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Issue Brief

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State Policies to Improve the Effectiveness of School Principals

Executive Summary

A principal's effectiveness impacts both teachers and students. Effective principals improve the retention of effective teachers and the outcomes of students. Although all schools can benefit from an effective school principal, there is an emergent need for schools that are chronically low-performing. As states look for ways to turn around low-performing schools and improve the overall quality of education, attention should be paid to reforming the way principals are prepared, trained, and evaluated.

Governors can lead efforts to redesign state policies that govern how principals are prepared, licensed, and evaluated. Specifically, they can:

- Reform state regulations to require at least the annual evaluation of principals to assess and monitor their effectiveness; and
- Use the state's accreditation and licensure authority to ensure that principal preparation programs make the admission process more rigorous, redesign the program curriculum, create stronger clinical experiences, use data to drive improvements in preparation programs, require partnerships between preparation programs and school districts, and create a tiered licensure structure for school principals.

What the Research Reveals About the Impact of Principal Effectiveness

Because principal effectiveness is second only to teacher effectiveness in terms of the school-based factors that influence student learning, improving the effectiveness of school principals is a necessary step toward improving student outcomes.[i] Even though principals do not seem to have a direct impact on student achievement, they do have an impact on teacher effectiveness.[ii] High-quality principals are therefore critical to retaining high-quality teachers—a condition necessary for all schools, but particularly for low-performing schools, where higher-than-average staff turnover can disrupt efforts to improve school culture, teacher effectiveness, and student performance.[iii]

Defining the knowledge, skills, and abilities of principals is essential because it provides a measure of accountability that is integral to assessing the quality of the people who are leading instruction in schools. The standards set by the Interstate School Leaders Licensure Consortium (ISLLC) define what an effective principal should know and be able to do.[iv] The ISLLC standards are the most widely used and accepted set of standards for determining whether or not a principal is effective. In fact, many states have adopted the ISLLC standards as the state standards for school principals. Some of the standards include:

- Knowledge of the principles related to implementing a strategic plan;
- Knowledge of information sources, data collection, and data analysis strategies;
- Knowledge of the principles of effective instruction; and

- Knowledge of curriculum design, implementation, evaluation, and refinement.

Ineffective leadership is the primary reason teachers cite for leaving a school or the profession.[v] A 2009 survey of working conditions in North Carolina, for example, found that the majority of teachers from the state's highest performing schools said school leadership was effective.[vi]

Effective school principals are critical to improving student learning in low-performing schools.[vii] In fact, there is no documented instance of a school turnaround that did not include strong, effective leadership.[viii] In terms of principal effectiveness, experience leading a school is important; however, most hard-to-staff and low-performing schools are led by inexperienced principals whose effectiveness is less than average.[ix]

Overall, investing in improving principal effectiveness is a cost-efficient way to bolster teacher effectiveness in a school.[x] Effective principals work to establish school cultures that are conducive to improving instruction by creating positive working conditions for teachers and thus their impact can be far-reaching.[xi]

Principal Evaluation Needs Improvement

The current state of principal evaluation, like that for teachers, is not useful for improving the effectiveness of school principals and building the capacity of teachers throughout a school. Principals are evaluated infrequently and, in some instances, not at all.[xii] When principals are evaluated, the process is often considered compulsory and not as an opportunity to help school principals improve their effectiveness. And although evaluation feedback is necessary to identify what additional skills principals may need, it is typically disconnected from the principal's professional development. Principals, like teachers, need timely, actionable feedback about their performance to make adjustments and improve.

Because approximately 60 percent of state budgets are dedicated to funding public education, the effort to use data to inform funding decisions should be a gubernatorial priority. Principal evaluation data are needed to inform future decisions about how to improve principal preparation and where to invest state funds for principal professional development. Without these data, making strategic decisions about allocating funding will be challenging.

Principal evaluations should include several measures. Student learning data, for instance, should be used to assess principal effectiveness.[xiii] In addition, because principals are the primary reason teachers stay in their position at a school, principals should be evaluated on their ability to attract and retain an effective teaching workforce by improving working conditions.[xiv] **New Jersey's** Education Effectiveness Task Force, for example, recently recommended that 10 percent of a principal's evaluation be based on skills related to effective teacher retention.[xv] Principals could also be evaluated using survey data from teachers, parents, and, potentially, students.

