

The Hunt Institute's

BLUEPRINT

for Education Leadership

James B. Hunt, Jr.

Foundation Chairman
Governor of North Carolina
(1971-1985; 1993-2001)

Judith A. Rizzo, Ed.D.

Executive Director and CEO

April D. White, Editor

Director of Communications
awhite@hunt-institute.org

Created by the University of North Carolina Board of Governors in 2001, the James B. Hunt, Jr. Institute for Educational Leadership and Policy works with leaders to secure America's future through quality education. Working at the intersection of policy and politics, the Hunt Institute connects leaders with best strategies for developing and implementing policies and programs to improve public education.



1000 Park Forty Plaza
Suite 280
Durham, NC 27713
p: 919.425.4160
f: 919.425.4175
www.hunt-institute.org

For additional copies of *Blueprint*,
or to receive a copy via e-mail,
please call 919.425.4167.

Realizing the Promise of Standards-Based Reform

Thanks to the unprecedented infusion of federal dollars to states intended to dramatically improve education, governors, chief state school officers, legislators, and other state leaders are confronting difficult choices and competing interests. Simultaneously, these funds provide a means to stanch the loss of critical teaching positions and to continue vital services to students, as well as a tool with which to institute essential change.

During this time of serious budget shortfalls, the natural tendency is to conserve and protect rather than challenge or change the status quo. But even a cursory look at how American students fare on national or international tests, or what our high school drop-out and college completion rates are, clearly demands big, bold, and courageous reform — not a maintenance of effort.

States have taken a “standards-based” approach to education during the past two decades; however, as reported in the Hunt Institute-sponsored study by the National Research Council, that approach has fallen short of its lofty and admirable goals. **A comprehensive and integrated system of standards, assessments, curriculum, instructional materials, data, teacher and principal development, and student support is rarely found in states.** Yet, each of these is a vital component of a successful and productive education enterprise. State leaders must address these shortcomings or too many of their students will continue to fail.

The great news is that states do not have to work in isolation as they seek answers to these universal challenges. They can address these shortcomings by building on President Obama's commitment to education, Secretary Duncan's determination to support and foster innovation through the Race to the Top Fund (RTT), and the ever-increasing interest in collaboration among states. Leaders who are committed to the improvement of education in their states will capitalize on the one-time American Recovery and Reinvestment Act (ARRA) funds to drive lasting change and will lead creative and innovative thinking to compete for RTT dollars. Leaders who allow this opportunity to slip by, fail to use these funds well, or do not take bold action, will not serve their constituents well.

Blueprint is designed to help state leaders identify leverage points for change and to note several key efforts and resources that are available to assist them. The Coalition for Student Achievement — a group of more than 50 organizations committed to ensuring that ARRA funds are used to drive effective education reform — is one of those sources. This issue summarizes and references the Coalition's efforts and publications as well as those from a variety of sources. You will find a list of these on the last page of this issue. We hope you find it useful.

KEY COMPONENTS OF THE SYSTEM: STATUS, MOMENTUM, & CAUTIONS

Content Standards and Curriculum

Content standards describe what a student should know and be able to do. As described in the first two issues of *Blueprint*, the Hunt Institute commissioned the National Research Council (NRC) to look objectively at the status of state content standards across the nation. The study committee concluded that states vary greatly in their expectations for students, the clarity and general quality of their standards, and how they articulate and communicate them to teachers, students, and parents.¹ What states are seen to have in common are the breadth of topics within each content area and grade level and the excessive repetition of content across grade levels. In most cases, state content standards embody an unachievable array and scope of material that teachers cannot cover well within a school year.

Any attempt to dramatically overhaul state content standards is a daunting challenge for state leaders. Most states have a long-held and well-guarded tradition for developing standards. The process usually involves many levels of state government such as boards and legislatures, as well as teachers and other educators. There is great pride of ownership and a preservation of the belief that each state's education needs are unique.

The growing awareness of global competition for jobs, the need for a better educated workforce, and the understanding that a high school diploma does not guarantee either work or college success has led to an important attitudinal shift: **A majority of states have decided to participate in a state-led effort to develop a shared set of fewer, clearer, and higher content standards** that will ultimately define work and college readiness and that will be internationally benchmarked to the best standards in the developed world. The Council of Chief State School Officers (CCSSO) and the National Governors Association (NGA) are leading this process.

