

# A Framework for Principal Talent Management

FEBRUARY 2020



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Rooted in President and Mrs. Bush's belief that "excellent schools must first have excellent leaders," the George W. Bush Institute developed the School Leadership Initiative (SLI) to transform districts' talent management of school principals and to provide school districts with knowledge and tools to attract and retain effective principals. SLI's mission is to help ensure there is an effective principal – able to significantly advance student achievement – at the helm of every school.

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We are grateful for the continued generous support of the following: an anonymous donor, The AT&T Foundation, Bass Foundation, The BNSF Railway Foundation, Carstens Family Funds, CME Group Foundation, Mr. and Mrs. John W. Johnson, The Morris Foundation, The Prudential Foundation, Rainwater Charitable Foundation, and Sammons Enterprises, Inc., Sid W. Richardson Foundation.

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American Institutes for Research was contracted to support the George W. Bush Institute's research on education leadership.



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We thank our partners at Collaborative Communications who helped us improve this report. While their work greatly shaped this final document, we take full responsibility for all errors and omissions.

# Table of Contents

2	Introduction
3	A Framework for Principal Talent Management
4	Understanding Effective Principal Talent Management
6	Building Effective Principal Talent Management Systems
8	Working Environment
10	Pipeline Development
14	Recruitment and Selection
16	Professional Learning
18	Principal Supervision
20	Performance Evaluation
22	Compensation and Incentives
24	Districts to Watch: Principal Talent Management in Practice
27	Denver Public Schools—Principal Working Environment
28	Gwinnett County Public Schools—Quality-Plus Leader Academy
31	IDEA Public Schools—Principal in Residence Program
33	Prince George’s County Public Schools—Leadership Development Framework
35	Hillsborough County Public Schools—The Hillsborough Principal Pipeline
37	Charlotte-Mecklenburg Schools—5-Year Induction Program
40	Recommendations
42	Endnotes
44	References
50	Acknowledgments

**T**alented leaders are essential to building and sustaining successful organizations. This is especially true for schools, where principal leadership plays a major role in fostering student success. Research shows that principals are a significant school-level factor affecting student achievement, second only to classroom teachers.<sup>1</sup> Like other types of leaders, great principals recruit and retain the best talent (teachers), set ambitious visions for their buildings, and create a culture of collaboration and constant improvement. Because of this, it is critical that school districts implement policies and practices aligned with a coherent system of principal talent management, enabling them to attract and retain the most effective principals.

This Principal Talent Management (PTM) Framework is a guide to help school district leaders and policymakers understand the fundamental components and the interconnectivity of effective PTM systems. As such, the Framework is intended to support efforts to strengthen the policies and practices districts use in a holistic effort to attract, support, and retain the best principals. Specifically, this guide:

Summarizes the available **evidence and expert thinking on each major factor and component of a PTM system.**

These include: *working environment, pipeline development, recruitment and selection, professional learning, principal supervision, performance evaluation, and compensation and incentives.*

Provides a list of **promising practices** for each PTM component, along with the evidence that supports each practice. In some cases, we include practices that have emerged in the field or are recommended by experts, but do not yet have research to support their impact on outcomes.

Highlights **examples of these promising practices in select districts** based on document review and interviews with district leaders involved in the systematic improvement of PTM in their schools. The practices are relatively new in most cases and districts are only beginning to collect evidence as to their efficacy. The districts chose these practices to implement based on currently available research or in response to issues noted when reviewing data on principals.

Although the individual PTM components are discussed separately, PTM is, at its core, a systems-building approach to improving the quality of principal leadership. Districts that are beginning to address their own PTM needs may choose, initially, to focus on one or two of the components that are most urgent. Ultimately, however, they should broaden to address each component within a coherent system. To this end, the guide also provides a set of recommendations to support a holistic approach to developing and implementing PTM systems. These recommendations offer guidance to school district leaders, legislators, researchers, and others as they work toward implementing and improving such efforts.

This guide was first developed and released in the 2016. Since that time, the Bush Institute has been working with a cohort of four school districts as part of the School Leadership Initiative to learn more about these practices and policies. This guide has now been updated to reflect the latest research from the field as well as some of our own learnings.

## A Framework for Principal Talent Management

A Framework for Principal Talent Management follows the continuum of a principal's career. It begins with the linear progression of preparation and recruitment, followed by more cyclical components once the principal is leading a school.

Each component is **rooted in standards** and **measurable competencies** and influenced by a principal's **working environment**.

**Pipeline Development** begins with teacher leadership or assistant principal experiences and includes formal leadership preparation programs. It ensures that new principals are ready to lead their school.

**Recruitment and selection** processes ensure that schools are hiring quality candidates who meet the district's leadership needs while making a right "fit" for the school.

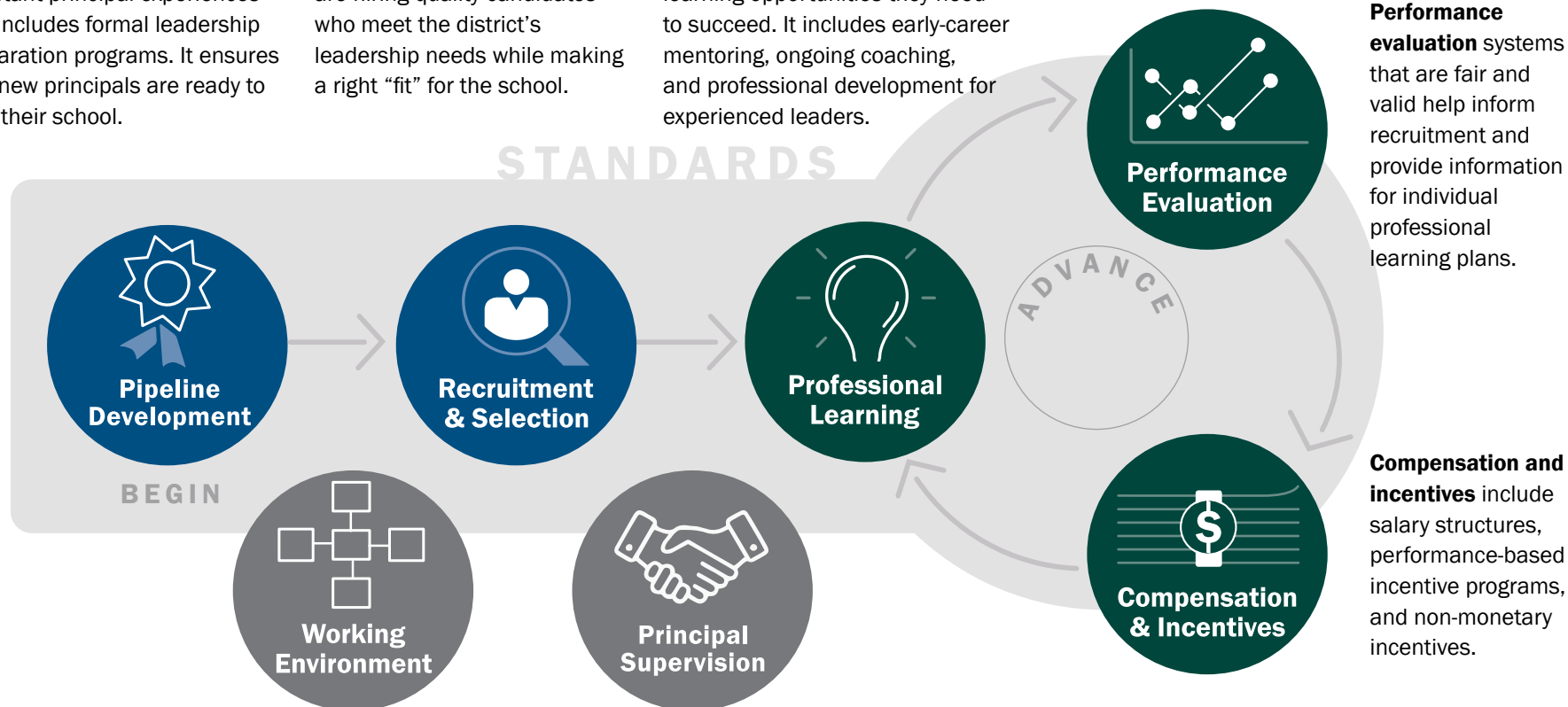
**Professional learning** gives principals the learning opportunities they need to succeed. It includes early-career mentoring, ongoing coaching, and professional development for experienced leaders.

**Performance evaluation** systems that are fair and valid help inform recruitment and provide information for individual professional learning plans.

**Compensation and incentives** include salary structures, performance-based incentive programs, and non-monetary incentives.

**Principal Supervision** focuses on providing meaningful support and feedback to principals.

The **working environment** includes district policies and practices that give a principal the right supports, balanced with the autonomy to make critical decisions. The working environment has an impact on aspiring principals' experiences during preparation programs, which may include in-district residency experiences, and may influence where an aspiring principal chooses to work. Once a principal is employed, the working environment could influence a principal's ability to make decisions and have support for curriculum, programming, teacher and staff talent management, and professional learning opportunities. The working environment also encompasses district-level policies and practices related to accountability and other demands on a principal's time and effort.

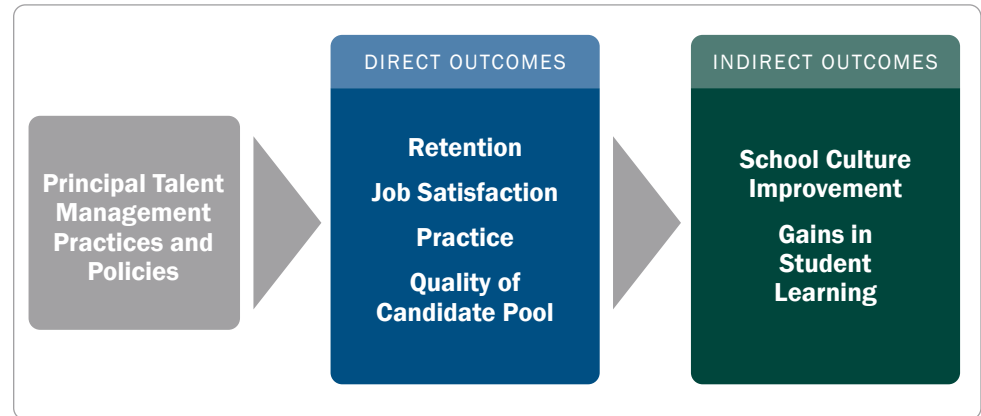


# Understanding Effective Principal Talent Management

School leadership workforce realities require that districts take a new approach to attracting, supporting, and retaining principals. The role of the principal has changed; new school principals are younger, with less teaching experience than the generation before them.<sup>2</sup> In addition to traditional management responsibilities such as coordinating school building maintenance, organizing schedules, and taking inventory of curriculum, a critical role of today's principal is as the instructional leader. Principals must spend much of their time coaching teachers, specialists, and the building's leadership team. In addition, this new principal generation leaves the position faster than their predecessors. The average number of years that principals stay in a school has decreased from six years to three years over the past decade. When principals leave their positions in three years or less, school improvement agendas—which can take as many as three to five years to gain traction under a new principal—are challenged.<sup>3</sup>

At its best, PTM represents a holistic, cohesive approach to attracting, supporting, and retaining more effective school leaders. Districts and states taking a PTM approach coordinate previously disparate human resources processes and align them to a common set of research-based competencies or standards for school leadership. PTM provides greater coherence to programs and supports that serve both current and future leaders—regardless of their place on the career continuum. In a cohesive PTM system, each component of the system should be aligned to a district-wide set of research-based standards or

## Outcomes Associated with Principal Talent Management Policies and Practices (see further explanation on next page)



competencies that describe what all principals in the district should know and be able to do. Ultimately, PTM aims to create and sustain high performing schools that are capable of supporting strong student learning, and doing so takes time and incremental efforts to fully achieve.

Despite the clear importance of effective principal leadership, there is not yet a large body of definitive research that provides empirical evidence attesting to the effect of specific principal talent management policies and practices. However, a RAND study of six districts implementing comprehensive PTM strategies found widespread positive effects on principals, schools, and students. The same study found this PTM work was affordable.<sup>4</sup> Many experts agree that improving alignment and cohesion across principal talent management components, such as preparation, recruitment and selection, professional learning, and compensation, will lead to improved principal effectiveness.<sup>5</sup> Additionally, the nascent state of the research

on PTM does not discount the broader research on the impact principals have on student achievement. Rather, the research limitations reflect a clear need for more well-designed studies of PTM systems and components in order to inform district and policymaker decision-making when it comes to building and sustaining a strong school leadership workforce.

