

Supporting Principals' Learning Key Features of Effective Programs

Leib Sutcher, Anne Podolsky, and Danny Espinoza



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Executive Summary

Improving student achievement requires strong school leadership. In the wake of the Every Student Succeeds Act, many states are redesigning their education systems to better prepare students for today's dynamic, knowledge-driven economy. Implementing new education initiatives related to curriculum, instruction, accountability, and social and emotional learning requires substantial expertise on the part of principals. Furthermore, principals play a critical role in addressing widespread teacher shortages by creating school environments that attract and retain competent teachers. The most effective principals assume a range of responsibilities, including setting direction, developing people, redesigning the organization, and leading instruction.

There is a great deal for school leaders to learn in order to manage all of these responsibilities productively. Fortunately, the field has learned a lot in recent years about how to construct principal preparation and professional development programs that are effective in enabling principals to improve school outcomes, such as increasing principal and teacher effectiveness and retention and improving student learning. Research points to several key building blocks of such programs. These include:

- Organizational partnerships that support learning
 - 1. **Close collaboration between programs and school districts.** High-quality programs partner with school districts in a mutually beneficial blend of research and practice.
 - 2. **Purposeful and targeted recruitment.** High-quality programs recruit teachers with leadership potential to enter the principalship, ideally from the communities they plan to serve.
- Programs structured to support learning
 - 1. **Cohorts of principal candidates.** High-quality preparation programs structure learning and courses to be carried out in collaboration amongst a small group of peers.
 - 2. Networks of practicing principals. High-quality in-service learning utilizes professional learning communities where school leaders learn together on the job.
- Meaningful and authentic learning opportunities
 - 1. **Problem-based learning opportunities.** Effective programs use context-specific problems to connect coursework and practice to enrich candidates' skill development.
 - 2. **Field-based internships and coaching by an expert**. High-quality programs support principals' development through internships and on-the-job coaching by strong and supportive leaders.
- Learning opportunities focused on what matters
 - 1. **Strong focus on improving schoolwide instruction.** High-quality programs have curricula focused on instruction and school improvement.
 - 2. Attention to creating collegial organizations. High-quality programs prepare educators to create environments where teachers, staff, and students engage in continual learning and improvement.
 - 3. Using data for change. High-quality programs train educators to use data and collective inquiry to identify problems and address needs, in collaboration with staff, parents, and community organizations.

Strong education systems typically invest in the preparation and development of principals. Although high-quality principal training requires financial investments, the benefits can be substantial when considering a principal's influence on student achievement, as well as teacher quality and retention. States can invest in high-quality principals by using federal funds in ESSA for teacher and school leader development. Policymakers can use the evidence base for what makes an effective preparation and development program to increase the odds that students are in schools led by well-prepared principals.

Introduction: Why Principals Matter

Schoolwide improvement requires strong school leadership. In response to the Every Student Succeeds Act (ESSA), communities across the country are redesigning their education systems by raising academic standards, adopting new curricula, and investing in high-quality teachers. Communities are also considering how best to address the academic, social, and emotional needs of students. Schools serving the most vulnerable students are especially interested in addressing the often high rates of teacher turnover that can hurt student achievement.¹

All of these efforts require a strong principal. In fact, principals have been found to be a crucial school-level factor associated with student achievement—second only to teachers' classroom instruction.² One study noted that "there are virtually no documented instances of troubled schools being turned around without intervention by a powerful leader."³

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Furthermore, principal support is one of the most

important factors cited by teachers in their decisions about whether to stay in a school or in the profession.⁴ Thus, principals' abilities to create the positive working conditions and collaborative, supportive environments that retain teachers will play a critical role as school districts around the country struggle to address widespread shortages, particularly in mathematics, science, and special education.⁵

Research finds that, across differing school and community contexts, effective principals set direction, develop people, redesign organizations, and lead instruction.⁶

Effective principals **set direction** by establishing a vision for a strong learning environment that can encourage teacher growth and retention⁷ and drive a culture of continuous improvement.⁸ Such a vision is informed by data; it empowers staff to share in school decision making, and it inspires educators and students around teaching and learning.⁹ Accordingly, principals need to learn how to create and implement a strategic vision that ultimately leads to improved student well-being and academic achievement.

Principals also **develop people**, in part through their influence on the quality of teachers that a school attracts and retains.¹⁰ In fact, the quality of principal support is often the top factor teachers identify in their decision to leave or stay in the profession.¹¹ Principals must learn how to attract quality teachers, as well as how to create collaborative environments where teachers and students thrive.

Strong principals **redesign organizations** by shaping the teaching and learning conditions that help all students learn and succeed. Principals have an important role in making the necessary shift to whole-child teaching practices, including the integration of social and emotional learning. For example, principals can influence the school environment to support students in becoming self-directed learners who understand and mitigate emotions, learn to set goals, value diverse viewpoints, build strong relationships, become responsible decision makers, and productively navigate personal and interpersonal situations.¹² Therefore, principals must learn how to foster supportive and engaging school environments that promote all students' acquisition of the knowledge and dispositions that help them succeed in school, college, and career.

Talented principals **lead instruction** by helping teachers learn how to implement increasingly rigorous academic standards that emphasize higher-order thinking skills. A former principal commented that today's best principals "know what good and effective instruction looks like, so they can provide feedback to guide teachers."¹³ These principals work directly with teachers to strengthen and provide feedback on their practice; offer meaningful professional learning opportunities to improve instruction; foster a safe space for teachers to critique, learn from, and collaborate with each other; analyze multiple forms of student data with the aim of improving instruction; and set high expectations for teachers and students.¹⁴ Consequently, principal preparation and professional development programs need to attract strong educators and help them learn how to lead schoolwide instructional improvements.