The Imperative to Improve Principal Preparation

Over the last 20 years, the role of the school principal has changed dramatically.[xvi] Unfortunately, the preparation of principals has not kept pace with the new demands of leading a school. In a series of focus groups conducted by Public Agenda in 2008, the majority of principals participating said that their preparation was "irrelevant" to the actual job of leading a school.[xvii] They also reported that preparation programs were out of touch with the realities of being a principal. The inadequacies of principal preparation programs centered on several issues, including:

- Lack of selectivity to preparation programs;[xviii]

- Outdated, impractical curriculum in preparation programs;[xix]
- Insufficient clinical experiences;[xx]
- Lack of data collected relative to a principal's effectiveness that could be tied to the preparation program and used to continuously improve the preparation of principals in the program; and
- Lack of partnerships between school districts and preparation programs.[xxi]

The majority of prospective principals are self-selecting into leadership programs as opposed to being invited into such programs because of merit. This means that, in the admissions process, little to no attention is paid to candidates' leadership ability.[xxii] Because of financial incentives offered to teachers who complete master's degrees, and because some preparation programs have low admissions standards, many teachers pursue graduate degrees that can lead to licensure as a principal.[xxiii] These factors tend to result in principal preparation programs that lack rigor and that are seen as an easy way to earn a graduate degree and higher pay.

In fact, many teachers who pursue degrees or certificates in school administration do not plan to use the credential to become administrators. Data from the National Center for Education Statistics (NCES, 2007–2008 school year) show that approximately 191,110 teachers hold master's degrees in administration but are not using their degrees to work as school administrators.[xxiv]

The combination of low standards and self-selection complicates the process of preparing individuals to lead schools. Better preparation is necessary, but candidates admitted to preparation programs must also have the ability to lead a school. Without better candidates, efforts to improve preparation programs will fall short.

Even if admissions standards are higher and programs are more selective about the candidates they accept, preparation program courses are often outdated and too theoretical.[xxv] In addition to the lack of relevance to the demands of the job, 44 percent of principals reported that the curriculum in their preparation program was not rigorous.[xxvi] Candidates need more coursework related to the use of data to drive instructional decisions. To prepare them for the role of instructional leader, they also need coursework that prepares them to evaluate teaching and learning and provide meaningful, actionable feedback that helps teachers improve their effectiveness.

Furthermore, one-third of principals reported that the clinical experience they received as part of their preparation was inadequate.[xxvii] In general, requirements vary widely; some programs require just 30 hours of clinical experience.[xxviii] Moreover, expectations for candidates who are in the clinical phase also are vary widely as well. Some preparation programs require the completion of a project that details what was done during the experience along with an evaluation of the candidate by the supervising principal. Others require that certain hours be completed and nothing more.[xxix] Candidates need varied opportunities to actually lead instruction and manage the organization during the clinical experience; however, many report being given tasks that are clerical in nature.

Another problem is related to how candidates are placed in clinical experiences: some principal preparation programs allow candidates to complete clinical experiences in the school where they are currently employed without regard to the effectiveness of the supervising principal.

Although principals reported that their preparation programs fell short in terms of readying them for the task of leading a school, research cannot definitively confirm that the quality of a principal's preparation program impacts student achievement.[xxx] The lack of research makes designing more rigorous preparation programs challenging. In addition, such programs rarely collect data on the effectiveness of their graduates. Without all of

this data, preparation programs will struggle to identify what elements of preparation programs are most beneficial to graduates who will be placed in leadership positions.