The Bush Institute’s review of the research on PTM identified several direct outcomes (results a principal can influence directly), as well as a number of indirect outcomes (results we would expect a principal to influence more indirectly) that can result from certain PTM programs and practices.

These include:

- Principal retention (direct outcome)
- Principal job satisfaction (direct outcome)
- Principal practice quality (direct outcome)
- The size and quality of the principal candidate pool (direct outcome)
- School culture (indirect outcome)
- Student learning (indirect outcome)

The types of research included in this guide are presented in the following table. In instances where promising practices have been published (e.g., policy briefs, reviews of literature), we note this evidence as “published expert opinion.” The Bush Institute also gathered feedback from a wide variety of education experts, including researchers, policymakers, and practitioners engaged in talent management practice. In instances where practices are recommended by these experts, it is noted as “expert opinion.”

Type of Research	Definition
Qualitative Research	Includes case studies and action research. Case Studies include any reporting on the in-depth experience of one person, family, group, community, or institution through direct observation and interaction with subject; and may include expert opinion focused on this particular experience. Case studies may also include focus groups, document review, and interviews. Action research may include program evaluation, technical action research, and practical action research.
Quantitative Research	Includes meta-analyses that study previous research; descriptive/ correlational analyses that do not draw a relationship between variables; and other statistical analyses (such as quasi-experimental designs) that use techniques like regression analysis, or that involve a treatment and control group to test hypotheses (e.g., impact evaluation).
Literature Reviews	Reviews of existing literature that includes citations from multiple resources and does not focus on any one experience; the review is general in nature and intended to substantiate a research question through existing literature. This may include policy briefs, text books or chapters of books, or digests.
Expert Opinion	Opinions of persons well-respected in the respective field. This may include organizations’ policy position statements.

# Building Effective Principal Talent Management Systems

PTM should begin prior to a principal being placed in the job, which we refer to as **pipeline development**. Pipeline development starts when a candidate is a teacher. Giving teachers authentic leadership experiences may better prepare them to lead in the principal role. Additionally, most states require formal preparation. This **preparation** may happen through universities, colleges, or other preparation programs and should be done in close partnership with school districts. In some instances, districts may proactively identify teachers or other staff with leadership potential and encourage them to pursue the principalship. After completing their preparation, graduates are typically certified and licensed to be principals, allowing them to engage in the **recruitment and selection** process with districts and schools.

These first two PTM components are typically linear, but once principals complete their pre-service work and enter into their in-service role as principals, their career continuum becomes more cyclical. Many districts **evaluate principals annually** and use the results of these evaluations to identify **professional learning needs**. Regardless of evaluation results, professional learning should begin as soon as a principal is hired in the form of early-career supports or induction to effectively transition into their new role.<sup>6</sup> This professional learning may take the form of mentoring, coaching, or other job-embedded professional development activities. Redefining and talent managing **principal supervision** has been a high-leverage strategy for improving principal performance evaluation and professional learning.<sup>7</sup> In some districts, performance evaluation results are also tied to decisions about **compensation and incentives**. Districts may also use compensation and incentives to attract or retain principals in schools where the **working environment** may be more challenging.

The principal working environment influences all of these PTM elements. The working environment includes district policies and practices related to increasing principal autonomy to make critical budgetary and personnel decisions—as well as the types of curriculum, programming, and professional learning opportunities for their schools. Working environments may encompass pressures exerted at the district level related to accountability and other demands on a principal's time and effort. In addition, the working environment is influenced by supports devoted to a sitting principal, such as a supervisor who has the capacity and knowledge to coach principals.

The following sections represent detailed accounts of the individual PTM components that provide guidance on best practices—based on research evidence and expert opinion—for attracting, supporting, and retaining strong principals. For each component, the guidance summarizes the available evidence and expert thinking and highlights practices to watch, all of which can help district leaders and policymakers better understand how they can improve PTM in their schools, districts, and cities. The final section of this framework guide profiles school district policies and practices enacted to strengthen PTM. It also provides broad recommendations for effective approaches to PTM systems building.

Because PTM system building requires a holistic approach that addresses each district's individual needs, the practices to watch included in this guide represent a range of options that districts can choose from according to their priorities and goals. For example, some districts may choose to implement one or more policies or programs focused on principal learning before addressing the other PTM components.



## ESSA and Principal Talent Management

The Every Student Succeeds Act (ESSA) affords school districts the unprecedented ability to use federal dollars to fund efforts designed to raise the quality of their school leadership corps. In order to allocate federal funds (Title I and Title II, particularly) in this way, ESSA requires districts to use research-based approaches, meaning that districts must be able to provide an evidentiary rationale for selecting any given initiative or intervention that targets principal improvement.

As district leaders plan for ESSA implementation, uncertainties remain as to which programs and interventions are considered research-based and which criteria they must meet. ESSA-eligible programs and interventions are backed by well-designed, well-implemented research. The evidence supporting a given program or intervention must meet the criteria for one of the following tiers:

- **Tier I:** Strong evidence from at least one well-designed and well-implemented randomized control study (RCT)
- **Tier II:** Moderate evidence from at least one well-designed and well-implemented quasi-experimental study
- **Tier III:** Promising evidence from at least one well-designed and well-experimented correlational study that controls for selection bias
- **Tier IV:** For non-Title I school improvement activities, supporting research or a positive evaluation plan that demonstrates school improvement activities.

This guide aggregates the best available evidence on PTM, providing districts with documentation of the research that supports allocations of funding for principal improvement, in accordance with the ESSA requirements. Districts can use this guide to understand which components of PTM have the strongest evidentiary support and those for which the evidence is still emerging. This will enable districts to make informed decisions about expanding and strengthening their approaches to PTM.

For more information on ESSA requirements as they relate to PTM, see RAND's *School Leadership Interventions Under the Every Student Succeeds Act*.<sup>8</sup>

# Working Environment



The working environment is among the most important factors that influence a district's ability to attract and retain effective principals, making it a critical dimension of PTM for any district. Policies and practices that may influence a principal's working environment include principal supervisor caseloads, principal autonomy, and the general condition of classrooms and school facilities.<sup>9</sup> Additional factors related to the working environment may range from teacher evaluation and assessment requirements to state and federal reporting requirements and other mandated aspects of the job.

Research suggests that districts can shape the working environment for the principal in a variety of ways, including:

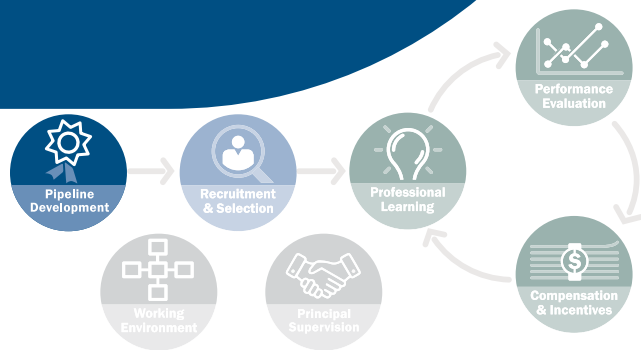
- Policies that support or restrict principal autonomy (e.g., the ability of principals to make important decisions related to hiring and firing teachers, selecting curriculum, assessment, and professional learning resources, and general spending and budget priorities);<sup>10</sup>
- The extent to which the district imposes principal accountability measures without providing necessary supports or training;<sup>11</sup> and
- The amount of support provided to principals through their supervisor or evaluator, as well as other support resources offered by the district.<sup>12</sup>

Research also indicates that an improved working environment may lead to greater principal job satisfaction, enhanced principal practice, and increased principal retention. A case study the Bush Institute completed on Gwinnett County Public Schools in 2015 showed that supportive district culture, effective principal management and support, and aligned school-level talent management policies can positively influence the work of principals.<sup>13</sup> Notably, such policies and practices that influence a principal's administrative environment are distinct from other factors that may influence working conditions. These other factors, such as student demographics or neighborhood characteristics, are largely out of a district's control.

# Promising Practices in **Principal Working Environment**

Promising Practices from Research and in the Field	Supporting Evidence
<b>Autonomy</b> <p>Districts provide principals with increased autonomy in exchange for increased accountability for student learning—e.g., principals are able to make critical decisions about the types of curriculum and professional learning they provide to teachers while being held to more ambitious student growth targets at the school or student subgroup level.</p>	<p>Several quantitative and qualitative studies, along with published expert opinion associate this practice with several positive outcomes that include:</p> <ul style="list-style-type: none"> <li>▶ Improved retention<sup>14</sup></li> <li>▶ Job satisfaction</li> <li>▶ Student achievement<sup>15</sup></li> </ul> <p>Other quantitative research yielded no impact on retention.<sup>16</sup></p>
<b>Expectations and Culture</b> <p>Districts purposefully consider both the actions and expectations they request of principals and the degree of support they provide principals to be more effective in their roles – e.g., limiting the number of non-essential out-of-office engagements they must attend or providing support for some of the schools’ administrative data-entry tasks. The district culture clearly and thoroughly positions the central office in support of principals.</p>	<p>Published expert opinion<sup>17</sup>, and one quantitative study found that overall workload was one of the major factors for deciding to stay or leave a job for principals.<sup>18</sup></p>
<p>District administrators ensure that labor contracts support, not detract, from a good working environment by enabling principals to make critical personnel decisions based on educator effectiveness and other school contextual factors.</p>	<p>Expert opinion<sup>19</sup>, and one quantitative study found that principals do not feel like they have the authority to choose their own staff.<sup>20</sup></p>
<p>District leaders ensure that the principal’s main job and mission is to improve instruction for students. Update job descriptions and other district documentation to reflect this.</p>	<p>Report containing qualitative case studies.<sup>21</sup></p>
<p>Districts actively seek out feedback from principals on district- and school-level reform or improvement initiatives, continuously refining or improving the resources they provide for schools to implement initiatives.</p>	<p>Published expert opinion.<sup>22</sup></p>
<p>Districts strategically develop common school-level improvement plans, aligning the personnel and fiscal support they provide to schools to match the priorities in these plans— e.g., plans that prioritize a robust teacher evaluation system require district-level support for the implementation of an evaluation and professional growth framework.</p>	<p>Published expert opinion.<sup>23</sup></p>
<b>Equity</b> <p>Districts have a culture that uses strategic talent management to clearly and thoroughly focus on equity and the needs of students.</p>	<p>Expert opinion<sup>24</sup>, and one quantitative study found that principal effectiveness is associated with greater teacher satisfaction and lower turnover, and positive impacts of principal effectiveness on teacher outcomes is greater in disadvantaged schools.<sup>25</sup></p>
<p>Districts have a culture that clearly and thoroughly focuses on identifying and removing bias in how talent is managed.</p>	<p>Expert opinion<sup>26</sup>. One qualitative study describes potential bias in principal selection process<sup>27</sup>, and one study explores potential bias in classroom observations, which may have implications for schoolwide observations.<sup>28</sup></p>

# Pipeline Development



It is widely accepted that principal leadership is critical to school success.<sup>29</sup> Yet, research suggests that many new principals feel unready to lead schools.<sup>30</sup> Even after a full course of preparation, which often ends in certification or licensure, new principals often are not equipped for the challenges and the opportunities they face at school.<sup>31</sup> Research points to several “promising practices” for principal preparation programs, including:<sup>32</sup>

- **Program coherence and alignment** to research-based competencies that allow candidates to demonstrate practices of effective leaders (e.g., the ELCC Educational Leadership Program Standards<sup>33</sup>);
- A **rigorous recruitment and selection** process for entrance into the program based on the skills, tasks, and dispositions of effective leadership;
- A **meaningful residency experience** that provides candidates with opportunities to apply knowledge and skills, observe current leaders modeling effective practices, and receive feedback on performance;
- A commitment to **collecting evidence of program effectiveness** and engaging in continuous improvement; and
- Strong **district-program partnerships** that align program standards and district needs.<sup>34</sup> Research on the impact of these practices, and principal preparation programs more generally on student achievement is not definitive. A quasi-experimental study of the New Leaders Aspiring Principals Program found statistically significant positive effects on student achievement and attendance.<sup>35</sup> Other studies have also found positive but modest effects of selected principal preparation programs on student learning.<sup>36</sup>

On the other hand, in a 2016 study, the Bush Institute found that graduates of five selected preparation programs that embrace the “promising practices” outlined above are no more or less effective, on average, than graduates of other preparation programs.<sup>37</sup> The study did find, though, that preparation programs produce a significant variation of individual performers, meaning some principals have a very positive impact on student achievement while others do not.