The development of these standards is a very important task. CCSSO and NGA are working with a number of recognized experts to craft them. These two organizations will also convene a National Validation Committee that will be comprised of national and international experts on standards. This committee will validate end-of-course expectations, provide leadership for the development of K-12 standards, and certify state adoption of the Common Core Standards.²

Content standards are essential, but it is the curriculum that provides the basis for instruction. Content standards come alive

Comparison of Core Math Curricula Between High-Performing Countries and a Sample of U.S. States

■ Coverage in high-performing countries ■ Coverage in a sample of U.S. states

TOPIC	GRADE							
	1	2	3	4	5	6	7	8
Whole Number Meaning	■	■	■	■	■			
Whole Number Operations	■	■	■	■	■			
Measurement Units	■	■	■	■	■	■	■	
Common Fractions			■	■	■	■	■	
Equations & Formulas			■	■	■	■	■	■
Data Representation & Analysis			■	■	■	■	■	■
2-D Geometry: Basics			■	■	■	■	■	■
Polygons & Circles			■	■	■	■	■	■
Perimeter, Area & Volume			■	■	■	■	■	■
Rounding & Significant Figures				■	■			
Estimating Computations				■	■	■		
Properties of Whole Number Operations				■	■			
Estimating Quantity & Size				■	■			
Decimal Fractions				■	■	■		
Relationship of Common & Decimal Fractions				■	■	■		
Properties of Common & Decimal Fractions					■	■		
Percentages					■	■		
Proportionality Concepts					■	■	■	■
Proportionality Problems					■	■	■	■
2-D Coordinate Geometry					■	■	■	■
Geometry: Transformations					■	■	■	■
Negative Numbers, Integers & Their Properties							■	■
Number Theory							■	■
Exponents, Roots & Radicals							■	■
Exponents & Orders of Magnitude							■	■
Measurement Estimation & Errors							■	
Constructions w/ Straightedge & Compass							■	■
3-D Geometry							■	■
Congruence & Similarity							■	
Rational Numbers & Their Properties							■	
Patterns, Relations & Functions							■	
Slope & Trigonometry								■

In high-performing countries, the sequencing of math topics progresses as students move into higher grades. In the U.S., most state math curricula do not display such a pattern. U.S. students often study the same topics most years of their education.

Recreated from W. Schmidt, R. Houang, and L. Cogan. A Coherent Curriculum: The Case of Mathematics. *American Educator*, Summer 2002.

through curriculum. An effective curriculum is aligned with the standards, offers clearly defined instructional goals, and incorporates current understandings of cognition and learning. Teacher involvement in crafting curriculum to meet the standards gives them an opportunity to take ownership of the standards, translate them into classroom application, apply their experience and expertise, share their knowledge with colleagues, and is a wonderful professional development experience. As noted by the Coalition for Student Achievement's recently published guide, *Smart Options: Investing the Recovery Funds for Success*, "A common complaint in virtually every school district in the country is that the standards have not made their way into classrooms." There is overwhelming evidence that having too many, poorly sequenced content standards prevents the development of effective curricular materials. The adoption of fewer, clearer content standards will free the hands of instructors to focus on the most

essential aspects of instruction and to develop curricular materials that are better aligned with college and workforce readiness. The Common Core Standards effort will make it possible for states to achieve economies of scale as they share resources in the development of curriculum, selection of textbooks, and the identification of instructional materials and strategies.

Assessments for Accountability, Instruction, and Learning

As found by the Hunt Institute-commissioned NRC study, **in the absence of clear and concise standards and without an aligned curriculum, teachers rely on state tests for guidance about what to teach.** State accountability systems are based on test results, and teachers understand that those results will be used to determine student and school achievement — and possibly in evaluations of their own success. In deciding what to test and with what level of proficiency, states send a clear message about what is important. Unfortunately, current state assessments rely on multiple choice questions that test low-level knowledge and skill. Complaints about the “narrowing of curriculum” derive from a dependence on state test items that are limited by design. It would be neither possible nor desirable to test all of the numerous content standards that states have on the books. A set of fewer, clearer, and higher standards would allow for an improved assessment system and would free up teachers to enrich the curriculum.