Although it can be difficult to determine precisely who will be an effective school principal, there are indicators that should be taken into consideration as part of the principal preparation program admissions process. One such indicator deals with the prospective principal's effectiveness as a teacher. The competencies required to be an effective teacher are similar to those of an effective school principal; therefore, an applicant's teaching record can be used to draw some conclusions about potential effectiveness in a school leadership role.[xxxi] Most prospective principals are currently employed as teachers; however, many preparation programs do not require a recommendation for admission to a preparation program from the employing school district. Such a recommendation is necessary to ascertain a potential candidate's teaching skills, ability to model instructional change, and ability to lead.[xxxii]

Governors Can Lead Efforts to Require Evaluations for School Principals

Governors should consider state policies that require all school principals to be evaluated on an annual basis. **Arkansas, Colorado, Delaware, Illinois, Iowa, Ohio,** and **Utah** require the annual evaluation of principals. In general, annual evaluations should be based on clear, concise standards and include multiple measures to determine effectiveness. In addition, the evaluation tools used to conduct evaluations should be valid and reliable.

Governors can support the creation of state frameworks or standards for principal evaluation that are aligned to school leader standards such as the Interstate School Leader Licensure Consortium standards (ISLLC).[xxxiii] Frameworks or guidelines leave districts with some flexibility to create evaluations. Some states, however, prefer to use a statewide evaluation process for principals. For example, **Delaware** developed the Delaware Performance Appraisal System (DPAS II) to evaluate principals using multiple measures, including survey data from the principal, the teachers in the school, and evaluators. Student achievement data are also taken into consideration.

North Carolina uses a validated, statewide instrument to evaluate principals. Based on standards developed by the state board of education, the evaluation process incorporates information on working conditions into the data the state collects annually. Principals are partially evaluated based on their ability to improve working conditions as well as their ability to lead instruction and improve the culture of the school they lead.

Although it does not require the use of a particular assessment, **Iowa** does provide a framework for evaluating principals. Evaluations must be aligned to state leader standards and must include the use of various types of data. **Rhode Island** recently adopted new evaluation standards for teachers and principals. The standards now form the basis for an evaluation instrument developed by the Rhode Island Department of Education. Districts can adopt the instrument or modify it for use. The new evaluation standards require the use of student learning measures as part of the evaluation. They also require districts to use the data collected from the evaluation to make decisions about future employment.

Several states recently passed legislation requiring that a portion of a principal's evaluation be based on student achievement. **New Jersey's** Educator Effectiveness Task Force in 2011 recommended that 35 percent of a principal's evaluation be based on "empirical measures of student learning."[xxxiv] **Arizona, California, Louisiana, Maine, Michigan,** and **Tennessee** all require the use of student achievement data as part of a principal's evaluation.

How Governors Can Reform Principal Preparation Through State Accreditation and Professional Licensure

Using accreditation to push preparation programs to become more selective in admissions is not only an opportunity to potentially improve the effectiveness of school principals, but is also a way for states and school districts to save money. There are three ways states can improve the selectivity of preparation programs, which are described below.

First, states could adopt policies that require teachers who want to pursue a master's degree in administration to secure a recommendation from the school district. For example, **Kentucky** requires preparation programs to form partnerships with districts to better ensure that candidates admitted to preparation programs have greater potential to be strong school leaders.[xxxv] A school district recommendation serves as its endorsement of the candidate—an endorsement based on the district's belief that the person has the potential to develop the requisite skills and abilities to be an effective school leader. Requiring the district's recommendation could also reduce the number of teachers who pursue a master's degree in administration and thus could improve the quality of the candidates enrolled in principal prep in the first place. The recommendation requirement, in effect, solves two circumstances perpetuating the low quality of principal preparation program graduates: self-selection and lack of motivation to become a leader.

The second way selectivity could be improved is to reverse policies that require teachers to be paid on "step and lane" salary schedules.[xxxvi] Currently, 16 states require by law that teachers be paid on what are referred to as "step and lane" salary schedules.[xxxvii] Step and lane salary schedules pay teachers based on their years of service and provide additional pay for holding graduate degrees.[xxxviii] Providing supplements for advanced degrees to teachers—irrespective of the degree they hold and regardless of whether or not the degree is used—creates a perverse incentive to pursue, in particular, master's degrees in administration. These policies flood enrollment in principal preparation programs. Efforts to adopt new models of teacher compensation that do not provide additional pay for advanced degrees could help school districts and states achieve significant cost savings. Supplement amounts vary widely; however, the overall costs of these programs to states and districts are substantial (**Table 1**).