Developing excellent principals who can set direction, develop people, redesign organizations, and lead instruction requires a system of high-quality preparation and professional development.¹⁵

This paper summarizes the elements of high-quality principal preparation and professional development programs that have been associated with positive school outcomes, ranging from student achievement, to staff and student perceptions of school climate, to principal efficacy and retention. To illustrate how these elements work together to develop strong principals, the paper also includes descriptions of four programs that have been found to produce effective principals.

The National Institute for School Leadership Executive Development Program: A Cost-Effective Model for Improving Student Achievement

The National Institute for School Leadership (NISL) Executive Development Program provides school leaders with a research-based professional learning program that helps them improve their effectiveness. Multiple studies have found that after controlling for student characteristics and prior school achievement trends, schools led by NISL principals outperform comparable schools led by non-NISL principals in student achievement over the 4-year period studied.¹⁶

The program's curriculum is sequenced to develop principals with the capacity to be strategic thinkers, the confidence and knowledge to be effective instructional leaders, and the ability to establish a supportive culture for students and teachers alike. Active in 25 states, NISL works with both individual districts and statewide principal development efforts.¹⁷

The Executive Development Program places principals in cohort groups of around 25 or 30, where they spend 24 days training with an NISL instructor over a 12- to 18-month period. The peer-to-peer interactions amongst the principals in the NISL network provide a professional learning community for the principals that often leads to ongoing collaboration amongst program participants after completing the course.¹⁸

The Executive Development Program uses a mix of problem-based teaching methods, including group discussions, role-playing, video case studies, and simulations, as well as on-the-job learning, including Action Learning Projects that aim to address the actual challenges principals face in their current schools. The curriculum is designed for principals in all stages of their career. The curriculum focuses on instructional leadership, including how to foster teacher collaboration; leadership for excellence in literacy, mathematics, and science; implementing standards-based instruction; and coaching teachers. In addition, the curriculum emphasizes principals as direction setters—teaching principals to think strategically, use data to inform decisions, and build a culture of improvement.¹⁹

The NISL program allows districts to build lasting leadership capacity by offering the "train-the-trainer" program, which supplements the existing Executive Development Program with additional guidance and feedback on facilitation with each unit so principals or district staff members can bring this knowledge back to their district to teach other school leaders.²⁰

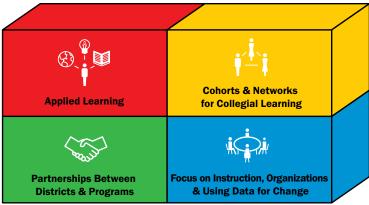
This program is highly cost-effective—\$4,000 per candidate—which one study estimates as \$117 per additional student achieving proficiency.²¹

The Building Blocks of Quality

To identify the elements of high-quality principal development programs supported in the research, we analyzed peer-reviewed research, or research by organizations with established review processes, published within the past two decades. Specifically, we reviewed studies that connected components of principal preparation and professional development to improved school outcomes, such as improved student learning, increased principal and teacher effectiveness and retention, and improved perceptions of school climate. Below, we summarize the organizational partnerships, structures, nature, and focus of high-quality principal preparation and professional development programs supported in the research.

Figure 1 The Building Blocks of High-Quality Principal Preparation and Professional Development Programs





Organizational Partnerships That Support Learning

High-quality programs require strong working relationships between the district and principal preparation/training program that involve: (1) close collaboration and (2) targeted candidate recruitment.²² Strong partnerships also provide a foundation for the other features of effective programs discussed in this paper.

1. Close collaboration between programs and school districts

High-quality programs partner with school districts in a mutually beneficial blend of research and practice. Effective partnerships between principal development programs and districts typically involve coordination on curriculum, active recruitment of promising teacher leaders, and the provision of authentic learning opportunities, such as residencies, where principal candidates work alongside mentor principals in a low-stakes, in-depth, and reflective environment.²³ Strong

partnerships provide candidates with a coherent experience in their clinical training and coursework that helps candidates bridge theory into practice. When districts and programs collaborate, candidates receive a more coordinated and holistic preparation and training experience.²⁴

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The structure of partnerships can vary depending on the unique context of a given

district, program, and community. In one example, the University of Illinois at Chicago works closely with Chicago Public Schools (CPS) to deliver an authentic residency as a part of its Doctorate in Urban Education Leadership program. "Triad meetings"—between candidates, their CPS mentor principals, and UIC leadership coaches—help coordinate and direct support between the two institutions throughout the yearlong residency. Furthermore, the two institutions have worked closely to align curriculum and program expectations with district leadership competencies (see description of the program on page 11).²⁵

2. Purposeful and targeted recruitment

High-quality programs recruit teachers with leadership potential to enter the principalship, ideally from the communities they plan to serve. Multiple studies suggest that a common characteristic of effective principal preparation programs is the careful recruitment and selection of talented individuals. Successful programs actively identify excellent educators with instructional leadership potential and a commitment to serve their community. Often, partnering districts recommend candidates whom they have identified as promising future leaders who also reflect the demographic characteristics of their students.²⁶

Rather than simply waiting for candidates to decide on their own to sign up for a program, targeted recruitment can attract more dynamic and diverse candidates into school leadership positions.²⁷ An administrator in a district working to improve principal quality noted how the district changed its principal recruitment

[From a process of] individual people self-selecting themselves, going into leadership [programs], ... when maybe they aren't the right people to eventually be principals, and it's allowing us to be very purposeful, very intentional, and taking [selected individuals] through a very supportive process.²⁸

Studies of successful principal preparation programs at Bank Street College, Delta State University, the University of Connecticut, and the University of San Diego found that these successful programs worked directly with partnering districts to recruit excellent teachers to their principal preparation programs. The principal candidates in these programs were more likely to have been instructional coaches and teacher mentors, and also to be women and people of color, compared to the norm across the country, as well as the norm in the programs before the partnerships were launched. Recruits in these programs were also more likely to become and remain principals, to feel competent, and to plan to stay in their jobs than their counterparts across the nation.²⁹

The New Leaders principal preparation program, also carefully recruits candidates and prepares candidates in ways and prepares candidates in ways that produce similar outcomes (see description of the program below).