A growing number of state leaders understand that poorly constructed, end of the year assessments focus instruction on low-level skills and make it impossible to gauge whether a student is on track for success beyond high school. In response, 17 states are now making an effort to better align their K-12 assessment systems with the goal of college readiness in some form, whether by requiring students to take the ACT or SAT or by embedding questions from such assessments within the state test;³ however, unless such assessments are aligned with the state’s content standards, the system remains disjointed.

Many states are also looking to technology to increase the classroom relevance of their assessments by getting results to teachers in a timelier manner. In 2008, 27 states delivered at least one state assessment via computer;⁴ however, most states are merely administering their same multiple-choice tests electronically at the end of the year. Such use of technology may improve the speed at which results are known but will not provide the detailed, frequent feedback that is needed to strengthen the connection between assessments and instruction.

States currently spend only half of one percent of per pupil spending on their assessment systems, yet cost concerns prevent

most states from investing in improvements such as open-ended questions or demonstrations of learning; the release of test answers to help teachers and students understand what was expected; formative or benchmark assessments to give teachers an indication of student progress during the year; and computer adaptive tests to provide educators with detailed information about student learning. Ironically, states are spending five-times more to have tests constructed that are customized to their unique content standards, regardless of test quality or value.⁵

State collaboration is one strategy for overcoming the cost of high-quality assessments. The New England Common Assessment Program (NECAP) is an example of four states — Maine, New Hampshire, Rhode Island, and Vermont — successfully banding together to achieve economies of scale and improved assessment products that are based on a shared set of content and performance standards. Momentum is also growing for a similar effort on a national scale. This is a marked change of direction, and the success of efforts such as NECAP is very encouraging.

Promising research activities are now underway — both within the U.S. and internationally — to develop assessment tools that provide better information about student learning. Projects by Educational Testing Service and the Learning in Informal and Formal Environments (LIFE) Center are designing computer-based assessments that can be more easily integrated into instruction to provide teachers with real-time information about individual student learning. An international project spearheaded by Cisco, Intel, and Microsoft has attracted the attention of organizations that design the Programme for International Student Assessment (PISA) and the Trends in International Mathematics and Science Study (TIMSS). The NRC has conducted several studies on assessment in recent years and is now undertaking a new project commissioned by the Hunt Institute to consider the steps that states could take to establish a new generation of assessments.

Data Systems

States have recognized the importance of data systems and have made great progress on implementing some of the “10 essential elements” identified by the Data Quality Campaign. However, much of the data being warehoused in state data systems is used merely for compliance reporting rather than decisions that improve student learning. Progress is also lagging for key data system components. Forty-eight states now have a statewide student identifier, but only 21 states have a teacher identifier with the ability to match teachers to students. Only 28 states have the ability to match student-level data between P-12 and higher education.⁶

“Given the \$600 billion that the United States spends annually on its public school systems, and the enormous economic stakes riding on improved student achievement, it is remarkably shortsighted to invest so little in insights about educational performance.”

— The Economic Impact of the Achievement Gap in America’s Schools. McKinsey & Company (2009).

Without these data links between students, teachers, and higher education, policymakers cannot answer questions that are crucial to improving a standards-based education system. Which preparation programs produce teachers who foster strongest academic growth in the classroom? What percentage of students deemed “proficient” by the state still need remediation in college?

Six states have implemented all 10 of the Data Quality Campaign indicators: Arkansas, Alabama, Florida, Louisiana, Maryland, and Utah. The Data Quality Campaign has published case studies to describe the processes, cost, and strategies used to attain comprehensive data systems in several of these leading states.

The Data Quality Campaign encourages states to **focus as much on the people as the technology to ensure that data are used to improve student achievement and system performance.** Teachers and principals need training — both in their initial preparation programs and in ongoing professional development — to be equipped to interpret and utilize the data to inform instruction.

As noted in *Smart Options*, states need to make sure the information is accessible, actionable, and useful to policymakers, state and district superintendents, principals, teachers, and parents. It is also critical that individuals who conduct research have access to the data; however, only a handful of states have adopted policies that allow or encourage third-party analyses of statewide, longitudinal student data (Florida, Kansas, North Carolina, Texas, and Arkansas).⁷ Many states deny researchers access to data because they are uncertain about compliance with the Family Educational Rights and Privacy Act (FERPA). Such **policy barriers prevent valuable evaluation and analyses to help educators and policymakers understand what is working in the state’s schools.** The Data Quality Campaign and Holland & Knight LLP have published guidance on how states can address FERPA requirements and privacy concerns.⁸

Since 2005, every state has applied for federal financial assistance to build their data systems through the IES Statewide Longitudinal Data System Grants Program. Forty-one states have

benefited, and ARRA provides an additional \$250 million for this federal grant program to help states address shortcomings in their current data systems, improve the operation of those systems, and provide training to help school and district officials put the data to use.⁹ In addition to the State Fiscal Stabilization Fund, these one-time grants present an opportunity for governors and chief state school officers to ensure that information reaches the individuals who need to make immediate and long-term decisions.