Table 1 illustrates only a portion of the costs states and districts cover for advanced degrees. For example, the table does not show the additional salary supplements provided to the 8.2 percent of teachers who have doctoral degrees or the salary supplements provided to teachers who have a master's degree *and* additional hours toward another master's degree, doctoral degree, specialist degree, or post-master's certificate.[xxxix] The additional supplement provided to teachers with hours beyond a master's degree is commonly referred to as "master's plus." It should be noted that the total amount spent on supplements, the percentage of the total education expenditure, and the per-student costs are aggregate data that may include salary supplements provided to other school system personnel, some of whom may not be teachers. It could also include supplements paid to teachers with advanced degrees in mathematics and science at the secondary level. Research indicates that students of teachers with advanced degrees in mathematics and science fare better in terms of their achievement, which appears to justify this salary supplement.[xl] States should invest time and effort to determine the percentage of the total money spent, the percentage of the total education expenditure, and the per-student costs associated with paying teachers advanced-degree supplements.)

Table 1-Percentage of teachers with master's degree, average amount of supplement for advanced degrees provided for teachers, the total money spent on advanced degree supplements, the percentage of the total education expenditure spent to provide advanced degree salary supplements, and the per pupil costs.[xli]

State	Percentage of Teachers with Master's Degree	Average Supplement for Master's Degree	Total Money Spent on Supplements	% of Total Education Expenditure	Per-Student Costs
Alabama	61	$6,666	$202,351,743	2.92	$272
Alaska	41	$10,329	$34,125,468	2.39	$258
Arizona	49	$5,410	$149,046,948	2.33	$125
Arkansas	38	$4,183	$56,789,071	1.2	$124
California	43	$8,977	$1,173,206,554	1.96	$187
Colorado	54	$5,341	$137,641,681	1.76	$169
Connecticut	74	$6,366	$205,393,986	2.58	$357
Delaware	53	$8,986	$39,332,745	2.3	$312
District of Columbia	51	$5,579	$16,379,295	1.62	$296
Florida	37	$3,496	$230,671,218	1.01	$86
Georgia	53	$8,336	$529,583,485	3.21	$313
Hawaii	55	$3,933	$25,272,855	1.19	$141
Idaho	27	$7,828	$32,055,315	1.56	$116
Illinois	53	$5,914	$422,385,314	1.73	$198
Indiana	62	$4,988	$191,807,156	1.88	$182
Iowa	34	$5,192	$63,741,719	1.5	$131
Kansas	45	$4,346	$66,527,855	1.4	$140
Kentucky	71	$4,772	$143,867,668	2.3	$220
Louisiana	34	$2,860	$44,335,803	0.67	$68
Maine	34	$3,048	$17,691,413	0.68	$92
Maryland	56	$5,482	$187,626,598	1.77	$222
Massachusetts	60	$5,227	$237,507,838	1.69	$249
Michigan	56	$5,927	$316,418,467	1.68	$183
Minnesota	50	$6,995	$184,435,902	2.05	$225
Mississippi	36	$4,310	$53,178,510	1.43	$107
Missouri	51	$4,283	$146,603,923	1.85	$163
Montana	34	$7,259	$25,687,016	1.94	$181
Nebraska	40	$9,484	$81,286,660	3.02	$279
Nevada	56	$6,972	$91,788,228	2.76	$202
New Hampshire	42	$4,682	$32,137,405	1.3	$157

New Jersey	42	$4,624	$225,579,179	1.01	$162
New Mexico	41	$3,986	$36,008,112	1.1	$109
New York	78	$7,109	$1,121,422,848	2.59	$416
North Carolina	32	$4,417	$140,151,025	1.09	$97
North Dakota	27	$4,212	$8,855,916	1.06	$96
Ohio	53	$7,280	$463,381,961	2.7	$243
Oklahoma	33	$2,014	$28,385,502	0.56	$44
Oregon	58	$6,441	$109,520,560	1.95	$193
Pennsylvania	50	$3,171	$199,008,461	0.92	$110
Rhode Island	52	$2,714	$22,027,136	1.09	$134
South Carolina	51	$6,194	$157,754,370	2.48	$222
South Dakota	26	$2,748	$6,249,122	0.16	$52
Tennessee	52	$3,717	$122,996,038	1.63	$139
Texas	27	$1,423	$124,519,635	0.32	$27
Utah	33	$4,490	$33,505,600	1.16	$69
Vermont	45	n/a	n/a	n/a	n/a
Virginia	40	$2,706	$114,530,052	0.81	$92
Washington	56	$10,777	$330,108,991	3.3	$319
West Virginia	61	$3,269	$39,597,424	1.31	$141
Wisconsin	45	$6,406	$171,358,055	1.79	$196
Wyoming	37	$6,955	$17,851,399	1.4	$209
TOTAL National			**$8,611,692,225**		