Emerging research suggests that new principals are better prepared when their districts provide them with job-embedded opportunities to develop leadership skills throughout their career trajectory, beginning as teacher leaders. For example, a U.S. Department of Education’s Investing in Innovation (i3) implementation study of New Leaders program attributes stronger impact on student outcomes over time to a programmatic shift towards developing leaders earlier on the path to the principalship.<sup>38</sup>

This version of the PTM framework has been updated to include a broader set of activities aimed at developing leaders in the pipeline beyond formal preparation programs.

# Promising Practices in Pipeline Development

Promising Practices from Research and in the Field	Supporting Evidence
Developing a Deeper Bench	
Pipeline Recruitment	
Districts systematically and strategically recruit individual talent into the leadership pipeline, including aspiring teacher leaders, assistant principals, and principals. These strategies are unbiased and target a diverse set of individual talent to meet all students.	One qualitative study. <sup>39</sup>
Development	
A system in place to give teachers and teacher leaders authentic leadership experiences well before they are ready to start a principal training program. Giving teacher leaders these experiences can bring stability to succession.	One quasi-experimental study found that a program that includes a continuum beginning with authentic experiences for teacher leaders had a positive effect on student achievement and attendance <sup>40</sup> , two qualitative studies <sup>41</sup> , published expert opinion. <sup>42</sup> One case study recommends the use of Leader Tracking Systems as one way to do this. <sup>43</sup>
Principal Preparation	
Selection	
Preparation programs rely on a selective admissions process that is unbiased and rigorous. The program only accepts those with high academic benchmarks and excellent achievement in authentic performance tasks. The admission criteria are aligned with the partnering districts’ school leadership framework.	Published expert opinion <sup>44</sup> and additional studies <sup>45</sup> support the need for a rigorous selection process for program candidates, associating this practice with improved principal practice and a higher-quality candidate pool. A case study recommends having clear standards of principal effectiveness. <sup>46</sup>
Preparation programs prioritize certain competencies and dispositions in their initial screening and interviewing of candidates, which include: Emotional intelligence, A commitment to remain in the principal role for a longer period of time, An understanding of culture and organizational behavior, An understanding of systemic change and change processes, An understanding of the importance of quality management and the use of feedback loops with teachers, An understanding of how to make data-driven decisions. Selection processes are conducted in conjunction with district partners.	
Coursework	
Preparation coursework relies on hands-on methods that allow principal candidates to demonstrate their leadership skills, including: scenarios, case studies, simulation, role play, and action research projects.	Published expert opinion <sup>47</sup> and two qualitative case studies <sup>48</sup> . One quasi-experimental study found that a program that uses these methods had a positive effect on student achievement and attendance <sup>49</sup> .
Program Residencies	
Preparation includes a meaningful internship or residency experience characterized by increasing levels of responsibility and autonomy as a result of demonstrated performance and engagement in instructional leadership, talent management, and organizational management.	Published expert opinion <sup>50</sup> one policy review <sup>51</sup> , and one qualitative study <sup>52</sup> associate this practice with a higher-quality candidate pool and improved principal practice. One quasi-experimental study found that expanding the clinical aspect of preparation programs contributed to improved student achievement and principal retention. <sup>53</sup>
Residency or host principals are selected for their effectiveness and trained to provide consistent support to principals.	This is an emerging practice in the field.
Residency or host principals and schools are strategically matched with principal candidates.	Expert opinion. <sup>54</sup>

# Promising Practices in Pipeline Development (cont.)

## Program Coherence & Alignment

All components of preparation programs, including coursework and practicum, align with research-based competencies and the standards used in district hiring and evaluation.

Published expert opinion<sup>55</sup> and two qualitative studies<sup>56</sup> associate this practice with a higher-quality candidate pool and improved principal practice. One quasi-experimental study found that aligning principal talent management activities with leader standards contributed to improved student achievement and principal retention.<sup>57</sup>

## Program-District Collaboration

Strong, sustainable district-program partnerships allow districts to take an active role in defining their leadership needs, setting expectations for the program, and aligning preparation with other leadership initiatives.

Published expert opinion<sup>58</sup> and one case study<sup>59</sup> associate this practice with improved principal performance. One quasi-experimental study found that a program that worked closely with district partners to customize its approach improved student achievement and principal retention.<sup>60</sup>

Preparation programs remain connected to program graduates in their first years on the job through mentoring/coaching or coordination of induction programs within districts.

Published expert opinion<sup>61</sup> and two qualitative studies<sup>62</sup> associate this practice with improved principal practice and a higher-quality candidate pool.

## Program Continuous Improvement

Preparation programs form relationships with districts and states to maintain data on program graduates; relatedly, researchers are exploring methods to assess preparation program outcomes.

Published expert opinion<sup>63</sup> and two quantitative studies<sup>64</sup> associate this practice with improved principal performance.<sup>65</sup>

Preparation programs track districts' hiring and assignment decisions to be responsive to local educational needs and collaborate with local education agencies on the matching of candidates with the communities and schools.

Expert opinion<sup>66</sup> and one quantitative study.<sup>67</sup>



# Recruitment and Selection



Although states typically certify a sufficient number of principals to fill school leadership vacancies, some districts report principal positions are hard to staff with qualified candidates.<sup>68</sup> Even for districts with sufficient applicants, it can be challenging to ensure that the principals who are recruited and selected have the requisite skills and expertise, are a good match for a particular school or district need, and present an approach that aligns with that of district leadership.<sup>69</sup>

Findings from literature reviews, case studies, and program evaluations suggest that districts should align recruitment, selection, and hiring procedures to a set of research-based leadership performance standards or competencies. Findings from case studies also suggest that using technology to share information among schools—to support the creation of a strong candidate pool—may help districts effectively match principals to schools.<sup>70</sup>

Implementing these strategies at the district level requires a shared understanding of the characteristics of effective principals—as well as an understanding of the factors that make for a strong candidate pool, both of which can vary by district and school context. Some research also points to the importance of establishing structured hiring processes that considers the candidate’s “fit” for a school. While additional research is needed on the characteristics of effective principals and how to best identify “fit,” experts encourage districts to use data tracking systems to learn more about the characteristics and experiences of successful principals in their own systems.<sup>71</sup>

In a study of five districts the Bush Institute found that in many cases important human resources data related to principals (e.g., where they received their training, what supports they receive from the district) are not collected uniformly or may be difficult to access.<sup>72</sup> More systematic data collection and organization could provide districts with important information on the characteristics, experiences, and supports provided to their most effective principals—and help inform recruitment, selection, and professional development efforts.

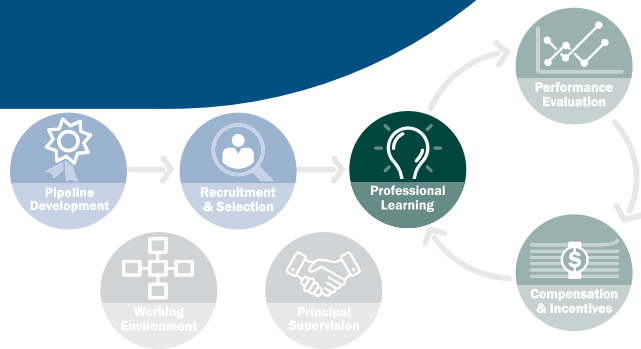
Additionally, some experts recommend proactive succession planning as a solution to strategically filling leadership vacancies. Districts can predict the number of expected principal vacancies over the next three to five years—based on upcoming retirements or expected promotions, student enrollment growth, and natural attrition in the district—and use these projections to inform a strategic hiring and succession planning process. With rapid principal turnover in high-need schools and principals retiring each year, districts must have a talent identification pipeline in place to tap future leaders for principal positions so they are able to quickly fill any leadership gaps—both foreseen and unforeseen.<sup>73</sup>



# Promising Practices in **Principal Recruitment and Selection**

Promising Practices from Research and in the Field	Supporting Evidence
<b>Planning</b>	
Leadership succession plans identify prospective talent for future leadership positions. Prospective leaders receive the support to develop their skills through multiple career paths (e.g., assistant principal, dean of students, etc.). Districts thoroughly understand which principal positions they will need to fill, where, and why. This information is used to minimize duration of vacancies and ensure hiring is completed in a timely fashion.	One quantitative <sup>74</sup> and one ongoing qualitative study <sup>75</sup> , as well as published expert opinion <sup>76</sup> , associate this practice with a higher-quality candidate pool. The quantitative study also shows improved principal performance. Two additional qualitative studies discuss vacancy timelines. <sup>77</sup>
<b>Strategically Recruiting</b>	
Districts systematically, equitably, and actively implements intentional talent management strategies to attract diverse candidates and develop and support existing leaders. These intentional talent management strategies seek to create synergies between different aspects of talent management, creating efficiencies and increasing effects. For example, those strategies may include a performance management system that reinforces employee performance and motivation through strategic compensation. <sup>78</sup>	Published expert opinion in education <sup>79</sup> suggests that effective career management strategies improve the quality of candidates and meta-analyses in the business sector <sup>80</sup> note that these strategies can increase retention and improve practice in the workplace. One qualitative study supports casting a wide net for candidates. <sup>81</sup>
Recruitment and selection processes align to state or district research-based performance standards or competencies. These processes try to bring more diverse candidates into the role and are equitable.	Three studies associate this practice with different outcomes; one study links it to a higher-quality candidate pool <sup>82</sup> , one study links it to improved principal performance <sup>83</sup> , and one study links it to both improved principal satisfaction and student achievement <sup>84</sup> . One study looked at district recruitment and selection practices and found key places where they could be more equitable. <sup>85</sup>
<b>Candidate Pool</b>	
Districts create a high-quality, comprehensive pool of qualified candidates from which principals can be hired. The pool is equitable.	One report <sup>86</sup> and one quantitative study on principal pipelines describes creating selective principal candidate pools as one of the strategies used by the districts. <sup>87</sup>
A district-wide candidate pool and tracking system allows school and district leaders to evaluate principal candidates, their qualifications, and the extent to which they meet research-based performance standards or competencies.	Three qualitative studies <sup>88</sup> , one report <sup>89</sup> , and published expert opinion <sup>90</sup> support this practice. One mid-project report studying six districts focused using tracking systems to help improve principal pipelines. <sup>91</sup>
<b>Rigorous Assessment</b>	
Districts have a structured hiring process that includes screening and interviews, and in some cases incorporates assessments based on district leadership standards and competencies which may help identify future professional development needs for newly hired principals. The process is timely so that districts have access to the best candidates before they take jobs elsewhere.	Published expert opinion <sup>92</sup> , one report <sup>93</sup> , and two qualitative studies <sup>94</sup> associates this practice with a higher-quality candidate pool. Mid-project report studying six districts focused on improving principal pipelines. <sup>95</sup>
State or district research-based performance standards and competencies align across a human resources/talent management continuum that includes recruitment and selection.	Published expert opinion associates this practice with an improvement in recruitment efforts and a rise in the proportion of candidates that are the right fit for districts. <sup>96</sup>
<b>Placement</b>	
Systematic consideration of candidate placement and fit occurs when selecting and placing a principal. Tools, such as leader tracking systems, can be used in order to collect and analyze more data to understand the qualifications and needs of each candidate.	Published expert opinion <sup>97</sup> , two qualitative studies <sup>98</sup> associate this practice with a higher-quality candidate pool. Two qualitative studies describes how leader tracking systems support the recruitment and selection process. <sup>99</sup>

# Professional Learning



Professional learning throughout the career of a principal can take on a variety of forms, including mentoring and induction in the early years on the job and professional development and coaching in later years.

Despite progress in certain districts, professional learning for principals has historically been very limited. Principals often participate in district professional development designed for teachers rather than trainings or supports designed specifically for school leaders.<sup>100</sup> Many principals report receiving little if any support specifically targeted to their learning needs, the very type of professional development that experts in the field suggest that principals truly require.