Teacher Training, Professional Development, and Distribution

A System to Support Teacher Effectiveness

Teachers interact with, and are influenced by, the quality of each component of the education system. Policymakers who seek to support teacher effectiveness must also ensure that the system includes:

- Clear goals for student learning
- Curriculum built upon learning goals
- Appropriate, timely system of formative and summative assessments
- Access to longitudinal and real-time data on individual students
- High quality training and professional development
- Instructional leadership from an effective principal
- Supportive learning environment

Research has shown that **teachers are the most influential in-school factor for student achievement.**¹⁰ Any systemic effort to improve education must address teacher quality, including the recruitment of high-caliber candidates into the profession and effective training and professional development. Yet, only 15 states have established minimum admissions requirements for individuals seeking a degree in a teacher preparation program.¹¹ And despite a dramatic shift in expectations for student learning under NCLB, many teachers feel poorly prepared by their training programs;¹² teachers rarely receive useful or timely feedback on their instructional practices;¹³ and many teachers find little value in the professional development they do receive.¹⁴

States and accreditation agencies set requirements for teacher preparation programs in traditional and alternative settings, yet without the ability to link teacher and student data, few states have a mechanism to evaluate teacher effectiveness — let alone the effectiveness of individual teacher training programs or professional

development. Though we can glean some information by studying the practices of other countries, we just don't have sufficient data to identify characteristics of effective training and professional development for our teachers.

Smart Options encourages states to develop fair, accurate, and useful measures of teacher effectiveness. For an evaluation to be useful and fair, it's imperative that the state provide teachers with fewer, clearer, higher, evidence-based content standards; assessments that are aligned to those standards and provide a meaningful measure of student progress; and curricular materials that are developed with teacher input and built around the content standards. **These elements of the system must be in place to accurately evaluate teacher effectiveness, training, and professional development.**

A successful teacher evaluation system will allow researchers and policymakers to analyze whether teacher training and professional development increase student learning. Louisiana is now developing a state accountability system to measure the value-add of teacher preparation programs based on the achievement of students taught by new teachers. Louisiana is the first to implement a statewide model of this kind. State leaders have noted two essential system components to support such an effort: a comprehensive data system that allows information about students, teachers, and higher education to be linked, and a collaborative relationship between K-12 and higher education.¹⁵

Effective teachers need effective principals to create the conditions for learning in the school. **Principals must provide teachers with constructive feedback on instruction, guidance on interpreting and using data, and a professional development system that meets the needs of both individual teachers and the school.** Though the principal's instructional leadership is important for every school, the most critical need for effective school leadership continues to be in our lowest-performing schools.

States set their own criteria for traditional and alternative programs that train principals, and 43 states based their standards for school leadership on the 1996 *Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders*.¹⁶ Yet a study by the Southern Regional Education Board found only episodic changes in principal preparation programs a decade after the original ISLLC standards were published.¹⁷ Additionally, a study by the Education Schools Project found that most educational administration programs pay little attention to the recruitment and selection of individuals who exhibit the potential to be a successful school leader. In fact, most programs admit nearly everyone who applies.¹⁸

Recently revised, the 2008 ISLLC standards now include a new policy focus to help state policymakers strengthen the selection, preparation, licensure, and professional development of school leaders. States, districts, and institutions of higher education must work together to ensure that these standards are translated into real improvement. Policymakers can also consider examples of programs that employ tools to identify the best candidates for school leadership. The National Association of Secondary School Principals has designed an assessment tool to diagnose the behavioral strengths and professional development needs of prospective principals.¹⁹ New Leaders for New Schools, a nonprofit organization that partners with urban school districts to recruit, train, and place new principals, uses a rigorous four-step selection process and accepts only seven percent of applicants.²⁰