Some school districts cover portions or all the costs of graduate coursework but do so without accompanying such payments with any stipulations. This makes pursuing a graduate degree an even more attractive option for teachers. But because not all teachers who earn master's degrees in school administration use them, cost savings could be achieved if teachers are reimbursed for the cost of their graduate degrees only if they are hired to work as school administrators. Additional incentives on top of degree cost reimbursement could be offered to principals who agree to lead low-performing schools and are able to turn them around.

The state's ability to accredit principal preparation programs is another powerful lever to improve principal preparation. States can use their authority to accredit preparation programs to drive broader improvements in principal preparation by "sunsetting" principal preparation programs and requiring candidates to reapply for accreditation under more rigorous standards.[xlii] **Iowa**, **Kentucky, Louisiana, Mississippi,** and **New York** are examples of states that took such action.[xliii] More rigorous standards could include: more rigorous selection of applicants to degree programs, stronger and more rigorous clinical experiences, a prescriptive set of curriculum requirements that are aligned to research about what is known about what skills and knowledge are necessary to drive improvements in student learning, what competencies candidates should master prior to completing a preparation program, and what districts can expect principals to know and be able to do upon initial licensure.

By using their states' accreditation authority, governors can lead efforts to improve a very important piece of the principal preparation process—the clinical experience, otherwise known as an externship or internship. Often

cited as inadequate, clinical experiences have the potential to be effective in determining which candidates should complete a preparation program and which should not. Standards might cover how the clinical experience ought to be structured, such as the minimum number of hours required, and include a culminating project that requires the candidate to demonstrate mastery of a specified set of skills. Clinical experiences for prospective principals should focus on what principals need to know and do to improve student achievement. Candidates should be assigned to schools where efforts to improve student achievement are underway and where an effective leader is spearheading that effort. States should establish guidelines for preparation program supervision of the candidate to ensure that they benefit from feedback about their progress.

Tennessee, for instance, created regulations to improve principal clinical experiences and now requires that they include:

- Mentors for prospective principals;
- Opportunities to work with diverse students, teachers, parents, and communities;
- Ongoing faculty supervision;
- Rigorous formative and summative standards-based evaluations using reliable, valid, and standardized instruments and procedures; and
- Candidate defense of a practicum project.

Louisiana changed its internship experience for prospective principals through its accreditation authority. Degree programs are now aligned with the Louisiana State Standards for School Leaders and national accreditation standards that focus on teaching, learning, and school improvement. The programs place greater emphasis on research-based practices that have demonstrated effectiveness in improving student achievement.

As stated above, many principals report that their preparation programs do not adequately prepare them to lead a school. Yet what is also true is that there is not a solid research base that can confirm whether or not the quality of a principal's preparation program impacts student achievement.[xliv] The lack of research makes it hard to identify the preparation program elements that are most beneficial to graduates who will be placed in a leadership position.

Preparation programs need information about their graduates' performance on the job to make continuous improvements in what material the programs should cover and how they should be taught. To provide this information, states must be able to link principals, the teachers they lead, the students in their schools, and their preparation program. Using data to link all of these aspects can provide preparation programs with information about how effective their graduates are once employed.

Louisiana leads the country in its ability to make the necessary data connections to tie a principal's performance to his or her preparation program. The state already reports teacher effectiveness data to preparation programs and uses the information to reaccredit preparation programs. Prep programs that are minimally effective are given time to make improvements; however, those that fail to get better can lose accreditation.