In fact, experts recommend that professional learning should be based on a thorough understanding of an individual principal's immediate needs—not according to a one-size-fits-all model. To this end, some districts now use principal evaluations to identify these needs and embed cycles of goal setting and professional growth planning within the evaluation process. While the research is not yet definite, some emerging research suggests that individualized feedback can help principals improve their leadership practice.<sup>101</sup>

However, there is only limited research on the efficacy of specific mentoring practices and the outcomes of individual programs. Some experimental studies have found positive effects of specific professional development programs on leadership practice—or an association between particular types of professional development and improved student performance, school climate, teacher collaboration, or principal retention. There is various research on different designs for professional development that may work.<sup>102</sup> Since many districts prefer to “grow-their-own”, professional learning can create stability in success.<sup>103</sup>

Although the supporting empirical evidence is limited, experts and principals generally agree that quality mentoring programs, in particular, are valuable. They recommend that mentorship programs carefully consider the “match” between a mentor and a mentee—and that mentors themselves are selected carefully for the role.<sup>104,105</sup>

# Promising Practices in Professional Learning

Promising Practices from Research and in the Field	Supporting Evidence
<b>Support for New Principals</b>	
There is seamless support from principal preparation to the principalship, which hinges on collaboration between preparation programs and the district. Regional and national professional learning programs provide support to some states and districts.	Published expert opinion supports this practice <sup>106</sup> and a literature review associates this practice with improved principal performance. <sup>107</sup>
Districts and preparation programs carefully select mentors for new principals based on mentor quality measures such as having a history of effectiveness as a principal, demonstrating strong communication and listening skills, and matching mentors and principals based on similar styles of thinking.	Three qualitative studies describe important aspects of the mentor-protégé relationship, two of which are associated with improved principal practice <sup>108</sup> and one of which is associated with a higher-quality candidate pool. <sup>109</sup> One quantitative study found that participation in a program with careful mentor selection and training helped principals grow professionally. <sup>110</sup>
There is a clear definition of the relationship between new principals and their mentors.	Three qualitative studies describe important aspects of the mentor-protégé relationship, two of which are associated with improved principal practice <sup>111</sup> and one of which is associated with a higher-quality candidate pool. <sup>112</sup>
<b>Individualized</b>	
Professional learning relies on comprehensive evaluation and is tailored to the specific needs of principals, tied to district leadership competencies, and of high-quality.	Published expert opinion suggests this can improve principal practice. <sup>113</sup> Mid-project report studying six districts focused on improving principal pipelines. <sup>114</sup> One literature review <sup>115</sup> and one qualitative study. <sup>116</sup>
<b>Feedback</b>	
Districts provide feedback on practice via ongoing coaching. The feedback is regular, high-quality, and aligned to a clear set of leadership competencies that are in service of improving outcomes for students. Professional learning includes ongoing coaching and collaboration.	This is an emerging trend in the field. Some studies associate one aspect of the NISL professional development program with improved student learning and principal performance over time. <sup>117</sup> A study of the Balanced Leadership program found that it led to greater principal self-efficacy and positively impacted principal and teacher retention, but did not have an impact on student learning. <sup>118</sup> One literature view emphasizes this practice, <sup>119</sup> as does one qualitative study. <sup>120</sup>
<b>Job-embedded</b>	
Principal training is focused on developing their own coaching skills so that they have the most potential to help improve instruction in their building. Effective principal professional learning models require a visionary superintendent.	Report containing qualitative case studies. <sup>121</sup> One qualitative study on importance of the role of the superintendent. <sup>122</sup>
Districts allow principals the time, space, and support to learn through problems of practice and from one another.	Report containing qualitative case studies <sup>123</sup> and one literature review. <sup>124</sup>
Training is relevant and tied to problems from practice that are actionable.	One literature review of professional learning in fields outside of education <sup>125</sup> , and one case study focused on high performing school systems. <sup>126</sup>

# Principal Supervision



Principal supervisors — the central office staff to whom principals report — can enable school improvement when they emphasize principal growth and learning.<sup>127</sup> The supervisor role has historically focused on oversight and can have many different titles, such as: assistant superintendent, regional superintendent, regional executive director, instructional superintendent, instructional director, area superintendent, etc.<sup>128</sup> In 2015, the Council of Chief State School Officers released the Model Principal Supervisor standards to signal the need to shift the principal supervisor role from one focused on compliance to one focused on sharpening principals' instructional leadership capabilities.<sup>129</sup>

In 2014, The Wallace Foundation launched a \$24 million Principal Supervisor Initiative (PSI) to incent districts to pursue the principal supervisor strategy. A recent study of PSI found that these districts were able to successfully change the principal supervisor role so that they were spending more time in schools, coaching principals, and helping them become better instructional leaders.<sup>130</sup>

Districts can leverage principal supervisors as a key strategy for improving school leadership when they:

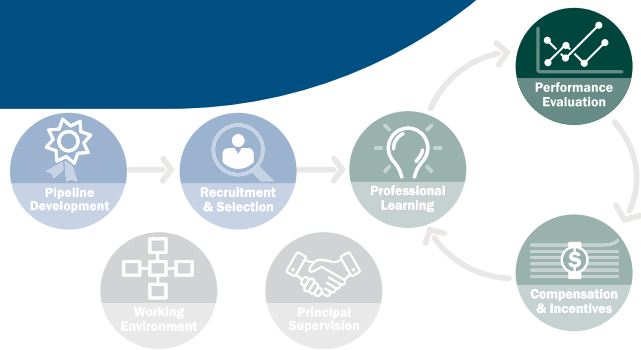
- Lower the ratio of principals overseen by each supervisor;
- Redefine supervisor job descriptions to focus on principal growth;
- Build capacity of principal supervisors through pre-service and in-service opportunities; and
- Improve talent management practices for principal supervisors to recruit, select, and retain the most qualified individuals in the role.<sup>131</sup>

Additional research on the role of the principal supervisor shows that principal supervisors may currently have caseloads ranging from three to 100 principals, despite expert suggestions that this number should be closer to eight to twelve in order for a supervisor to provide meaningful support.<sup>132</sup> However, there is currently no empirical evidence that directly links the roles and responsibilities of principal supervisors to improvements in student learning, and we encourage more research to be done in this area.<sup>133</sup>

# Promising Practices in **Principal Supervision**

Promising Practices from Research and in the Field	Supporting Evidence
<b>Talent Management of Supervisors</b>	
Principal supervisors receive a maximum caseload of 8-12 principals and take steps to maximize the support they provide to principals. Principal supervisors then have the experience and qualifications to provide meaningful support and feedback to principals.	Published expert opinion <sup>134</sup> , one descriptive case study <sup>135</sup> , and three studies (two of which are qualitative) <sup>136</sup> associate increased supervisory support with several positive outcomes that include: -Increased retention -A higher-quality candidate pool -Improved student achievement
Principal supervisors are primarily responsible for supporting principal growth and school improvement (as opposed to compliance monitoring). Expectations are clearly codified. Central office structures and culture reinforce principal supervisor in their role.	One descriptive case study and one mixed methods study shows the importance of revising the principal supervisor's job description to focus heavily on supporting principals. <sup>137</sup>
Districts have high-quality systems in place to select, develop, and evaluate principal supervisors.	One descriptive case study and one mixed methods study shows the importance of training principal supervisors to be more effective coaches. <sup>138</sup>
<b>Effective Support</b>	
All principal supervisors have knowledge and skills—as well as prior experience—to effectively carry out responsibilities.	One descriptive case study and one mixed methods study shows the types of principal supervisor pipeline work in place in districts. <sup>139</sup>
Principal supervisors provide extensive support and feedback to principals on their practice. The feedback occurs regularly (at least once every month).	One descriptive case study and one mixed methods study associated more time spent interacting with principal supervisors led principals to report more productive relationships. <sup>140</sup>

# Performance Evaluation



Over the past several years, in part due to federal grant programs like Race to the Top and other federal and state policies, states and districts have made extensive efforts to improve or refine their teacher and leader evaluation systems. In many cases, these new principal evaluation systems include measures of both principal practice and student growth as key indicators of performance.

Although there is no definitive evidence that points to the best approach for measuring principal practice—or for ensuring that measures of practice are valid and reliable—there is a significant body of literature, based on expert opinion, that provides guidance to districts on how to approach evaluation. Expert opinion suggests that principal evaluation should be standards-based, and include multiple measures of performance.<sup>141</sup> Measures of principal practice can include various types of evidence, including:

- Observation of a principal engaging in some of their critical responsibilities (e.g., providing instructional feedback to teachers, or leading data team meetings) and using a rubric to evaluate proficiency on specific principal practice standards;
- Collection and scoring of “artifacts” of principal practice that demonstrate proficiency on particular standards of principal practice (e.g., agenda and session materials from professional development sessions run by principals, school improvement plans, etc.);
- Teacher perception data through leadership “360 degree” surveys (e.g., the VALED survey); and
- Measures of school and student performance and growth.<sup>142</sup>

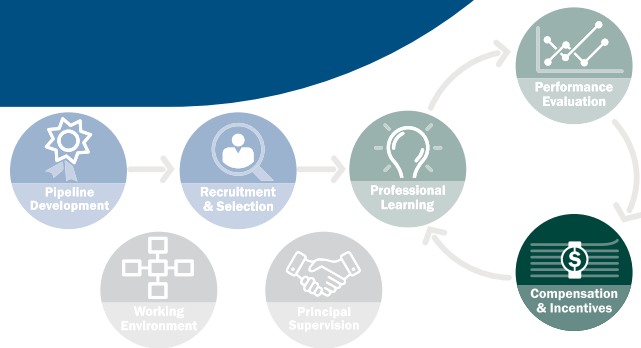
Experts also recommend that performance evaluation results connect with professional learning so that principals engage in individualized growth plans that align to their particular needs.<sup>143</sup>

Notably, designing effective performance evaluation systems for principals remains an ongoing challenge for many states and districts. In particular, training evaluators to use systems with fidelity—to ensure accuracy and reliability—is essential to assessing principal performance and using data to inform professional development.<sup>144</sup> Some states and districts are evaluating the extent to which their current systems effectively measure principal performance, and, as a result, contribute to improved student outcomes. The results of these evaluations inform continuous improvement processes (see for example, the evaluation conducted by Kimball et al., 2007).

# Promising Practices in Performance Evaluation

Promising Practices from Research and in the Field	Supporting Evidence
<b>Alignment and Measures</b>	
Evaluations are standards-based and aligned with district goals as well as other human talent management measures (e.g., hiring practices).	This is an emerging practice in the field. Published expert opinion associates this practice with improved principal performance <sup>145</sup> , as well as one case study. <sup>146</sup>
Evaluations include multiple measures of practice and student growth to form a holistic picture of principal effectiveness; an example measure could entail the instructional feedback that principals provide to teachers after classroom observations. Multiple measures (more than three) improve validity and fairness of an evaluation.	This is an emerging practice in the field and is also supported by published expert opinion <sup>147</sup> and one qualitative study. <sup>148</sup> One quantitative study found that adding teacher and student survey measures can explain additional variation in traditional evaluation measures <sup>149</sup> and another quantitative study suggests adding measures could improve validity. <sup>150</sup>
Principal evaluation employs valid measures that can provide reliable results.	This is an emerging practice in the field and is also supported by published expert opinion. <sup>151</sup> One quantitative study found that rater bias plays a role in how principals are rated, and that, principals in schools with a higher portion of low-income students tend to be rated lower on observation rubrics. The research was unclear on why this was, but caution should be used. <sup>152</sup> Another quantitative study shows the importance of understanding the tradeoffs between the different ways to attribute student achievement scores to a principal's evaluation. <sup>153</sup>
<b>Evaluation Process</b>	
Regular and transparent evaluation occurs according to a transparent plan and is conducted by trained supervisors.	This is an emerging practice in the field and is also supported by published expert opinion. <sup>154</sup>
<b>Connecting Evaluation with Professional Learning</b>	
Evaluation results inform professional growth opportunities.	This is an emerging practice in the field and is also supported by published expert opinion. <sup>155</sup>

# Compensation and Incentives



Most school systems follow a salary schedule for principals based on years of experience and education credentials. A transparent “steps and lanes” salary structure means new principals are the lowest paid and that salary is independent of principal performance. One common alternative that considers principal performance as a factor in determining salary is a pay-for-performance system. Pay-for-performance compensation systems seek to improve educator quality and attract the most effective teachers and principals to high-needs schools. Examples of incentive pay elements for principals include additional compensation if:

- A school achieves certain number of target outcomes,
- A principal commits to leading a high-needs school for an extended period of time,
- A principal increases his or her skills through professional development or takes on additional responsibilities, or
- Principal evaluations show evidence of effective leadership.<sup>156</sup>

Some qualitative and quantitative research connects salary to principals’ decisions to stay in schools.<sup>157</sup> Some studies also indicate that increased salaries may attract more qualified candidates to the profession or to hard-to-staff schools.<sup>158</sup> This finding is particularly important given that schools with higher percentages of low-income students, lower performing schools, or schools with predominantly minority students more often report difficulty finding and keeping principals.<sup>159</sup> There is also evidence emerging from existing district compensation and incentive initiatives that connect performance-based compensation to improved principal retention, principal practice, and student achievement.<sup>160</sup>

Some district leaders see non-monetary recognition and incentives as one way to attract a broader candidate pool and keep their best principals in the position for a longer period of time.<sup>161</sup> Additionally, some experts suggested non-financial incentives might appeal to younger, new principals in the millennial generation, although it is challenging to identify examples of this practice in the field of education.<sup>162</sup> One expert cited Deloitte’s sabbatical program—which allows employees to take unpaid or partially paid sabbaticals—as an example of a compelling non-monetary incentive.<sup>163</sup> However, the research to date on the impact of non-monetary incentives on principal hiring, performance, and retention is limited.