Just as a quality evaluation system is needed for teachers, one is also needed for principals. Unfortunately, **many states and districts are not conducting meaningful evaluations of school leaders.** A 2008 study found that among 44 assessments for school leaders, only half provided feedback on how principals could improve teaching and learning in their school.²¹ To help principals improve their practice, several states are now drawing on the

Though data and research are needed to evaluate the effectiveness of individual training and professional development programs, policymakers can look to recent research to learn about the state of the art. The NRC will soon report the conclusion of a comprehensive, Congressionally-mandated study of teacher preparation that will describe the current status of teacher training in traditional and alternative settings. A study recently published by the National Staff Development Council and The School Redesign Network at Stanford University, *Professional Learning in the Learning Profession*, describes the status of professional development in the U.S. and abroad, and characteristics of effective professional development programs.

▶ To access these studies, visit:
<http://www7.nationalacademies.org/teacherprep/index.html>
<http://www.nsd.c.org/stateproflearning.cfm>

Vanderbilt Assessment of Leadership in Education (VAL-ED), a model of education leadership assessment developed by Vanderbilt University with support from the Wallace Foundation.²² Delaware is among the few states that have developed their own system of leadership assessment and is now engaged in statewide implementation of the Delaware Performance Appraisal System.²³

In addition to efforts to evaluate and improve the training and professional development of teachers and school leaders, many policymakers at the federal, state, and local levels are also interested in using non-traditional compensation systems to attract and retain effective teachers in low-performing schools. Though a sustainable funding source would be needed for compensation programs, **states could use one-time ARRA funds to establish the necessary systems for performance pay to be a viable option**, including appropriate measures of student growth, systems of professional evaluation and development, and data systems that link information about students and teachers. The Teacher Advancement Program (TAP) provides a comprehensive model for states and districts. Programs such as Minnesota's Q Comp system have been modeled on TAP principles, which include an accountability system focused on classroom instruction, multiple career paths, a system to support ongoing professional growth, and performance-based compensation.²⁴

A System to Support School Turnaround

In addition to the system elements discussed in this issue, chronically failing schools need extra support to break the cycle of low performance.

Failing Schools Need:

- Clear goals for student learning
- Curriculum built upon learning goals
- Appropriate, timely system of formative and summative assessments
- Access to longitudinal and real-time data on individual students
- Effective teachers and leadership
- Supportive learning environment

In addition to:

- More time for learning
- Additional resources to help students catch up to grade level
- Intensive dropout prevention

Turnaround for Low-Performing Schools

Under NCLB, 6,000 of the nation's 95,000 schools are currently labeled as needing corrective action or restructuring. These schools serve higher percentages of minority, poor, and middle-school students than are served in other Title I schools. Many schools report that student academic performance is being hampered by external factors such as neighborhood violence and student mobility.²⁵

Chronically low-performing schools require dramatic and comprehensive intervention to ensure educational opportunities for their students. Under both the Elementary and Secondary Education Act (ESEA) and ARRA, states must take corrective action to restructure or turnaround failing schools.²⁶ Yet, efforts to help these schools improve have largely failed. A 2008 survey of states conducted by the American Institutes for Research found a common trend across states: once needs assessments are completed and turnaround strategies selected, relatively few states provide support to schools throughout the implementation process.²⁷ In addition, many whole-school reform efforts focus on improving programs and people while neglecting the need to change conditions and incentives. Without intensive, sustained support from school, district, and state leaders, few of the nation's chronically low-performing schools will be able to break the cycle of low performance.

Across the nation, there are notable examples of schools that are helping students overcome significant environmental obstacles to learning and are generating substantial academic achievement against the odds. Through research of such "high-performing, high-poverty" schools, Mass Insight Education & Research Institute has identified factors that led to success in these schools and incorporated the findings into a planning tool for policymakers to consider. The Turnaround Challenge model provides a framework to help states and districts **address operating conditions, build capacity, and establish clusters of schools for support.**²⁸

The National Governors Association recently announced a multi-year initiative with Mass Insight to develop turnaround policies and practices in four states (Colorado, Massachusetts, Maryland, and Mississippi).²⁹ These states will generate examples of the benefits and challenges that come with intensive turnaround efforts. Other state leaders who want to develop and implement a more systemic approach to school turnaround in their own state could find support under \$3 billion in ARRA funding for School Improvement Grants. States have some discretion over how these funds are allocated and spent, offering state leaders an opportunity to ensure that all system components are in place to support dramatic turnaround in low-performing schools.