New Leaders' Aspiring Principals Preparation Program: A Program Partnering With Districts to Prepare Principals to Lead High-Need Schools

New Leaders, a nonprofit organization, offers an Aspiring Principals preparation program in over 20 cities in the U.S. that prepares school leaders to serve in high-need urban schools. New Leaders attracts highly qualified and diverse individuals, often recommended by the schools or districts in which they are teaching, who support their training for the principalship. The program actively identifies and recruits candidates with classroom experience, a history of student improvement, and a belief that all students are capable of success.³⁰ Approximately 64% of New Leaders alumni identify as people of color, as compared to 20% of principals and teachers nationally.³¹

Candidates participate in yearlong residencies in which they work alongside mentor principals. The New Leaders residency is designed to expose candidates to the day-to-day realities of a principalship as well as problem-based learning opportunities such as role-playing and simulations, while receiving feedback, support, and coaching. New Leaders also provides ongoing support for its candidates after they become principals, generally providing 2 years of mentoring once per week for at least 2 hours.³²

Candidates learn together in a cohort where they "share challenges and reflect with their peers ... forging a support network that will last through their careers."³³ New Leaders' curriculum and experiences focus on "strengthening instruction across a building, enacting ambitious improvement plans, and fostering high expectations and shared accountability."³⁴ This includes specific coursework on data-driven decision making, cultural competence, mathematics and science instruction, and setting organizational culture. New Leaders closely partners with school districts and charter-management organizations to ensure that its graduates are placed in high-need schools and that each district supports its principals by giving them the necessary resources to enable their growth as leaders.³⁵

Just as the program urges its candidates to do, New Leaders engages in a continuous improvement process by setting ambitious standards, collecting data to monitor its progress toward those standards, and refining its program based on data. New Leaders' Aspiring Principals program underwent an evaluation, which found that, on average, students in schools led by principals selected and trained in the New Leaders program experienced larger gains in achievement than students in schools led by non-New Leaders principals, controlling for student characteristics. The study concluded that the three key elements of New Leaders' preparation that help principals to ultimately improve student learning include "selective recruitment and admissions, training and endorsement, and support for principals early in their tenures."³⁶

In addition, the study found that principals prepared in the program were more likely to remain in their schools for 3 or more years compared to other newly placed principals.³⁷ This finding is important because principal turnover is also associated with lower student achievement gains, particularly in high-poverty, low-achieving schools.³⁸

Programs Structured to Support Learning

High-quality programs recognize that learning is a social activity, and include structures to train and support principals, such as (1) cohorts and (2) networks. A veteran principal from California stated, regarding her work as an administrator, "No matter where you work, there is a feeling of isolation."³⁹ High-quality principal preparation and in-service programs curb principal isolation by envisioning leadership as a communal activity. Having principals learn together in cohorts and professional learning networks reflects the collegial and collaborative school environments that they will both work within and foster.

1. Cohorts of principal candidates

High-quality preparation programs structure learning and courses to take place in collaboration among a small group of peers. Multiple studies of effective principal preparation programs have found that a key aspect of programs is the fact that aspiring principals learn in cohorts.⁴⁰ The positive effects of cohort learning include an increased likelihood of participants completing the program,⁴¹ participants perceiving that they are better prepared,⁴² and more collegial and supportive learning environments.⁴³ In

Cohorts allow school leaders who are often isolated in their positions to turn to other professionals facing the same challenges for support, reflection, and insight.

well-run programs that operate in cohorts or professional learning communities, participants may also develop skills in conflict resolution, information processing, and, not surprisingly, cooperation.⁴⁴ Cohorts allow school leaders who are often isolated in their positions to turn to other professionals facing the same challenges for support, reflection, and insight.

The benefits of cohorts often persist past the completion of preparation programs as graduates use the network to exchange ideas, share resources, and engage in problem solving and critical reflection well into their professional careers.⁴⁵ A graduate from the Principals Institute at Bank Street College described the continued benefits of her cohort group:

We bounce frustrations as well as successes and questions off each other. And I'll have colleagues call me back [with] a question when they need an answer to something.⁴⁶

In this way, cohorts provide an ongoing network of support from practicing principals.

2. Networks of practicing principals

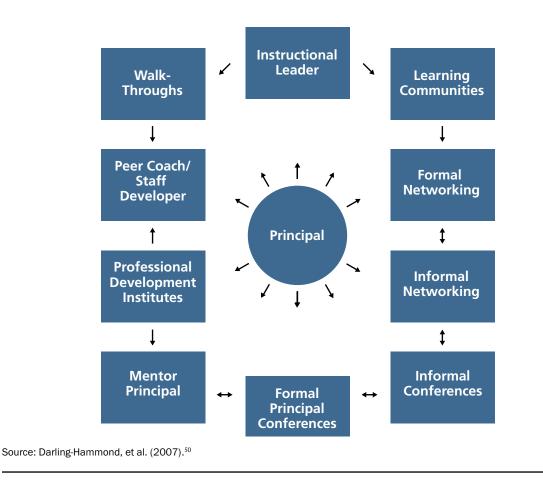
High-quality in-service learning programs also utilize networks or professional learning communities in which school leaders learn together on the job. Practicing principals who are part of networks or well-functioning professional learning communities that meet regularly and work on common problems of practice can provide opportunities for principals to share best practices, develop a shared orientation toward instruction, and problem solve through mutual, interactive, and self-initiated learning. To achieve these benefits, communities typically possess a commitment to students' needs, a regular time for meeting, user-friendly data to analyze problems, and a willingness to share authority through distributed leadership.⁴⁷