Data could also be used to streamline the large number of state preparation programs. The oversupply of preparation programs can work against efforts to improve selectivity. States could use data to identify high-performing preparation programs in a state and close those that are less effective. This strategy could improve the selectivity of candidates admitted to preparation programs and improve the overall quality of principal preparation statewide.

In addition to authority over accreditation, governors can lead efforts to improve the skills of principals through their authority to license education professionals. An important policy lever, principal licensure is the gateway between preparation and practice.[xlv] Initial licensure regulations should place greater emphasis on demonstrating mastery of skills and competencies, as opposed to the current approach to licensure in many states, which requires only the acquisition of degree credentials.[xlvi] Creating additional requirements for initial licensure besides degree completion essentially separates degree attainment from licensure—a step that may help states better ensure that licensed principals possess the knowledge, skills, and abilities needed for maximum effectiveness.

One way states can change licensure regulations to improve principal performance is to create a tiered licensure system, which allows principals to earn more advanced licenses based on the mastery of a prescribed set of skills. Tiered licensure, designed to recognize the variation in school leaders' competencies, has been adopted in several states, including **Delaware, Illinois, Kentucky, Louisiana,** and **Virginia**. A RAND study of 10 states showed that tiered licensure improved school leader effectiveness because it differentiated performance among principals and provided a structure to allow principals to receive needed mentoring and coaching support during the first critical years of holding an administrative position.[xlvii]

Finally, preparation programs could be improved through partnerships with school districts designed to ensure that preparation programs are in touch with the realities of leading a modern school.[xlviii] This is essential because, once principals are placed into leadership positions, they often find that the school district's expectations are disconnected from what they learned in their preparation program. Without meaningful partnerships with school districts, area preparation programs will continue to miss the mark in terms of providing an adequate curriculum and clinical experience for prospective principals that can positively impact school achievement.

There are two additional benefits to school districts partnering with preparation programs. First, school districts have the opportunity to shape the curriculum to closely reflect the real-world challenges of leading a school in that district's unique context. Second, partnerships between districts and preparation programs—as required in **Kentucky**—can potentially improve the quality of the candidates by basing admissions decisions in part on school district recommendations.

Next Steps for States

Governors can improve principal effectiveness in the states by using their licensure and accreditation authority to make advancements in leadership preparation programs. In addition to providing students with access to higher quality school principals, state leadership in this area can achieve significant costs savings through more informed, data-based decisions around the practice of educating and training school principals.

Students in our nation's low-performing schools are particularly vulnerable to ineffective leadership and turning these institutions around hinges on highly effective leadership and teachers—two conditions that, as this paper shows, governors can work to improve. By enlisting the support of state commissioners of education, legislators, higher education leaders, and other stakeholders, governors can lead the effort to build public and political will to institute the necessary changes to reform and improve the process of selecting, preparing, licensing, and supporting school leaders.

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Notes

[i] Kenneth Leithwood et al., "How Leadership Influences Student Learning," (New York: The Wallace Foundation, 2004): 3. http://www.wallacefoundation.org/SiteCollectionDocuments/WF/Knowledge%20Center/Attachments/PDF/ReviewofResearch-LearningFromLeadership.pdf (accessed April 13, 2011).

[ii] Gregory Branch, Eric Hanushek, and Steven Rivkin, "Estimating Principal Effectiveness," *Working Paper 32* (Washington, DC: National Center for Analysis of Longitudinal Data in Education Research, December 2009). http://www.caldercenter.org/upload/CALDER-Working-Paper-32_FINAL.pdf (accessed April 13, 2011).

[iii] Tara Beteille, Demetra Kalogrides, and Susanna Loeb, "Effective Schools: Managing the Recruitment, Development, and Retention of High-Quality Teachers," *Working Paper 37* (Washington, DC: Urban Institute, December 2009). http://www.caldercenter.org/upload/Effective-Schools_CALDER-Working-Paper-37-3.pdf (accessed April 13, 2011).

[iv] See also Interstate School Leaders Licensure Consortium: Standards for School Leaders, 2009, http://elan.wallacefoundation.org/SiteCollectionDocuments/WF/ELAN/isllcstd.pdf.