CONCLUDING THOUGHTS

America's declining educational status in the world has prompted years of concern about our ability to maintain a comfortable standard of living for future generations. And documentation of the stubborn achievement gap within our nation has demonstrated that race, residence, and socioeconomic status remain strong determinants of educational opportunity for American students.

Despite such persistent bad news, we have great reason to believe that we can achieve a world-class education for all students. As noted in a recent study of the achievement gap by McKinsey & Company, "Many teachers and schools across the country are proving that race and poverty are not destiny." The authors conclude that despite powerful factors of inequality outside of schools, student achievement can be "dramatically affected" by a high-quality education.³⁰

ARRA presents states with an unprecedented opportunity to invest in critical education system components, and the outcomes that are achieved with these funds will have implications for the public's willingness to invest in future educational improvements. Strong state leadership is needed to communicate the importance and interrelationship of the key education system elements and to ensure that ARRA investments are used effectively. State leaders can look to neighboring states for ideas and partnerships to build the elements of a stronger education system.

Key Questions to Consider

- What obstacles must be overcome for my state to adopt the Common Core Standards?
- Do teachers in my state have access to curricular materials that are crafted around a clear set of standards?
- Could current testing resources be used to support a more effective system of assessment? How might an assessment based on the Common Core Standards free up resources for this improvement?
- Does my state have all of the elements of a longitudinal data system? Are stakeholders using this data effectively?
- Does my state know whether approved training and professional development programs are improving the effectiveness of teachers and principals?
- How is my state supporting efforts to turn around chronically low-performing schools?

REFERENCES

- ¹ National Research Council. (2008). *Common Standards for K-12 Education?: Considering the Evidence: Summary of a Workshop Series*. Washington, DC: The National Academies Press. http://www.nap.edu/catalog.php?record_id=12462#toc
- ² The Council of Chief State School Officers and The National Governors Association Center for Best Practices. (2009). *Common Core Standards Memorandum of Agreement*. Information about the Common Core Standards Initiative is available at http://www.ccsso.org/federal_programs/13286.cfm
- ³ Education Commission of the States. (2007). *High School-Level Assessments: Include College-Ready Measures*. <http://mb2.ecs.org/reports/Report.aspx?id=1157>
- ⁴ Bill Tucker. (2009). *Beyond the Bubble*. Education Sector. http://www.educationsector.org/usr_doc/Beyond_the_Bubble.pdf
- ⁵ Thomas Toch, (2006). *Margins of Error*. Education Sector. http://www.educationsector.org/usr_doc/Margins_of_Error.pdf
- ⁶ For an overview of the states' status toward the Data Quality Campaign's 10 essential elements: <http://dataqualitycampaign.org/survey/elements>
- ⁷ Fordham Foundation. (2008). *A Byte at the Apple: Rethinking Education Data for the Post-NCLB Era*. Edited by Marci Kanstoroom and Eric C. Osberg. http://www.edexcellence.net/detail/news.cfm?news_id=740=92
- ⁸ Data Quality Campaign. (2007). *Maximizing the Power of Education Data while Ensuring Compliance with Federal Student Privacy Laws: A Guide for State Policymakers*. http://www.dataqualitycampaign.org/files/Publications-FERPA_A_Guide_for_State_Policymakers.PDF
- ⁹ Data Quality Campaign. (2009). *Fiscal Stimulus Plan: Provide Strategic Investment in Realizing the Potential of Longitudinal Data Systems to Improve Student Achievement*. http://dataqualitycampaign.org/files/publications-stimulus_federal_investment_longitudinal_data_systems.pdf