One New York City principal involved in a comprehensive principal network described the value of the network in the following way:

We got a chance to sit with our networks, bring in our work, and see other principals' ideas who have been principals longer then I have, who have a lot more to share. I'm always asking, "How did you do that?" or ... "Can I come to your school and see that?" They are always open and willing.⁴⁸

Innovative programs and districts have replaced the one-time workshop approach to in-service learning with multiple professional learning opportunities where principals develop a broader network of peers. For example, a study documenting San Diego Unified School District's web of learning supports for all principals described how groups of principals meet and engage in case studies, school visits, and peer coaching (see Figure 2). These activities provide principals with an informal peer network that facilitates reflection, analysis, and problem solving. Principals reported that this learning was "intensive in its hands-on nature" and "helpful for their school improvement work."⁴⁹

Figure 2 San Diego Unified School District's Principal In-Service Program Structure



Long Beach Unified School District, in partnership with the Association of California School Administrators, is another example of principal professional learning occurring within networks. The district has a "Grow Your Own" leadership development pipeline consisting of eight programs aiming to recruit, train, support, and retain high-quality leaders. These programs include a series of workshops preparing teacher leaders to become assistant principals; shadowing and professional development programs for aspiring principals; on-the-job coaching and support meetings for principals in their first 2 years; and continued coaching for principals with 3 or more years of experience.⁵¹ Participants' multiple points of contact with mentors, expert principals, and program peers create a network of resources that principals can continuously tap into for guidance.

Meaningful and Authentic Learning Opportunities

High-quality programs incorporate: (1) problem-based learning methods and (2) field-based internships and on-the-job coaching by an expert principal. Research demonstrates that people of all ages learn and transfer their knowledge and skills best in contexts that are similar to real-world situations.⁵² Studies in multiple disciplines show that leaders who participate in experiential learning activities rooted in the realities of their job become more able to "contemplate, analyze, and systematically plan strategies for action."⁵³ In response, some principal development programs have made changes in program curricula to offer more opportunities for learning through case- and problem-based teaching,⁵⁴ as well as internships and on-the-job coaching. Such practices ground participants' learning in authentic experiences while broadening their problem-framing skills for future situations.

1. Problem-based learning opportunities

Effective programs use context-specific problems to connect coursework and practice to enrich candidates' skill development. Strong principal preparation and development programs present a logical sequence of courses that bring together theory and practice through problem-based learning.⁵⁵ For example, San Diego State University's principal preparation program restructured its fieldwork and coursework to be mutually supportive. Replacing isolated, one-off administrative tasks, the program was redesigned so candidates complete an 18-month, comprehensive fieldwork project focused on improving student achievement for a candidate-selected target group of students. The candidates' coursework supported the project at each stage through exploration of applicable topics. Regarding the benefits of this hands-on learning linking coursework and practice, one candidate noted:

I think the coursework was physically and mentally exhausting because it pushed me out of my comfort zone. It forced me to look at things differently, and I came to realize that what I was reading wasn't just theoretical, that it could actually be done.⁵⁶

Researchers have noted that the restructuring was effective in providing candidates opportunities to connect program experiences with genuine school leadership responsibilities and in improving candidates' sense of self-efficacy.⁵⁷

In the National Institute for School Leadership Executive Development Program, current principals are provided with a yearlong curriculum that focuses on instructional leadership and strategic thinking (see description of program on page 2). Using group discussions, role-playing, video case studies, and Action Learning Projects that aim to address the actual challenges principals

face in their current schools, principals in the program apply the information they are learning to situations they face on a daily basis.⁵⁸ In the School Turnaround Specialist Program (STSP) at the University of Virginia, principals build their capacity to lead change by applying leadership theory to practice through their design of a 90-day action plan for bringing about change in their school (see description of program on page 15). University of Virginia faculty and STSP staff provide tailored instruction and support that reflects the unique challenges a district faces.⁵⁹ Effective programs like STSP ground candidates' learning in real-world challenges.

2. Field-based internships and coaching/mentoring by an expert

High-quality programs support principals' development through internships and on-thejob coaching by strong and supportive leaders. On-the-job coaching and mentoring have long been recognized as practices that improve leader effectiveness and productivity.⁶⁰ In education, coaching and mentoring—the latter being more interpersonal and general, while the former is more formal and focused on specific skills—provide critical learning opportunities

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for principals both in pre-service and in-service settings. Principals often report that this is the most valuable learning opportunity for them, but also the one they are least likely to experience in many states.⁶¹

Internships. A key aspect of many effective principal preparation programs is a field-based internship for aspiring principals. These programs offer internships or residencies directly under the wing of expert principals so that candidates can experience the daily demands of school leaders with the support of an experienced school leader who can model strategies and coach them. Ideally, candidates intern in the districts where they intend to work so that they become familiar with the context, resources, and challenges facing that district.⁶² A principal candidate in an effective program described the value of her internship:

The internship experience is phenomenal. We really got to see schools, because we were given an opportunity to experience an internship that put you in the school and had you working with a principal doing things for the school—not just sitting around hearing about it. You're actually doing it, and that was one of the benefits of this program. ... It's authentic. [We had] authentic experiences that helped us learn, so we had not only an opportunity to discuss it through classes, but we experienced it through doing.⁶³

Unlike traditional assistant principal placements that put candidates directly into challenging jobs to learn on the fly, field-based internships raise candidates' awareness of the day-to-day complexities and demands of principals' work,⁶⁴ while also providing support from a mentor to help candidates connect theory from their coursework to practice.⁶⁵ In addition, the scope of the principal's role is typically different from that of the assistant principal (who is, for example, often assigned to "discipline" or other non-instructional roles in high schools), so the internship provides an opportunity to learn the broader set of responsibilities, including instruction, interactions with parents and stakeholders, and school improvement initiatives.