# Promising Practices in Compensation and Incentives

Promising Practices from Research and in the Field	Supporting Evidence
<b>Compensation</b>	
<b>Competitiveness</b>	
Compensation should be competitive for principals, especially in districts with challenging working environments. Salaries should reflect the quality of the principal's work, compare to surrounding districts, and exceed those of teachers.	Published expert opinion, <sup>164</sup> one qualitative study <sup>165</sup> , and seven quantitative studies <sup>166</sup> associate competitive principal salaries at hard to staff schools with several outcomes that include: increased retention, a higher-quality candidate pool and improved student achievement. One quantitative study found that principals' pay satisfaction is influenced by the salaries of comparative peers and is negatively associated with intention to turnover. <sup>167</sup>
Compensation is tied to performance (i.e., not step-ladder). The system is transparent and effectively entices desirable candidates and retains effective principals.	One mixed methods study. <sup>168</sup>
<b>Incentives</b>	
<b>Non-monetary Incentives that Attract and Retain</b>	
States or districts provide nonmonetary recognition of excellent performance that can include: master principal certification, flexible work environments, or job sharing.	This is an emerging practice in the field and supported by published expert opinion. <sup>169</sup> Also, one qualitative study indicates the correct incentives could improve the quality of the candidate pool. <sup>170</sup>
<b>Incentives for Challenging Environment</b>	
Districts provide performance-based incentives to principals that take on challenging assignments and additional responsibilities to improve school performance and/or school culture, taking into account both short-term and long-term improvements.	Three quantitative evaluations show mixed results on achievement that may not be generalizable outside of the programs studied. <sup>171</sup> An evaluation of Teacher Incentive Fund grantees finds that pay-for-performance measures improve the retention of high performing principals at treatment schools. <sup>172</sup> One quantitative evaluation indicates that measuring trust of practitioners in compensation and incentive programs is important to implementation. <sup>173</sup>
<b>Other Monetary Incentives</b>	
Monetary awards are meaningful enough to appeal, and there is a credible connection between the work, the performance, and the reward. How a principal gets the award must be perceived as fair.	One mixed methods study. <sup>174</sup>

## Districts to Watch: Principal Talent Management in Practice

Drawing upon research and expert guidance, districts across the country can build the capacity of their school leaders at each point along their career continuum and, as a result, demonstrably improve both student and school-level outcomes. *Yet, how do the “practices to watch” identified in the research and by PTM experts translate to real educational contexts?*

Some districts have already taken the lead, implementing programs and strategies that align with one or more components of the PTM framework. Along with learning about the research-based practices, district leaders must also explore how to best enact them. This section highlights districts across the country that have designed and implemented PTM policies and practices aligned to their specific needs and local educational contexts. We obtained all key information from interviews with each district’s staff, an array of district-specific materials, and their respective websites.

These profiles are based on the PTM research, a review of district documents, and comprehensive interviews with district leaders engaged in PTM initiatives at their schools. While some of these practices are still relatively new and are just now starting to receive support through empirical data, districts chose to implement elements of PTM to address key leadership issues—from inadequate principal preparation and insufficient professional learning to limited evaluation and unsupportive working environments.

Each profile includes the following three components:

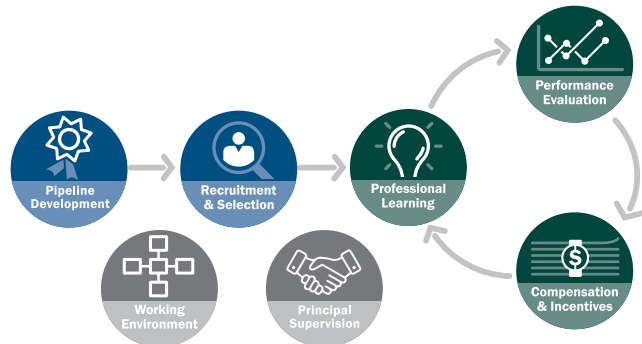
- **Brief overview of the district**  
Size, number of students served and general focus areas
- **Practice Overview**  
How does the district’s current framework reflect the practices of a particular PTM component?  
  
Examples of several concrete policies that highlight a successful PTM practice
- **Collecting Data to Monitor Success**  
Evidence that supports the effectiveness of the practice and demonstrates its positive impact on student achievement and other school-level outcomes

Policies and practices in PTM rarely align neatly with a single component or influencing factor. A practice that enhances preparation could also have positive implications for professional learning and impact the working environment. However, this document has attempted to map a practice with two corresponding category, highlighting its strongest fit and the considerable impact it can have on a school’s success.

District leaders can leverage the insights from the following case studies to build on existing initiatives; lay the groundwork for new, innovative ideas that reflect these practices; and validate the importance of principal talent management. From this guide, individuals in the education community can discuss both the opportunities and challenges associated with this set of practices.

## Summary of District Efforts

The profiles that follow provide useful case studies of the PTM policies and programs in each district. Use the summary chart on the right to identify which PTM components each district has prioritized in their PTM systems-building efforts.



Denver Public Schools  
Page 27



Gwinnett County Public Schools  
Page 28



IDEA Public Schools  
Page 31



Prince George's County Public Schools  
Page 33



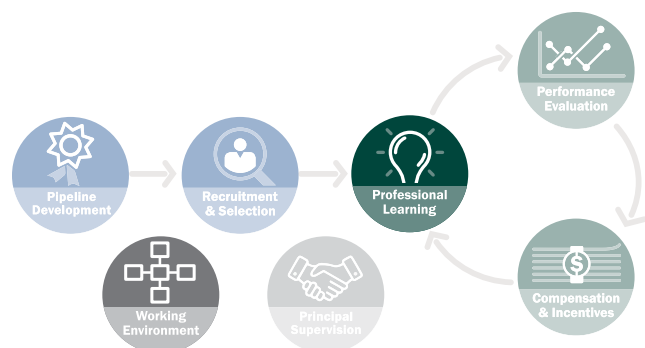
Hillsborough County Public Schools  
Page 35



Charlotte-Mecklenburg Schools  
Page 37



## Denver Public Schools



**Denver Public Schools (DPS) is a large urban school district, serving approximately 90,000 pre-K to Grade 12 students across 199 schools. The district's Denver Plan 2020 (DPS's five year strategic goals plan) commits to recruiting and retaining great leaders and teachers—in large part through the development of supportive working conditions.**<sup>175</sup>

### Practice Overview

DPS has made concerted efforts to improve working conditions for principals through two approaches: improving the principal to supervisor ratio and increasing principal autonomy.

DPS has a ratio of about one instructional superintendent for every eight principals. This ratio is noteworthy given, in some large districts, the ratio can be as high as one supervisor for every 40 or more principals. This resulted from DPS' school turnaround efforts, in which it grouped about 20 of its failing schools into two geographic clusters and assigned an instructional superintendent to oversee each cluster. The district also appointed deputy instructional superintendents to each cluster for extra support, allowing each principal supervisor to manage only four or five schools. DPS then applied this model across the district. Now, instructional superintendents spend approximately three quarters of their time observing classrooms, reviewing student data, and coaching principals. The district also assessed and eliminated redundant meetings to allow supervisors to spend more time on school campuses.

In addition, DPS has provided increased autonomy to principals in the form of increased choice of curriculum, additional authority over staffing and budgets and discretion over class size, field trips, and technology. Schools participate in a "Universal Flexibility" decision-making process in which they submit their decisions in alignment with the annual school budget process (typically in February). DPS provides a number of supports to school leaders to clarify the process and explain options, such as in-person sessions, one-on-one consultations with central office experts, and a series of guidance documents.<sup>176</sup>

### Evidence of Success

The district has tracked its overall progress in student achievement and graduation rates across the past five years. Although progress on these metrics may not be a direct result of Denver's efforts to improve the principal working environment, with the first implementation of the Denver Plan, DPS rose from a district with the lowest rate of student academic growth to the district with the highest rate of academic achievement growth for students in poverty and middle-class students.<sup>177</sup> According to DPS, in the last five years, the district has significantly reduced the drop-out rate and has increased its four-year graduation rate by 11 percentage points. It has record enrollment increases, and has continued the student-achievement gains initiated with the creation of the Denver Plan in 2005.

Source: Information for this "District to Watch" example was collected through an interview with Denver Public Schools; the Denver Public Schools website, a Wallace Foundation on-the-spot report<sup>178</sup>, and Teamwork Matters, a blog the George W. Bush Institute wrote.

### OUR VISION: EVERY CHILD SUCCEEDS

#### Great Schools in Every Neighborhood

A Foundation for Success in School  
Support for the Whole Child

Ready for College & Career  
Close the Opportunity Gap

Leadership  
Teaching  
Flexibility

Invest Early  
Culture

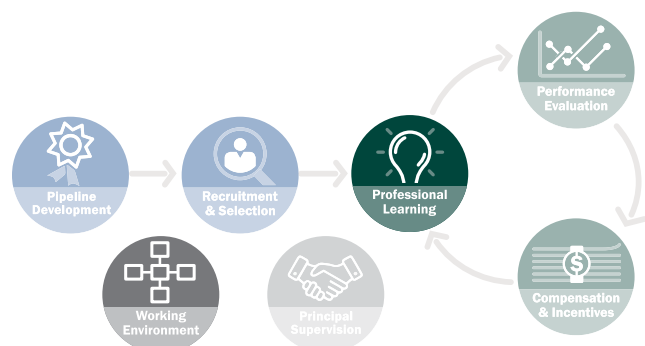
Every child has talent and potential.  
Our diversity is a community treasure.  
We can and will eliminate the opportunity gap.

We must dramatically accelerate our progress.  
Every family deserves choice and access.  
Our kids need all of us.

Students First  
Integrity  
Equity

Collaboration  
Accountability  
Fun

## Gwinnett County Public Schools



**Gwinnett County Public Schools (GCPS), located in the metro Atlanta, Georgia, area, serves more than 176,000 students.<sup>179</sup> The district is a two-time winner of the prestigious Broad Prize, which leadership attributes to a focus on school leadership.<sup>180</sup>**

### Practice Overview

GCPS focuses on building educators' skills over their entire careers, creating building blocks of knowledge and competencies at each career level to help prepare the educator for the next career level (see figure on the next page). Rising school leaders build their skills in instruction while serving as teachers, their skills in curriculum and assessment and instructional leadership as teacher leaders, and their administrative skills while serving as an assistant principal. The district calls its professional learning system the Quality-Plus Leader Academy (QPLA). The QPLA is a suite of programs and strategies that GCPS uses to prepare and support aspiring and in-service school and district leaders to excel in their roles. The QPLA includes year-long, cohort-based programs focused on preparing assistant principals, principals, and district staff with ongoing training and support. We focus here on the ongoing training and support.

### Ongoing Training and Support

The district offers the following professional learning supports:

**Peer and Supervisor Supports:** GCPS has developed peer networks within its school "clusters." Cluster meetings are held to coordinate curricula and ensure vertical alignment, as well to discuss common challenges. Assistant Superintendents (AS) directly supervise principals and give additional, job-embedded professional development. Each AS supervises from 10 to 19 principals, depending on the need of the principals.

**Evaluation:** The performances of schools and school leaders on district evaluations are used to inform professional development in the district.