[v] M. Christine DeVita et al., "Education Leadership: A Bridge to School Reform" (paper presented at The Wallace Foundation's National Conference, New York, October 22–24, 2007). http://www.wallacefoundation.org/SiteCollectionDocuments/WF/Knowledge%20Center/Attachments/PDF/ABridgetoSchoolReformfinalPDF.pdf (accessed April 13, 2011).

[vi] Eric Hirsch and Keri Church, "North Carolina Teacher Working Conditions Survey Brief: Teacher Working Conditions Are Student Learning Conditions," *Research Brief* (Santa Cruz, CA: New Teacher Center, June 2009). http://www.newteachercenter.org/pdfs/NC_student_achievement.pdf (accessed April 13, 2011).

[vii] Hirsch and Church, 2009.

[viii] Hirsch and Church, 2009.

[ix] Eileen Horng, Demetra Kalogrides, and Susanna Loeb, "Principal Preferences and the Unequal Distribution of Principals Across Schools," *Working Paper 36* (Washington, DC: National Center for Analysis of Longitudinal Data in Education Research, December 2009). http://www.caldercenter.org/upload/Working-paper-36_FINAL.pdf (accessed April 13, 2011).

[x] Horng, Kalogrides, and Loeb, 2009.

[xi] Horng, Kalogrides, and Loeb, 2009.

[xii] Michael Usdan, Barbara McCloud, and Mary Podmostko, "Leadership for Student Learning: Reinventing the Principalship," (Washington, DC: Institute for Educational Leadership, 2000). http://www.iel.org/programs/21st/reports/principal.pdf (accessed April 13, 2011).

[xiii] The ability to determine a principal's impact on student achievement is somewhat limited due to the lack of random assignment to and within schools. It is difficult to separate the influence of school leadership on student achievement from other factors that may contribute to a student's achievement. There are ways to more accurately link principal effectiveness and student performance; for instance, using panel data and value-added controls. See Branch, Hanushek, and Rivkin, "Estimating Principal Effectiveness," 2009.

[xiv] Limited emphasis should be placed on this measure in instances where the principal's hiring authority is limited or nonexistent.

[xv] See the recommendations in the New Jersey Educator Effectiveness Task Force, Interim Report, March 1, 2011, http://www.state.nj.us/education/educators/effectiveness.pdf (accessed April 13, 2011).

[xvi] Arthur Levine, "Educating School Leaders," (New York: The Education Schools Project, 2005). http://www.edschools.org/pdf/Final313.pdf (accessed April 13, 2011).

[xvii] Public Agenda, "A Mission of the Heart: What Does It Take to Transform a School?" (New York: The Wallace Foundation, 2008). http://www.publicagenda.org/files/pdf/missionheart.pdf (accessed April 13, 2011).

[xviii] According to U.S. News & World Report, Penn State University's business school, which ranked 43rd in the nation, accepted less than 25 percent of applicants. Meanwhile, Penn State's School of Education, a top-10 program in school administration, accepted 50 percent of applicants.

[xix] Levine, 2005.

[xx] Southern Regional Education Board, http://www.sreb.org. See http://publications.sreb.org/2010/10V14_Leadership_Reform_Alabama.pdf.

[xxi] Southern Regional Education Board.

[xxii] Levine, 2005.