Internships help candidates build leadership competencies and skills through a process of planning, practice, and reflection that requires them to put sophisticated theories into practice. In the context of robust program-district partnerships, coaches help candidates link their internship experiences to the theories and problem-based activities they learn in their coursework.⁶⁶ Internships, by improving principals' leadership practice, can promote an effective school climate of teacher collaboration and continuous learning.⁶⁷

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Expert mentors or coaches play a critical role in bringing insight and support to candidates' internship experiences. In the New Leaders principal preparation program, candidates participate in a yearlong residency in which they serve, typically, as assistant principals while being mentored by an expert principal (see description of program on page 5).⁶⁸ Similarly effective programs in Mississippi and Chicago, sponsored by local districts in collaboration with Delta State University and the University of Illinois at Chicago, respectively, also feature a yearlong internship under the guidance of carefully selected expert principals.⁶⁹

While these programs are highly effective, costs can be a barrier to high-quality internships for many programs and candidates.⁷⁰ Exemplary programs ensure candidates receive financial support during their internships, and in many instances candidates receive a salary. In North Carolina, principal internships have been supported through the state-funded Principal Fellows program. In Mississippi, a state-funded sabbatical program funds a yearlong internship offered at Delta State University with a collaborative of rural districts.⁷¹ Some districts support internships for principals-in-training in collaboration with local universities, structuring these either as assistant principalships that go beyond the traditional role and allow for integrated coursework or as special assignments for a semester or a year under the wing of an expert principal while the candidate undergoes a tightly linked credential program.⁷²

On-the-job coaching. High-quality preparation for new principals continues after the awarding of a credential in the form of high-quality principal induction and on-the-job coaching or mentoring. This approach helps ease new principals into organizational responsibilities. For principals from all levels of experience, on-the-job coaching supports them to foster school improvement and adopt new leadership methods.⁷³ One way coaches do this is by asking thoughtful questions to assist principals to self-reflect on their leadership. For example, principals in San Diego Unified School District and their coaches might visit a dozen classrooms together, spending 5 minutes in each, examining student learning and teaching methods. The principal is asked to synthesize what he or she observed in the classroom, and to create next steps to improve instruction with the staff. These practices of strong instructional leadership are modeled, later becoming part of a principal's future routine.⁷⁴

Coaches and mentors should be selected because they are exemplary administrators with an interest in mentoring, and they should be trained to be successful in their role.⁷⁵ A common weakness of many in-service principal mentoring programs is that mentors are selected haphazardly and are not trained in a meaningful way. In contrast, the New Leaders program works with districts to ensure their mentors are high-quality, successful principals and also provides mentors a financial stipend (see description of program on page 5).⁷⁶ Several high-quality programs recruit retired principals to serve as mentors for novice or struggling principals.⁷⁷ For example, Gwinnett County, Georgia, established a support program for new principals by recruiting retired principals and training them to work one-on-one with novice principals for at least 4 hours a month.⁷⁸ The mentors are also matched based on similarities between the demographics of the mentor's and the novice's school. Programs in Missouri, Chicago, Gwinnett County, and New Leaders' districts understand that providing research-based pre- and in-service mentoring and coaching helps to develop effective leaders.

Ed.D. Program in Urban Education Leadership at University of Illinois at Chicago: A Model of Evidence-Based Principal Preparation

The Ed.D. in Urban Education Leadership is a nationally recognized doctoral degree program for principal preparation at the University of Illinois at Chicago (UIC), in partnership with Chicago Public Schools (CPS). Through its innovative features, the program prepares leaders who can significantly improve teaching and learning in high-need urban public schools. Since its redesign in 2002, the program has admitted 16 cohorts of students who have been trained to lead with a social justice perspective.⁷⁹

The Urban Education Leadership program includes many evidence-based elements. Candidate selection is a rigorous process involving a 2-hour in-person interview, professional portfolio, and case analyses to ensure that only individuals with instructional expertise, a record of success in leadership roles, and a commitment to improving schools are accepted.⁸⁰ Candidates learn in a cohort so that they can interact with and learn from their peers' diverse professional and personal experiences and perspectives. The program organizes its curriculum around three strands: instructional diagnosis and development, organizational/leadership diagnosis and development, and cycles of inquiry for schoolwide improvement. Furthermore, many courses deliver problem-based teaching techniques by combining research and practice.⁸¹

Recognizing that training school leaders to transform student achievement demands support and collaboration with local school districts, Urban Education Leadership has built a strong partnership with CPS. This is best evidenced by the fieldwork component, which consists of a yearlong paid residency (funded by CPS) at a public Chicago elementary or high school.⁸² Throughout the residency, UIC faculty coaches and on-site mentor principals with demonstrated records of school improvement support candidates.⁸³ Over the course of this extensive residency, candidates gain numerous opportunities to practice and develop authentic school leadership. For example, candidates gain experience designing professional development for teachers that targets student achievement. Candidates also gain experience developing interpersonal leadership skills through interactions with teachers, parents, and students.⁸⁴ UIC's strong partnership with CPS helps the program to train school leaders who are ready to effect positive change in schools.

The Urban Education Leadership's emphasis on highly prepared, social justice-oriented school leaders has led to positive results for CPS students and schools. At the end of the 2010–11 school year, 21 of 28 UIC-led schools recorded student achievement gains above the average for all CPS schools.⁸⁵ Additionally, between 2004 and 2015, 72% of UIC-led elementary schools and 60% of UIC-led secondary schools exceeded the state's average student growth gains by the end of the principal's first year.⁸⁶ Since that time, the program has expanded its impact and reputation for training high-quality administrators.