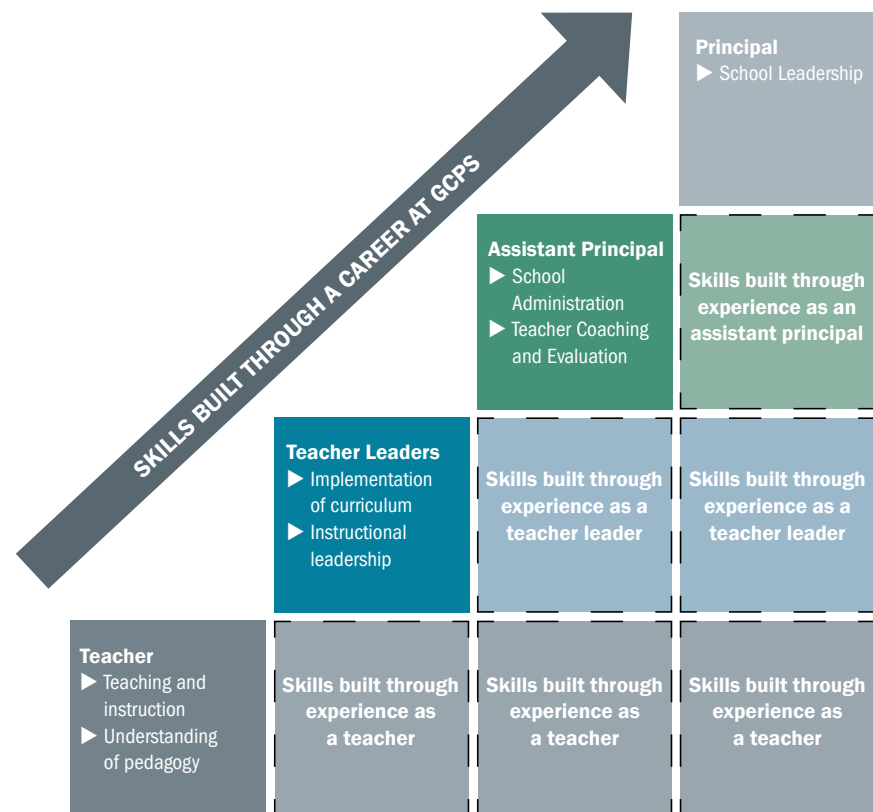
**Mentoring:** Once principals are on the job, they are assigned a mentor during their first two years. All mentors are retired, successful GCPS principals. The goal is to build school leader independence; therefore, as new principals gain experience in their roles, the mentor steps away. But even at the conclusion of the formal two-year mentorship, principals may continue to seek guidance from their mentors when they face new or difficult situations.

**Leadership Development Seminars:** These seminars highlight the best practices in school leadership, covering topics such as how to be an instructional leader or work with student data.

**Summer Leadership Conference:** This conference gives principals an opportunity to come together for an intense three-day learning experience.

## Pipeline Development

A unique aspect of GCPS' professional learning is the district culture that places a priority on professional learning as critical to everyone's joint success. Central office staff members, across all functional responsibilities and at all levels of seniority, view the development and support of school leaders and teachers as a critical part of their roles. The superintendent and his cabinet are frequently found teaching sessions for aspiring and sitting principals. Even when district leaders are not teaching, they frequently attend professional learning sessions, or take on mentoring and coaching roles themselves. It is well understood in the district that every GCPS employee is expected to support teaching and learning—both for students and staff.



## Working Environment: A System of Balanced Autonomy

Under the guidance of the district's superintendent, J. Alvin Wilbanks, GCPS has formulated a very clear theory of action: school leadership is an important driver of student success. GCPS' most senior leaders, including the superintendent, spend significant time and energy creating a culture where all district employees, and particularly central office staff, support the district's school leaders. The Gwinnett County Board of Education shares the same vision and plays an important supporting role in the district's approach to school leadership. The Board's belief in the work allows the district to allocate the required financial and human capital resources to support its school leadership work.

Mr. Wilbanks believes that if principals are to be held accountable for school level results, they should have authority over critical decisions such as personnel management, budgeting, and structuring of the school schedule. The district's Instructional Support Center oversees core and administrative matters, such as data systems, curriculum, assessments, and evaluation processes. Therefore, with this support structure, principals have the time to focus on implementing the instructional programs that can maximize student achievement and success.

To further allow principals to focus on teaching and learning, GCPS manages "core" academic functions that include: the district's curriculum, interim assessments, and logistical and operational functions. In turn, principals have discretion and the bandwidth over use of data, budget, program, schedule, and staffing. This balanced autonomy ensures principals have the power to make critical decisions and increase their sustainable successes over the long term.

These autonomies align with the district's theory of managed performance/empowerment. This theory holds all schools accountable to the same high standards but empowers principals to determine how they reach those standards.

### Principal Supervisors

Additionally, GCPS has instituted a coordinated system of hiring, induction, ongoing training, and support to ensure that principal supervisors, known as assistant superintendents in GCPS, are attuned to principals' needs. This also ensures that principals have the resources and autonomy to drive improvements in teaching and learning in their school buildings. GCPS' rigorous evaluation system ties principal performance to school and student outcomes.

The assistant superintendents serve a vital role in guiding and leading principals, providing support at various points in the process; identifying candidates with potential to excel as a principal; leading relevant trainings; and providing coaching and guidance to help principals improve their performance. The district ensures the caseload of each assistant superintendent remains between 10 to 19 principals to allow for the time needed to sufficiently support each principal. AS's also provide invaluable, real-time coaching and practical guidance based on their own experiences as highly effective school leaders within the district. They also can help school leaders effectively engage with central office staff.

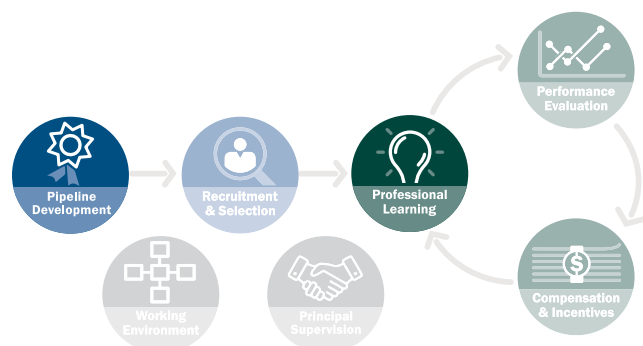
### Evidence of Success

GCPS spends considerable time and resources measuring their own policies and practices for effectiveness to inform improvement and decision-making in the district. Since the QPLA's inception, GCPS has worked with a team of evaluators from the University of Georgia that conducts annual evaluations. These evaluations are used by GCPS to improve the program, and they indicate that the program is meeting the district's goal of retaining effective principals. For example, participants in the QPLA system tend to stay in the district longer, and teachers are more satisfied with working for them. In addition, graduates from the full QPLA program perform better on Georgia state tests in both math and science than students at schools without a graduate. Although this does not establish a direct link between all the parts of the QPLA and student achievement, it does provide early indication of the program's success.

Source: Information for this "District to Watch" example was collected from *Gwinnett County Public Schools: A Systemic Approach to Scaling Effective School Leadership*, and via emailed questions with **Craig Barlow, Assistant Superintendent; Erin Hahn, Director, Leadership Development; and Kendra Washington Bass, Director, Quality-Plus Leader Academy.**



## IDEA Public Schools



**IDEA Public Schools is a network of Pre-K to 12th grade charter schools with 44 schools across Texas. Their *Principal in Residence (PIR)* program, launched in 2012-13, embodies key principal talent management practices. IDEA administrators describe the program’s philosophy as follows: “You don’t learn to lead by sitting in a classroom or practicing it – you learn by doing the work of a principal, seeing a strong principal do the work, and trying it out yourself.”**

### Practice Overview

In the PIR program, newly hired leaders are placed full time at a campus and will complete a residency in 1-2 years with the support of a mentor principal and a leadership coach. During this residency, they are fully integrated into the leadership team, overseeing teachers and taking on other campus management responsibilities.

During their residency years, leaders develop and complete an individualized learning plan that outlines the School Leadership Levers. They will focus on and set monthly targets to master these competencies. They also participate in ongoing skills-based evaluations with leadership coaches and receive intensive mentoring support from their principal at the residency site.

### Intensive Mentor Support

Residents are placed in schools with a mentor principal who models IDEA’s Core Values and embodies IDEA’s School Leadership Levers. Mentors provide access to two key elements of the PIR program—**principal moments and stretch assignments**.

**Principal moments** are experiences that typically only principals engage in—for example, dealing with emergency situations like school lockdowns, critical situations with students, or facilitating parent town halls. These moments provide residents the opportunity to observe or join in leadership during critical points in the principal experience, while also leveraging the support of the “safety net” of the mentor principal.

Mentors also provide residents with **stretch assignments**, which encompass areas for professional growth for residents. For example, a resident may enter the PIR program with extensive instructional experience but may be unfamiliar with special education law and programming. A stretch assignment, then, may serve as an opportunity to supervise special education teachers and coaches, lead their meetings, and generally oversee special education services.

## Leadership Coaching and Ongoing Evaluation

The resident's leadership coach visits the resident's campus 1-3 times a month to discuss the areas identified in the Individualized Learning Plan. IDEA manages PIR coaches, who each have a portfolio of residents who they support and evaluate through a repeated cycle of field observations.

## Evidence of Success

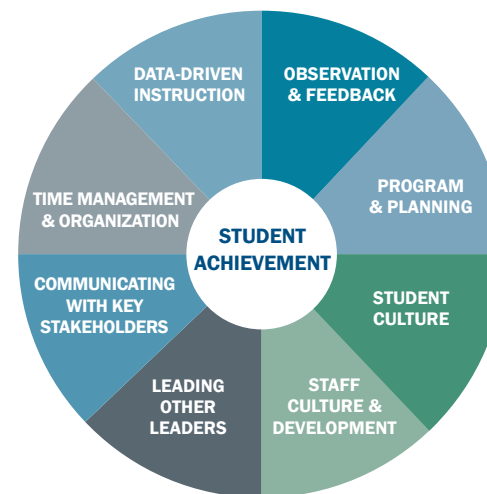
As of the 2016-17 school year, nearly 50 percent of principals who lead IDEA network schools (23 out of 50) are graduates of the PIR program. IDEA administrators collect and monitor PIR principal retention rates, including retention of teacher leaders and teachers at PIR-led schools. Since it was founded in 2012, IDEA has retained 100 percent of its PIR principals in the initial schools where they were placed. Teacher retention has improved across the IDEA network since the PIR program began, climbing from 71 percent in the 2011-12 school year to 84 percent in the 2014-15 school year.

IDEA administrators continue to collect and monitor student growth data in IDEA schools led by PIR and non-PIR leaders. As of 2014-15, schools led by new PIR graduates performed slightly better, on average, than IDEA schools led by other leaders. Yet, these differences are less apparent when comparing all PIR and non-PIR graduates, suggesting that the initial boost new PIR graduates give their schools normalizes over time.

Source: Information for this "District to Watch" example was collected through a phone interview with **Michael Hardy, Senior VP of Schools, and Bethany Solis, VP of Talent Development, IDEA Public Schools**. For more information, contact Bethany Solis.

## SCHOOL LEADERSHIP LEVERS

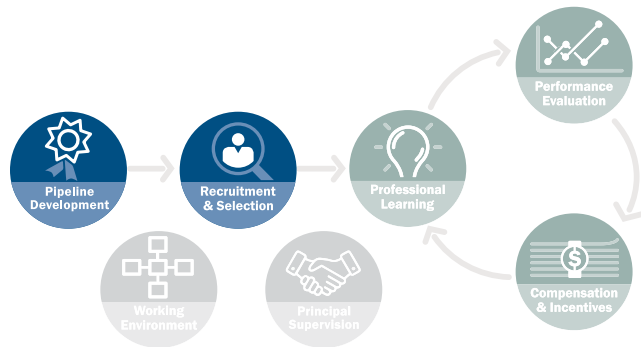
We look for leaders who believe in—and seek to grow in—the following areas that are critical for student and whole-school success. Each PIR's Individualized Learning Plan is built around our robust rubric for these levers:



## CORE VALUES



## Prince George's County Public Schools



**Prince George's County Public Schools (PGCPS) is one of the 25 largest school districts in the United States, serving almost 130,000 students in Maryland. PGCPS is one of the Wallace Foundation's Principal Pipeline Initiative grantee districts, a five-year grant initiative that supports improvements to the school leadership pipeline. Through this initiative, PGCPS has developed a number of new practices aimed at improving school leadership. We focus here on their work on pre-service preparation.**

### Practice Overview

The district has made improvements in their principal preparation efforts in two ways—first, by relying on and deepening relationships with external partners who have a track record of preparing the types of leaders needed inside PGCPS. Second, the district has improved their own, internal system of preparation through a year-long training program for assistant principals. PGCPS' eight leader standards serve as the foundation of the pipeline, setting high expectations for achievement and clearly establishing the criteria for an effective principal in the district.

