education. Lavy, V., & Boiko, A. (2017). *Management quality in public education: Superintendent value-added, student outcomes and mechanisms.* National Bureau of Economic Research.

Leithwood, K. (2010). Characteristics of school districts that are exceptionally effective in closing the achievement gap. *Leadership and Policy in Schools, 9*(3), 245-291.

Loeb, S., Horng, E., & Klasik, D. (2010). Principal's time use and school effectiveness. *American Journal of Education*, *116*(4), 491-523.

McCormack, J., Propper, C., & Smith, S. (2014). Herding cats? Management and university performance. *The Economic Journal, 124*(578), F534-F564.

Meier, K. J., & O'Toole, L. J. (2002). Public management and organizational performance: The effect of managerial quality. *Journal of Policy Analysis and Management*, *21*(4), 629-643.

Mellon, G. (2023a). Does school district leadership matter: Estimating variation in superintendent effects on achievement in the United States. Working paper.

Mellon, G. (2023b). Is the personnel political? Examining the role of political partisanship in school boards' superintendent appointment decisions from 2009-2019. Working Paper.

Nash, A. M., & Grogan, M. (2022). Leadership and the US Superintendency: Issues of race, preparation and impact. *School Leadership & Management, 42*(1), 24-43.

National Center for Education Statistics. (2022). Characteristics of Public School Principals. Condition of Education. U.S. Department of Education, Institute of Education Sciences. Retrieved on January 17, 2023, from https://nces.ed.gov/programs/coe/indicator/cls.

Natkin, G. L., Cooper, B. S., Alborano, J. A., Padilla, A., & Ghosh, S. K. (2003). Predicting and modeling superintendent turnover. *Journal of School Leadership*, *13*(3), 328-346.

O'Day, J. A., Bitter, C. S., & Gomez, L. M. (2011). Education reform in New York City: Ambitious change in the nation's most complex school system. Harvard Education Press.

Ragland, M. A., Asera, R., & Johnson Jr, J. F. (1999). Urgency, responsibility, efficacy: Preliminary findings of a study of high-performing Texas school districts. Charles A. Dana Center, The University of Texas at Austin.

Sabarwal, S., Asaduzzaman, T. M., & Ramachandran, D. (2020). *Managing the middle: Decision-making within education bureaucracies.* The World Bank.

The Broad Center. (2018). *Hire expectations: Big district superintendents stay in their jobs longer than we think.* The Broad Center.

Thomas, T., Tieken, C. H., Kang, L., Bennett, N., Cronin, S., & Torrento, J. (2023). 2022-2023 AASA superintendent salary & benefits study: Non-member version. AASA, The School Superintendent's Association.

Tienken, C., & Domenech, D. A. (2021). *The American superintendent: 2020 decennial study.* Rowman & Littlefield.

Togneri, W., & Anderson, S. E. (2003). Beyond islands of excellence: What districts can do to improve instruction and achievement in all schools. Learning First Alliance.

White, R.S. (2021) "Trial and error" and "trudging up a hill": Superintendents' engagement in state education policymaking. Paper presented at University Council of Educational Administration Annual Conference, Columbus, OH.

White, R. S. (2023). Ceilings made of glass and leaving en masse? Examining superintendent gender gaps and turnover over time across the United States. *Educational Researcher*, 1-14.

White, R. S., Evans, M. P., & Malin, J. R. (2023). Political battles in suburbia. *Phi Delta Kappan, 104*(5), 6-10.







FOR MORE INFO

Nathaniel Schwartz, Director of Applied Research, Annenberg Institute at Brown University nathaniel_schwartz@brown.edu