Learning Opportunities Focused on What Matters

High-quality programs focus on supporting principals in learning how to: (1) improve schoolwide instruction, (2) support collegial teaching and learning environments, and (3) analyze and act on data. Principals need to know how to lead instruction and continuous school improvement to meet the increasingly rigorous academic standards and dynamic demands of students. Consequently, high-quality programs include content that focuses on preparing leaders to implement an instructional vision through collective leadership and by improving instruction through data.⁸⁷

1. Strong focus on improving schoolwide instruction

High-quality programs have curricula focused on instruction and school improvement. Research has shown a positive link between instructional leadership—monitoring instruction, influencing curricula, assessing student learning, and other similar practices—and student achievement.⁸⁸ Principals indirectly influence student learning by, for example, creating professional learning communities where teachers collaborate to improve their instruction.⁸⁹ High-quality programs have curricula emphasizing the complex role principals play in instruction, school improvement, and developing students' social-emotional skills. High-quality programs also provide authentic opportunities for candidates to build mastery in these areas.

Effective instructional leaders who can improve school achievement tend to share a set of characteristics, even though their style generally varies by context. Strong leaders build communities

of teachers who support the development of students' academic, social and emotional skills, including helping teachers learn how to adapt learning to meet unique student needs. Additionally, high-quality principals provide targeted and actionable feedback to support teachers' continuous improvement.⁹⁰ And for principals to lead schoolwide change, they need to learn how to establish ambitious goals with clear plans for achieving those goals, how to implement a plan for change, and how to garner staff and student ownership in supporting the change.⁹¹

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For example, with an understanding that context matters, the Urban Education Leadership program at UIC embeds school improvement work in integrative performance assessments at candidates' school settings (see description of program on page 11). In two yearlong, post-residency courses, candidates—typically employed as assistant principals—focus on developing understanding, practice, and expertise with leading schoolwide improvement. Candidates' first assessment requires them to develop diagnostic data systems to identify the root cause of leadership, organization, or instructional problems in their respective schools. This project requires candidates to apply prior coursework to inform their diagnosis, which connects their knowledge of academic theory to real-world problems.⁹² By modeling its curriculum on authentic explorations of school improvement, the Urban Education Leadership program helps prepare its candidates for school leadership.

Bank Street College's Principals Institute also maintains a strong focus on instructional leadership and schoolwide capacity building as a means to create democratic and equitable school cultures. Through three robust internships over an 18-month period, the program helps transform teachers into school leaders focused on improving teachers' instructional practice. This improvement aims to put students at the center of learning. As one candidate commented regarding her learning at Bank Street, it helped her "think of another way to do it. Think of how you can do better in your school—what benefits the children of the school."⁹³ Bank Street's curriculum focused on schoolwide improvement and action-learning experiences that link academics and practice to concerns for equity has helped create a program that produces leaders who are more likely to report that teachers feel supported in and supportive of the school improvement strategies.⁹⁴

The McREL Balanced Leadership Professional Development (BLPD) principal program—which is associated with reduced teacher and principal turnover—also includes a curriculum focused on instruction and school improvement.⁹⁵ BLPD case studies require participants to read, reflect on, and discuss how to:

- establish a vision of academic success for all students,
- create a climate hospitable to education,
- cultivate leadership in others,
- improve instruction, and
- manage people, data, and processes to foster school improvement.⁹⁶

Within each of these goals, BLPD wants its participants to learn *what* to do, *how* to do it, *when* to do it, and *why* it is important.⁹⁷

2. Attention to creating collegial organizations

High-quality programs prepare educators to create environments where teachers, staff, and students engage in continual learning and improvement. Schools with collaborative learning environments are associated with improved student achievement⁹⁸ and reduced teacher turnover.⁹⁹ Collaborative schools provide opportunities for teachers to participate in schoolwide decisions and to work with teachers in the same grade level or subject area to plan curricula. A culture of collaboration does not spontaneously occur within schools. Principals need to learn to support the structures that foster

Principals need to learn to support the structures that foster collaboration, such as how to organize time in longer blocks so that teachers have extended time periods to plan and collaborate.

collaboration, such as how to organize time in longer blocks so that teachers have extended time periods to plan and collaborate. Principals also need to learn to encourage collaborative attitudes by promoting shared decision making among school staff and teachers, which is sometimes referred to as "distributed leadership."¹⁰⁰ One way effective preparation and in-service programs do this is by providing principals instruction on how to foster collegial environments for teachers.

For example, the Bank Street College Principals Institute emphasizes teaching and learning, including school reform and redesign. Courses cover topic areas such as adult learning, professional development, teacher collaboration, and shared decision making. A graduate of the institute shared that one of the main leadership initiatives she instituted upon becoming a principal was collaborative professional development. She created a culture of collaboration in which teachers are encouraged to observe strong teaching in other classrooms and to work together in formal and informal ways. She uses a system of "teacher buddies," which pairs teachers with distinctive strengths to support collective development.¹⁰¹

Another way effective preparation and in-service programs prepare principals to lead collegial organizations is by providing principals an opportunity to practice aspects of the daily tasks of collaborative leadership, such as learning to listen to and include teachers in school site decision making. The University of Connecticut's preparation program focuses on preparing school leaders to develop collaborative organizations. For example, one of the program's courses, "Creating and Sustaining a Positive School Climate," supports leaders in developing skills for "evaluating, establishing, and sustaining a positive school climate for the purpose of improving student achievement."¹⁰² A graduate of the program explained how the program's emphasis on collaboration has translated into her school leadership:

We set an improvement plan each year as a school—it's a collaborative effort with the classroom teachers—and we set our assessments right in that plan, so we have action steps and how we're going to evaluate them. ... At the end of the year, I have the staff members [look at] each of our action steps and [review] how far they feel we have progressed toward [the plan], and then they comment on that as well. Then we meet as a staff to determine if that's a goal that needs to continue the following year with a different plan, or if the plan should continue as it is, because there is some success noted.¹⁰³

Effective programs like the University of Connecticut and Bank Street understand that principals supporting teacher collaboration is key in schools where students thrive.