### Internal System of Preparation and Selection

That internal, district-led program for sitting assistant principals, the Aspiring Leaders Program for Student Success (ALPSS), has operated since 2012. To enter this highly selective and rigorous program, prospective principals go through a comprehensive selection process that consists of multiple screening requirements and activities that evaluate their leadership skills and related competencies. The qualifications for

program entry are also quite high; assistant principals must have at least two years of experience in that role, a master's degree, and an Administrator II certification (principal license in Maryland). Participants meet at least twice per month, completing assignments and practicum experiences between those meetings. ALPSS completers must still go through a rigorous selection process for a principal position, but the district structures the program to give participants the experiences they need to stand out in the principal selection process. Program completers must commit to three additional years of service to the district.

PGCPS also offers a Resident Principal Program (12-18 months) that serves as an extension for 3-4 selected graduates of the ALPSS program. This program aims to provide aspiring principals with the tools to meet anticipated needs, particularly for the district's two international high schools that require principals with particular skills. The district structures the ALPSS program to give participants the experiences they need to stand out in the principal selection process.

### External Partnerships

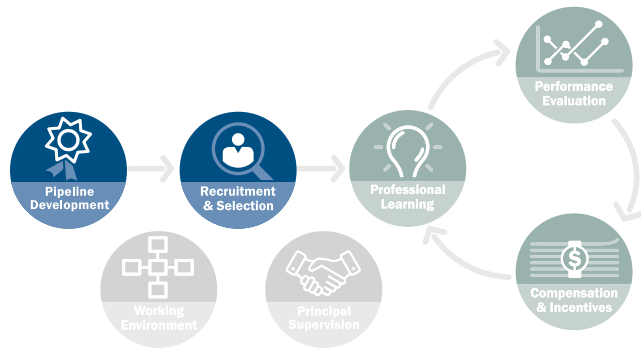
Another part of PGCPS's strategy to improve principal preparation calls for close partnerships with external preparation programs that allow programs to effectively meet the district's needs. More specifically, there are four pre-service preparation programs that PGCPS designed collaboratively with each of its university partners. Each preparation program is uniquely designed to address a need in the district and diversifies the system's offerings: (1) Bowie State University (Building Teacher Leaders); (2) Johns Hopkins University (Urban Leadership); (3) University of Maryland (STEM); and, (4) McDaniel College (Universal Administrator Program). All of the university partners use the district's eight leader standards to align program content. With this approach, PGCPS will be able to not only sustain but also build on these models with other universities in the future.

### Evidence of Success

Since the inception of ALPSS, PGCPS has been able to place 13 graduates as principals in the district; four are in resident principal positions and one is in a central office leadership position. Before 2011, PGCPS had just one university partnership specifically geared at leadership development. Now, in addition to the four signature university programs for leadership development, PGCPS has two doctoral programs (University of Maryland & Howard University) for Central Office Leaders and Principals. To date, PGCPS has a total of 17 strategic partnerships with universities from across the country.

Source: Information for this "District to Watch" example was collected through a phone interview with **Dr. Douglas W. Anthony, Associate Superintendent, Office of Talent Development;** **Damaris Blondonville, Project Manager, Office of Talent Management.**

## Hillsborough County Public Schools



**Hillsborough County Public Schools (HCPS), located in Tampa, Florida, serves more than 200,000 students.<sup>181</sup> HCPS, the eighth largest school system in the country, has worked to improve principal talent in their district for many years.<sup>182</sup>**

### Practice Overview

HCPS's PTM work revolves around a thorough process to select the right leaders for the right schools. This process is part of a larger, systemic, district-wide focus on preparing, developing, evaluating, and then retaining the best principals (work initially supported by the Wallace Foundation). Several important elements of the district's process include: a set of school leader competencies, a structured path to the principalship that entails additional training and assignment as an assistant principal, and careful tracking of data about school leaders.

### Selection Competencies

HCPS' recruitment and selection process is unique in its close ties to the principal evaluation process. Both revolve around the HCPS School Leader Competency Rubric, which provides a comprehensive and consistent definition of what it means to be a successful school principal in the district and an effective instructional leader.<sup>183</sup> Not only does this rubric describe what an effective principal looks like in HCPS, it also maps performance of each of the key elements over the course of a principal's career. The rubric also details expectations throughout all stages of school leadership—from an aspiring principal to an experienced principal.

### Path to the Principalship

Both internal and external candidates can apply for entry into the HCPS Principal Pipeline, which is the HCPS candidate pool and training program for leadership positions. They must have an Educational Leadership Certification (principal licensure in Florida) and at least three years of teaching experience. Both internal and external candidates enter the HCPS Administrative Selection Process. Along with an application form, the candidate must submit his or her most recent evaluation, two references, and a completed essay. From those who apply, selected candidates are invited to a 90 minute interview, which includes competency-based exercises. Successful candidates are then placed in a pool of potential future principals. Typically, it takes several years from entry into the pool until a candidate actually applies for a principal position in HCPS.

Once in the pool, candidates take the following steps:

**Attend Future Leaders Academy (FLA).** All candidates, both internal and external, must go through the Future Leaders Academy, a six-month preparation program. FLA course content can also be found online for those who do not live near the district.

**Apply to Assistant Principal Position.** Once candidates successfully complete the FLA, they can then apply for an assistant principal position. All assistant principals receive a carefully selected mentor and two years of professional development.

**Attend Preparing New Principals (PNP) Program.** After three successful years in the assistant principal role, a candidate can then apply for the Preparing New Principals Program, which provides an additional two years of training. Thus, a candidate is in the assistant principal role for a minimum of five years before moving onto the next phase.

**Apply for Principal Position.** Once candidates finish the PNP Program, they are eligible to apply for a principal position.

### Leader Tracking Systems

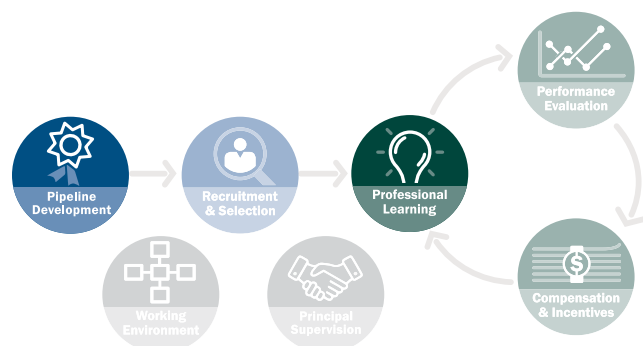
HCPS's leader-tracking systems collect longitudinal data on potential school leaders that include: previous experience (both type of role and length), certification, detailed preparation information, performance evaluation data, and data about participation in professional development. This system allows HCPS to:

**Improve the principal candidate pool.** The district can systematically review candidates' credentials, experiences, and training and proactively determine those who are best qualified to become a principal. The district can also tailor professional development to meet the needs of aspiring leaders and to prepare leaders for schools that will soon have openings.

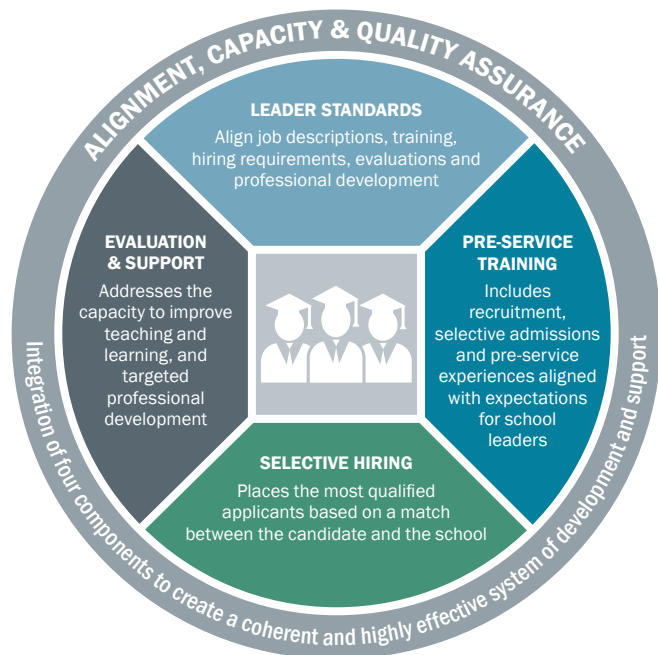
**Better match candidates to schools.** When principal positions open up, the district can make well-informed decisions on the school that a qualified aspiring leader should be placed in based on that candidate's experiences and training.

Source: Information for this "District to Watch" example was collected through a phone interview with **Tricia McManus, Director of Leadership Development, Hillsborough County Public Schools**; and through the district's website.

# Charlotte-Mecklenburg Schools—5-Year Induction Program



**Charlotte-Mecklenburg Schools (CMS) is located in Charlotte, North Carolina, and includes 168 schools serving more than 146,000 students. In the fall of 2011, CMS was one of six districts in the country that received a Wallace Foundation grant to focus on its pipeline for school leaders which includes the following components: high quality training; selective hiring; on-the-job evaluation and support; and alignment, capacity, and quality assurance that integrates the areas of the pipeline into a cohesive system.**



## Practice Overview

CMS provides a variety of programs designed to support school leaders as they develop and enhance their leadership practices. New principals in CMS complete a five-year induction program, described in the following sections.

### Years 1 and 2: Instructional Leadership Focus

All first- and second-year principals are part of a professional learning community that is facilitated by a consultant coach who is a highly effective sitting principal. There is a formal curriculum for both years. Participants meet on a bi-monthly basis and conduct school visits with a specific focus (such as developing effective administrators or increasing student achievement). In addition to being part of the professional learning community, second-year principals also participate in the Together Leader Workshop, which focuses on improving time management skills.

### Year 3: Learning About Leadership

Third-year principals participate in a yearlong change leadership program at the Educational Leadership Institute at Queens University. This is a 6-7 day training, spanning several months where the principals work on their individual leadership styles and focus on how to be the best possible leader.

### Year 4: Vision and Innovation

Fourth-year principals participate in the Innovation Institute, a program at the McColl Center for Art and Innovation, focused on creative leadership and taught by artists. All fourth-year principals attend four sessions of this program together as a cohort. The courses focus on using creativity and innovation to make significant changes in schools.

### Year 5: Demonstrating Leadership

In the final year of the principal induction program, principals participate in a Capstone Project which is offered in partnership with the Center for Intentional Leadership. Principals in their fifth year take part in a series of conversations revolving around their leadership and their visions around education. These series of conversations further develop their skills to lead sustained, positive change.



## Principal Professional Learning Community (PLC)

CMS also participates in a national professional learning community that is part of the Wallace Foundation's Principal Pipeline Initiative. This PLC was launched in April 2014, and participants include the initiative's principal preparation providers, program alumni, and administrators from each district that is part of this initiative. Participants work together to determine the most effective way to identify, develop, and support effective school leaders. Discussions are built around five practices of effective principals as identified through Wallace Foundation research. Participants are encouraged to convene their own local PLCs in their home districts. The PLCs include five project groups, biannual in-person meetings, site visits, conference calls, webinars, shared artifacts, vignettes, and videos. Objectives include:

- Building capacity of principals around the five key practices through quality professional learning
- Incorporating the “principal voice” into discussions about the CMS principal pipeline to inform continuous improvement of the initiative
- Developing “new knowledge” around effective school leadership through the engagement of principals participating in the PLCs
- Creating a space for participating principals to “influence the national conversation” through their public presentations, publications, or discussions of the PLC work
- Providing opportunities for participating principals to share their learning with CMS principal colleagues

## FIVE KEY PRACTICES



Five Key Practices of Wallace Foundation Principal Pipeline Initiative PLCs

## Collecting Data to Monitor Success

While there is not yet any external evaluation research documenting the effectiveness of the five-year induction program (the Wallace Foundation has future plans to study the impact of the grant in 2017 and beyond), Charlotte-Mecklenburg Schools has conducted some internal analysis of the impact of the program.<sup>184</sup> The internal analysis found that principals who participated in the induction program received higher scores on their principal evaluations across all standards by Year 3 of their participation than principals who did not participate in the program. By Year 5, there was no statistical difference between the effectiveness of participants and non-participants in the program, as measured by principal evaluation ratings. While their analysis attempted to examine the relationship between participation in the five-year induction program and outcomes such as retention and student achievement, principal mobility within the district, and changing tests made these analyses more difficult to interpret.