[xxiii] Admission standards vary, however. Levine (2005) found that, even at the nation's most selective preparation programs, admissions standards tend to be lower than in other education programs.
[xxiv] NCES analyzed data from the Schools and Staffing Survey for the 2007–2008 school year to provide this estimate. It should be interpreted with some caution, however; the standard error for this estimate is equal to 30 percent or more of the estimate's value. Teachers who reported their main position in schools as administrators—about 0.3 percent in public schools and about 0.7 percent in Bureau of Indian Education (BIE) schools—were not included in this estimate. See "Public School Teacher and BIE School Teacher Data Files," *Schools and Staffing Survey* (Washington, DC: U.S. Department of Education, National Center for Education Statistics, 2007–08).
[xxv] Levine, 2005.
[xxvi] Levine, 2005.
[xxvii] Levine, 2005.
[xxviii] Levine, 2005.
[xxix] Levine, 2005.
[xxx] Levine, 2005.
[xxxi] Competencies are defined as "consistent patterns of thinking, feeling, acting, and speaking." The common competencies referred to for both effective teachers and principals are relative to the context of a turnaround school—a school in which conditions are dire both academically and culturally. See Lucy Steiner, Emily Hassel, and Bryan Hassel, "School Turnaround Leaders: Competencies for Success" and "School Turnaround Teachers: Competencies for Success" (Chicago: The Chicago Public Education Fund, 2008). http://www.publicimpact.com/competencies-high-performers (both reports accessed April 20, 2011).
[xxxii] District partnerships with preparation programs were a common feature of the high-quality preparation programs reviewed as part of Darling-Hammond's study (2007) of high-quality preparation programs. See http://www.srnleads.org/data/pdfs/sls/sls_exec_summ.pdf (accessed April 13, 2011).
[xxxiii] For more information about the Interstate School Leaders Licensure Consortium, see http://www.e-lead.org/principles/standards1.asp.
[xxxiv] New Jersey Educator Effectiveness Task Force report, 2011.
[xxxv] For more information, see http://www.kyepsb.net/teacherprep/prinredesignguidelines.asp
[xxxvi] In states with state salary schedules, state policy could be used to change both the salary schedule and the salary supplement guidelines. However, there are states where salary schedules are determined locally. In addition, salary schedules and supplements are often bargained collectively at the local level.
[xxxvii] Michael Petrilli and Marguerite Roza, "Stretching the School Dollar: A Brief for State Policymakers," (Washington, DC: Thomas B. Fordham Institute, January 2011).
http://www.edexcellencemedia.net/publications/2011/20110106_STSD_PolicyBrief/20110106_STSD_PolicyBrief.pdf (accessed April 13, 2011).
[xxxviii] "Step and lane" salary schedules allow teachers to earn additional pay for their years of service and degree attainment. Teachers who stay in their positions are moved to a higher "step" in the form of a higher salary.
[xxxix] Marguerite Roza, "Frozen Assets: Rethinking Teacher Contracts Could Free Billions for School Reform," (Washington, DC: Education Sector, 2007).
http://www.educationsector.org/sites/default/files/publications/FrozenAssets.pdf (accessed April 13, 2011).
[xl] National Council of Teacher Quality, http://www.nctq.org/nctq/images/nctq_io.pdf.
[xli] Marguerite Roza and Raegen Miller, "Separation of Degrees: State-By-State Analysis of Teacher Compensation for Master's Degrees," (Seattle, WA: Center on Reinventing Public Education, 2009).
http://www.crpe.org/cs/crpe/download/csr_files/rr_crpe_masters_jul09_db.pdf (accessed April 13, 2011).
[xlii] The Interstate School Leaders Licensure Consortium standards, which have been adopted by many states, serve as the standards by which principal preparation programs are accredited and principals are evaluated for initial or renewal licensure. See http://www.e-lead.org/principles/standards1.asp.

[xliii] Kentucky Education Professional Standards Board, "Instructional Leadership — School Principal Certification."
http://www.kyepsb.net/Certification/principalcert.asp (accessed April 13, 2011).
[xliv] Kentucky Education Professional Standards Board, http://www.kyepsb.net/Certification/principalcert.asp (accessed April 13, 2011).

[xlv] It should be noted that there is no empirical research that identifies a prescriptive set of best practices in terms of licensure. However, it is widely accepted that licensure should go beyond the "do-no-harm" standard that governs most educator licensure processes.
[xlvi] Tabitha Grossman, "Building a High-Quality Education Workforce: A Governor's Guide to Human Capital Development," (Washington, DC: National Governors Association, 2009). http://www.nga.org/Files/pdf/0905BUILDINGEDUWORKFORCE.PDF (accessed April 13, 2011).
[xlvii] Catherine Augustine and Jennifer Russell, "State of the States: The Search for Ways to Improve Instructional Leadership Zeroes In on 6 Policy Areas," *Journal of the National Staff Development Council* 31, no. 2 (April 2010): 30–35.
[xlviii] Public Agenda, "A Mission of the Heart," 2008.