3. Using data for change

High-quality programs train educators to use data and collective inquiry to identify problems and address needs, in collaboration with staff, parents, and community organizations. Data play an important role in school leadership. Data collection starts with frequent classroom visits and continues with a broad assessment of qualitative and quantitative data. And with

High-quality programs train educators to use data and collective inquiry to identify problems and address needs.

ever more data available, principals have an opportunity to leverage this information to inform classroom instruction and school improvement. However, this requires principals to develop competencies in data use and assessments, to identify problems, and to inform and monitor solutions. In response, strong pre-service and in-service development programs are providing school leaders with opportunities to learn about and work with data. For example, candidates in UIC's Urban Education Leadership program engage in a "cycle of inquiry" in which they identify root causes of an issue, formulate a strategy for improvement, set outcome goals, enact a proposed action plan, and monitor progress. In this process, candidates use quantitative and qualitative data to identify problems at their school, design data systems and protocols to monitor the problem as well as the improvement plan, and use data to reflect and report key findings from their inquiry. This experience helps to prepare candidates to use multiple forms of data to drive continuous improvement at their school.¹⁰⁴ Similarly, the University of Connecticut's Administrative Preparation Program teaches the importance of data in a continuous improvement cycle. Candidates are exposed to data-driven methods in their coursework and later implement these practices during their internships. In the internship-residency model, all candidates, mentors, and the program director address the use of data-based planning cycles that use student assessments to inform classroom instruction.¹⁰⁵

Data-driven improvement is also emphasized in the STSP curriculum (see description of program below). In the beginning of the turnaround process, the "district shepherd," a prominent district official who acts as a liaison between the turnaround school site and the district office, works with the school to ensure the principal has access to a rich data system to inform instructional practices by analyzing formative and summative assessments. The program teaches principals to use and communicate data-driven goals to create a collaborative environment and shared mission among staff. In qualitative interviews of five STSP schools in Ohio, both principals and teachers said the biggest contributing factor to the program's success was the increased use of student data to inform instruction. Principals also shared the belief that there was a boost in teacher self-efficacy as teachers began to see improvement in the student data.¹⁰⁶

The School Turnaround Specialist Program: How Professional Learning for Principals Can Improve Struggling Schools

The School Turnaround Specialist Program—a collaboration between the Darden School of Business and the Curry School of Education at the University of Virginia—is designed to improve persistently low-performing schools. The STSP is a 2-year program aimed at improving leadership capacity at the school and district level to incite positive change in schools. In the past decade, the STSP has worked with more than 250 schools in more than 65 rural and urban districts.¹⁰⁷

Over the 2-year period, a turnaround team of teacher leaders, assistant principals, principals, and district leaders attend multiple off-site sessions during the summer and winter at the University of Virginia, where faculty and STSP staff instruct the team on how to identify problems, use student data to inform decisions, and employ strategies to engage and motivate school staff. At these off-site retreats, the turnaround team designs a 90-day action plan to implement at their school the following semester. During the school year, STSP staff members visit the turnaround teams' schools to monitor and support the schools' progress toward their 90-day action plan. A key feature of the program is building a connection between the district and the turnaround school. A "district shepherd" makes weekly on-site visits to mentor and support the school principal and evaluate the school's progress toward the turnaround team's 90-day action plan.

One study found that STSP schools in Ohio achieved large increases in the percentage of students scoring proficient and large decreases in the percentage of students scoring below basic in comparison to similar schools. These achievement gains occurred during the 2 years the intervention took place and persisted for at least 2 years after the intervention ended. Students across all levels of proficiency experienced achievement gains, suggesting the boost was not due to a "bubble" effect (in which schools deliberately target kids on the edge of proficiency to perform better). Beyond increases on test scores, average student daily attendance also increased in the STSP schools in Ohio.¹⁰⁹

Policy Implications

Because of the importance of principals for student achievement and teacher quality, policymakers have good reason to invest in the preparation, training, and professional learning of principals. Although high-quality principal development requires financial investments, the benefits can be substantial when considering a principal's influence on school culture, teacher quality¹¹⁰ and retention,¹¹¹ and, consequently, student outcomes.¹¹² (See Figure 3.)

Both the NISL Executive Development Program and STSP offer examples of cost-effective ways to boost student achievement (see descriptions of programs on pages 2 and 15). For example, a 2011 study of NISL in Massachusetts found that students in schools led by NISL-trained principals gained the equivalent of more than 1 month of extra learning in mathematics and English language arts. Other policies that have had a similar influence on student learning are more expensive, such as whole school reform and class-size reduction.¹¹³ For example, a meta-analysis of comprehensive school reform (CSR) efforts found a similar gain in student

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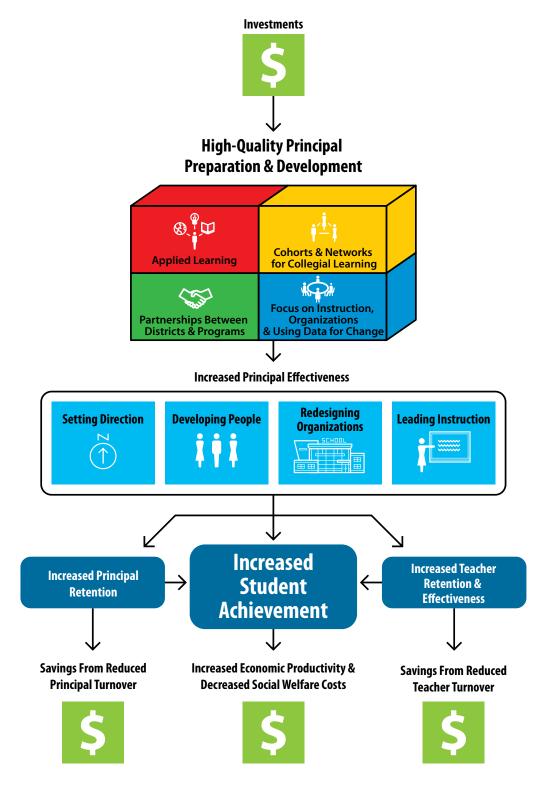
achievement as the impact of the NISL Executive Development Program, but the median cost of CSR was \$85,000 per school compared to \$4,000 per school leader in NISL.¹¹⁴