Source: Information for this “District to Watch” example was collected through a phone interview with **Jevelyn Bonner-Reed, Director of HR Strategic Initiatives, CMS**; district-provided materials on the Principal Pipeline Initiative, and the CMS website.





# Recommendations

For district leaders, this PTM framework is a starting point for principal workforce development planning. While the evidence regarding PTM systems and components is still emerging, our review of research and practices suggests that there is no single prescription for effective reform. Moreover, the holistic approach that defines effective PTM systems is nearly impossible to implement all at once. The district administrators interviewed for this report stressed that, regardless of the specific policies and programs implemented, the change process requires many years and consistent commitment due to the breadth and depth of the PTM framework, the changing state/national policy environment, and the deep institutional histories supporting current practices. Consequently, districts should focus on a stepwise or phased approach to PTM systems building.

One key learning we have from our District Cohort is that focusing on PTM alone is not enough. Districts must also consider how they will implement changes to their PTM systems, which often require multiple steps and the engagement of multiple stakeholders. We created the Effective Implementation Framework to provide specific resources and guidance required to meaningfully change practice or policy in an organization in service of student success.

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## When beginning change processes, district administrators recommend:

- **Taking a strong partnership approach.** PTM is intended to improve the entire principal workforce. Only rarely can this be accomplished exclusively within a school district. Multiple organizations have critical roles in preparing, hiring, and supporting the principal workforce. It is important that all of these organizations engage in the planning of PTM systems. When partnering, districts should be smart consumers by knowing what programs help them produce, retain, and support the best principals. This means working closely with external program staff throughout the life of the partnership.
- **Focusing on system coherence and communication.** Each component of the PTM system is important and needs to align with a cohesive set of research-based standards or competencies. As a starting point, districts should look at national principal standards such as the Professional Standards for Educational Leaders (PSEL) and the Model Principals Supervisor Professional Standards (MPSPS). Many states have adopted their own principal standards that could be used as a guide for school districts. Additionally, system coherence requires all involved agencies to use the same standards and approach to leadership learning and evaluation. System communication, in turn, requires data sharing and close coordination of development processes across organizations.
- **Improving leadership policies.** Although the PTM research is still emerging, the promising practices presented in this guide are a good starting point for developing or improving strong policies to recruit, retain, and support the best principals. Districts may use this guide as a self-assessment to determine which components they need to strengthen within their own systems. For example, a district may find they have strong recruitment and selection policies, but need to improve their policies on professional learning to help support and grow principals once they are in the seat. While districts will likely focus on improving one or two component areas at once, each component plays a critical role in a comprehensive PTM system.
- **Using data to inform continuous improvement.** It is important to establish data systems among partnering organizations that provide feedback on progress, identify challenges and, ultimately, assess impact. Many districts and states do not have data systems to provide accurate, timely information on the principal workforce. Thus, efforts to improve data systems are crucial to advancing the use of data for PTM.
- **Use Effective Implementation strategies to guide the work.** Too often, we see that new education initiatives fade away mid-year, or they have mixed implementation results. It is important that district leaders keep focused on how—and not just what—they are going to implement. Use the Bush Institute's Effective Implementation Framework as a resource to meaningfully support the change process used to update and improve PTM practices.

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For researchers, the Framework for Principal Talent Management and related discussion offers a testable theory of action on school leadership development. The research review suggests educational leadership development strategies are informed by experts' practical wisdom and a limited number of experimental and quasi-experimental studies. Although leadership-related impact studies are challenging to conduct, the analyses hold great potential for informing effective PTM design and leadership workforce retention. In partnership with school districts and other organizations, researchers have an opportunity to conduct rigorous studies to inform local PTM system improvement and, potentially, other efforts to support principal development.

For more guidance on the types of data districts can collect to support continuous monitoring and improvement of principal talent management policies and practices, check out the Bush Institute and AIR's policy brief *What Districts Know—And Need to Know—About Their Principals*. The brief examines the limitations—and implications thereof—of district data on principals, highlights several districts engaging in comprehensive leadership tracking systems, and provides a checklist to guide districts on the collection of data that can help them think more about how to monitor the success of their PTM policies and practices.

# Endnotes

- 1 See Leithwood, Louis, Anderson & Wahlstrom (2004)
- 2 Burkhauser, Gates, Hamilton, Li & Pierson (2013)
- 3 Clark, Martorell, & Rockoff (2015); Grissom, Kalogrides & Loeb (2014)
- 4 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019)
- 5 George W. Bush Institute (2015b)
- 6 See Youngs & King (2002)
- 7 Goldring, et al. (2018).
- 8 Herman, Gates, Chavez-Herrerias & Harris (2016)
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- 10 Adamowski, Bowles Thierriault, & Cavanna (2007); Augustine, et al. (2009); Barber, Whelan, & Clark (2010); Farkas, Johnson, Duffett, & Foleno (2001); Papa, Lankford, & Wyckoff (2002); Ikemoto, Taliaferro, Fenton, & Davis(2014); George W. Bush Institute. (2015a)
- 11 Fuller & Young (2009); White & Agarwal (2011)
- 12 Fuller & Young (2009); Scarpa (2005); Mascall & Leithwood (2010); George W. Bush Institute (2015a)
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- 14 Papa (2007); ACTION United Education Fund (2012); Burkhauser, Gates, Hamilton, & Ikemoto . (2012), Fuller & Young (2009), Ikemoto, Taliaferro, Fenton, & Davis(2014); George W. Bush Institute (2015a)
- 15 Augustine et al. (2009); Friedman, Friedman, & Markow (2008); DiPaola & Tschannen-Moran (2003); Ikemoto, Taliaferro, Fenton, & Davis (2014); George W. Bush Institute (2015a)
- 16 Papa, Lankford, & Wyckoff (2002)
- 17 Ikemoto, Taliaferro, Fenton, & Davis(2014); George W. Bush Institute (2015a)
- 18 Fuller, Hollingworth, & Young (2015)
- 19 George W. Bush Institute (2015a); George W. Bush Institute (2015b); Ikemoto, Taliaferro, Fenton, & Davis(2014)
- 20 Fuller, Hollingworth, & Young (2015)
- 21 Alvoid & Black (2014)
- 22 Ikemoto, Taliaferro, Fenton, & Davis. (2014)
- 23 Ikemoto, Taliaferro, Fenton, & Davis(2014)
- 24 Chiang (2018)
- 25 Grissom (2011)
- 26 Chiang (2018)
- 27 Palmer & Mullooly (2015)
- 28 Campbell & Ronfeldt (2018)
- 29 Leithwood, Louis, Anderson, & Wahlstrom (2004)
- 30 George W. Bush Institute. (2016c).; Corcoran, Schwartz, & Weinstein (2009); Gates, et al. (2014)
- 31 Browne-Ferrigno (2003)
- 32 Promising practices are based on a synthesis of the Alliance to Reform Educational Leadership's 9 principal preparation program competencies (George W. Bush Institute, 2014), the study of exemplary leadership programs completed by Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen (2007), the case studies published from this project by LaPointe, Darling-Hammond, & Meyerson (2007), and the Rainwater Alliance's Principal Preparation Program competencies (Cheney, Davis, Garret & Holleran, 2010)
- 33 See: <https://www.ncate.org/LinkClick.aspx?fileticket=zRZI73ROnOQ%3D&tabid=676>
- 34 Darling-Hammond, LaPointe, Meyerson, Orr & Cohen (2007); Davis & Darling-Hammond (2012)
- 35 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019)
- 36 See Corcoran et al. (2009) evaluation of NYC Leadership Academy (NYCLA), which found that students in schools led by NYCLA graduates outperformed their peers in ELA in other schools, although math achievement was similar in NYCLA/non-NYCLA schools
- 37 George W. Bush Institute. (2016)
- 38 Valdez, Broin & Koenigs (2019)
- 39 George W. Bush Institute. (2015a).
- 40 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019)
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- 44 Cheney, Davis, Garrett, & Holleran(2010); George W. Bush Institute (2014); George W. Bush Institute (2015b); Mendels (2016);
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- 46 NYC Leadership Academy (2014)
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- 48 NYC Leadership Academy (2014); Fry-Ahearn & Collins (2016)
- 49 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019)
- 50 Chambers (2016); Cheney, Davis, Darrett, & Holleran (2010); George W. Bush Institute (2014)
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- 52 Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen(2007)
- 53 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019)
- 54 Chambers (2016); George W. Bush Institute (2015b)
- 55 Cheney, Davis, Garrett, & Holleran(2010); King (2013); George W. Bush Institute (2014); Turnbull, Riley, & MacFarlane (2015)
- 56 Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen (2007); Davis & Darling-Hammond (2012)
- 57 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019)
- 58 George W. Bush Institute (2014)
- 59 Orr (2012)
- 60 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019) Valdez, Broin & Koenigs (2019)
- 61 George W. Bush Institute (2014); Burkhauser, Gates, Hamilton, Li, & Pierson (2013)
- 62 Davis & Darling-Hammond (2012); Parkay, Currie, & Rhodes (1992)
- 63 George W. Bush Institute (2016)
- 64 Briggs, Rhines Cheney, Davis, & Moll (2012); George W. Bush Institute. (2016)
- 65 Wrabel, Herman, & Gates (2018)
- 66 George W. Bush Institute (2015b)
- 67 George W. Bush Institute. (2016)
- 68 Malkus, Hoyer, & Sparks (2015)
- 69 Burkhauser, Gates, Hamilton, Li & Person (2013); Pounder & Young (1996); Turnbull, Riley, & MacFarlane (2015)
- 70 Burkhauser et al. (2013); Turnbull, Riley, & MacFarlane (2015)
- 71 George W. Bush Institute (2014b); George W. Bush Institute (2016)
- 72 George W. Bush Institute (2016)
- 73 Turnbull, Riley, & MacFarlane (2015); George W. Bush Institute. (2015a)
- 74 Furgeson, Knechtel, Sullivan, Tuttle, Akers, Anderson, et al. (2014)
- 75 Turnbull, Riley, & MacFarlane (2015)
- 76 George W. Bush Institute (2015a)
- 77 Anderson, Turnbull, & Arcaira (2018); Gill, J. (2016)
- 78 Subramony (2009)
- 79 George W. Bush Institute (2015a); Ikemoto, Taliaferro, Fenton, & Davis (2014)
- 80 Subramony (2009); Jiang, Lepak, Hu, & Baer (2012); Combs, Liu, Hall, & Ketchen (2006)
- 81 Doyle & Locke (2014)
- 82 Gates, Baird, Master & Chavez-Herrerias (2019)
- 83 NewSchools Venture Fund (2008)
- 84 Bottoms & Fry (2009)
- 85 The New Teacher Project (2006)
- 86 The New Teacher Project (2006)
- 87 Gates, Baird, Doss, Hamilton, Opper, Master, Tuma, Vuollo & Zaber (2019)
- 88 Anderson, Turnbull, & Arcaira (2017); Gill, J. (2016); Turnbull, Riley, & MacFarlane (2015)
- 89 The New Teacher Project (2006)

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- 92 George W. Bush Institute (2015a)
- 93 The New Teacher Project (2006)
- 94 Turnbull, Riley, & MacFarlane (2015); Doyle & Locke (2014)
- 95 Anderson, Turnbull, & Arcaira (2017)
- 96 Plecki, Alejano, Knapp, & Lochmiller (2006); Portin, Alejano, & Knapp (2006)
- 97 Burkhauser, Gates, Hamilton, Li, & Pierson (2013)
- 98 Turnbull, Riley, & MacFarlane (2015); Doyle & Locke (2014)
- 99 Anderson, Turnbull, & Arcaira (2017); Gill (2016)
- 100 Clifford & Mason (2013)
- 101 Garet, et al. (2017); Rowland (2017); Drucker, Grossman, & Nagler (2018)
- 102 See Jacob, Goddard, Kim, Miller, & Goddard (2014) for their experimental evaluation of the Mid-continent Research for Education and Learning's Balanced Leadership Professional Development program for principals (a formalized, 20-day professional development program), and studies by Camburn, Goldring, May, Supovitz, Barnes & Spillane (2007), Barnes, Camburn, Sanders & Sebastian (2010), and Nunnery, Ross, & Yen (2010) on the impact of the National Institute for School Leadership's principal professional development program
- 103 Parylo & Zepeda (2015)
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# Acknowledgments

This report was created by the George W. Bush Institute and the American Institutes for Research and would not have been possible without the support of its Expert Advisory Group, which provided detailed feedback on drafts of the PTM Framework and recommended additional research literature for review and consideration.

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