The positive influence of the STSP on student achievement, which costs about \$40,000 per team, was found to be comparable to the influence of a federal School Improvement Grant (SIG) used for school turnaround efforts. The average SIG in Ohio cost more than \$650,000. The STSP turnaround method is particularly relevant with the passage of ESSA, which targets Title I funds to persistently low-performing schools. States could model similar leadership development programs using the STSP as an example.¹¹⁵

The expense of principal preparation and training programs is even more reasonable when considering the per-pupil cost. For example, a 2009 study of a highly successful leadership development program in New York included a package of regular trainings for principals; frequent conferences and organized network meetings for school leaders; and support for teachers, assistant principals, and district leaders. It also fostered capacity building at the school and district level and provided intensive mentoring. This program cost a total of \$36,800 per recipient. While that is a major investment in school leadership, it only amounted to an estimated \$13 per pupil.¹¹⁶

States can use federal funds to offset the expense of principal preparation and training. ESSA permits states to set aside 3% of their Title II formula funds to strengthen the quality of school leaders, including by investing in principal recruitment, preparation, induction, and development.¹¹⁷ As states develop their plans under ESSA, they may want to consider taking advantage of these potentially more targeted funds to make strategic investments in their school leader workforce. In addition, states can leverage other funds under Titles I and II of ESSA to invest in school leadership as a means to strengthen both teacher and school leader quality, and ultimately, to improve schools (see page 18).

Figure 3 How High-Quality Principal Preparation and Development Pays Off for Students, Schools, and States



Federal Funding for Principal Preparation and Training in ESSA

Under the Every Student Succeeds Act (ESSA), states have multiple opportunities to invest in high-quality school leadership, especially in high-need schools and communities.

- Title II, Part A. States may allocate up to 5% of their Title II, Part A allocation to teacher and leader development and an additional 3% exclusively for leadership investments.¹¹⁸ These investments can be used to prepare aspiring school leaders, to develop current principals, or even to fund coaches or mentors who directly support principal learning.
- 2. Title I, Part A School Improvement. States are required to set aside 7% of their Title I, Part A funds to improve low-performing schools by using evidence-based strategies that improve student learning.¹¹⁹ States and districts have flexibility to select the mix of evidence-based strategies that best meet their contexts.¹²⁰ One potential strategy is for states and districts to focus on improving student outcomes by implementing research-based interventions to strengthen school leadership. Multiple school leader interventions demonstrate strong, moderate, and promising levels of evidence under ESSA's evidence-based requirements.¹²¹
- 3. **Competitive Federal Grants.** States, districts, and nonprofit organizations can further strengthen school leadership capacity by applying for a competitive federal grant. These grants can be used for a range of activities that support and develop high-quality school leaders. They include:
 - a. School Leader Recruitment and Support Program—for states and districts to recruit, prepare, place, support, and retain leaders in high-need schools.¹²²
 - b. Supporting Effective Educator Development—for nonprofit organizations and institutions of higher education to support educator recruitment, preparation, certification, and professional learning.¹²³
 - c. Teacher and School Leader Incentive Program—formerly the Teacher Incentive Fund, this program supports state and district investments in performance-based compensation and human capital management systems for principals, other school leaders, and teachers.¹²⁴

Conclusion

In the wake of the Every Student Succeeds Act, states around the nation are taking the opportunity to redesign their education systems to better prepare students for today's knowledge-driven economy. Strong leadership will be necessary to implement new education initiatives related to curriculum, accountability, and social and emotional learning. Furthermore, principals will be critical in addressing widespread teacher shortages around the country by improving hiring practices, creating positive working conditions, and fostering collegial environments that can help improve teacher recruitment and retention.

When investing in the preparation and development of principals, policymakers should ensure that programs reflect the evidence base for what makes an effective program, including strong partnerships; purposeful and targeted recruitment; cohort and network learning; problem-based learning methods; internships and on-the-job coaching by an expert; and curriculum and learning focused on improving instruction, creating collegial organizations, and using data to improve student achievement. This worthwhile and necessary investment is critical to school success.

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About the Authors

Leib Sutcher is a Research Associate on LPI's Educator Quality Team. His current work focuses on teacher labor market issues, including recruitment and retention, the inequitable distribution of unqualified and inexperienced educators, and teacher shortages. He is the lead author of *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.*

Anne Podolsky is a Researcher and Policy Analyst on LPI's Educator Quality team. Her work includes having served as the co-author of reports on the impact of experience on teacher effectiveness and evidence-based interventions for school improvement. As an education lawyer and teacher by training, she has served in legal, research, and policy roles with a variety of organizations. She is the lead author of *Solving the Teacher Shortage: How to Attract and Retain Excellent Educators*.

Danny Espinoza is a Research Assistant on the Educator Quality and the Equitable Resources and Access teams at LPI. As an undergraduate, he worked as a research assistant for the Institute for Latino Studies, assisting in studies exploring political identity formation for multiethnic voters. He also conducted research analyzing the impact and effectiveness of Chile's national education voucher program, particularly for students of low socioeconomic background. Previously, Espinoza interned with the Mexican American Legal Defense and Educational Fund where he focused on ESSA authorization and equitable access to higher education funding.



1530 Page Mill Road, Suite 200 Palo Alto, CA 94304 p: 650.332.9797

1301 Connecticut Avenue, Suite 500 Washington, DC 20036 p: 202.830.0079 www.learningpolicyinstitute.org

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