- ¹⁰ For example, Sanders and Rivers used value-added methods to examine the cumulative effects of teacher quality on academic achievement. Sanders, W., & Rivers, J. (1996). *Cumulative and Residual Effects of Teachers on Future Student Academic Achievement*. University of Tennessee Value-Added Research and Assessment Center. <http://www.mccsc.edu/~curriculum/cumulative%20and%20residual%20effects%20of%20teachers.pdf>
- ¹¹ National Governors Association. (2009). *Building a High-Quality Education Workforce: A Governor's Guide to Human Capital Development*. <http://www.nga.org/Files/pdf/0905BUILDINGEDUWORKFORCE.PDF>
- ¹² Arthur Levine. (2006). *Educating School Teachers*. http://www.edschools.org/pdf/Educating_Teachers_Report.pdf
- ¹³ Coalition for Student Achievement. (2009). *Smart Options: Investing the Recovery Funds for Student Success*. <http://www.coalitionforstudentachievement.org/pdf/ARRA-FINAL.pdf>. In addition to the *Smart Options* report, the Coalition will soon publish a supplement that describes concrete actions, examples, and resources for states and districts.
- ¹⁴ Linda Darling-Hammond, et al. (2009). *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad*. National Staff Development Council. <http://www.nsd.council/news/NSDCstudy2009.pdf>
- ¹⁵ George Noell and Jeanne M. Burns. (2007). *Value Added Teacher Preparation Assessment Overview of 2006-07 Study*. Louisiana Teacher Quality Initiative. <http://regents.state.la.us/Academic/TE/2007/Overview%20of%202006-07%20Study.pdf>
- ¹⁶ Council of Chief State School Officers. (2008). *Educational Leadership Policy Standards: ISLLC 2008*. http://www.ccsso.org/content/pdfs/elps_isllc2008.pdf
- ¹⁷ Southern Regional Education Board. (2006). *Schools Can't Wait: Accelerating the Redesign of University Principal Preparation Programs*. http://www.sreb.org/programs/hstwp/publications/special/06V04_Schools_Cant_Wait.pdf
- ¹⁸ Arthur Levine. (2005). *Educating School Leaders*. The Education Schools Project. <http://www.edschools.org/pdf/Final313.pdf>
- ¹⁹ National Association of Secondary School Principals. (2002). *Selecting and Developing the 21st Century School Principal*. http://www.principals.org/s_nassp/bin.asp?CID=40&DID=26775&DOC=FILE.PDF
- ²⁰ Information about the New Leaders for New Schools selection criteria and process is available at <http://www.nlms.org/>.
- ²¹ Ellen Goldring, Andrew Porter, et al. (2008). *The Evaluation of Principals: What and How Do States and Districts Assess Leadership*. Paper presented at the annual meeting of the American Educational Research Association in New York City. http://peabody.vanderbilt.edu/Documents/pdf/LSI/AERA_EvaluationPrincipals.pdf
- ²² Wallace Foundation. (2009). *Assessing the Effectiveness of School Leaders: New Directions and New Processes*. <http://www.wallacefoundation.org/KnowledgeCenter/KnowledgeTopics/CurrentAreasofFocus/EducationLeadership/Documents/Assessing-the-Effectiveness-of-School-Leaders.pdf>
- ²³ Wallace Foundation. (2008). *Improving Leadership for Learning: Stories from the Field*. <http://www.wallacefoundation.org/KnowledgeCenter/KnowledgeTopics/CurrentAreasofFocus/EducationLeadership/Documents/journalistic-accounts-leadership-for-learning.pdf>
- ²⁴ Information about the Teacher Advancement Program is available at <http://www.talentedteachers.org/>. Information about Minnesota's Q Comp program is available at http://education.state.mn.us/MDE/Teacher_Support/QComp/index.html.
- ²⁵ Government Accountability Office. (2007). *No Child Left Behind Act: Education Should Clarify Guidance and Address Potential Compliance Issues for Schools in Corrective Action and Restructuring Status Online*. <http://www.gao.gov/new.items/d071035.pdf>
- ²⁶ ARRA requires states to ensure compliance with the requirements of section 1116(a)(7)(C)(iv) and 1116(a)(8)(B) of the Elementary and Secondary Education Act (ESEA).
- ²⁷ Kerstin Carlson Le Floch, Andrea Boyle, and Susan Bowles Therriault. (2008). *State Systems of Support Under NCLB: Design Components and Quality Considerations*. American Institutes for Research. <http://www.air.org/news/documents/Research%20Brief%20II-State%20Systems%20of%20Support%20091508.pdf>
- ²⁸ Mass Insight Education & Research Institute. (2007). *The Turnaround Challenge*. http://www.massinsight.org/resourcefiles/TheTurnaroundChallenge_2007.pdf
- ²⁹ National Governors Association. (March 2, 2009). *NGA Awards Grants to Improve Low-Performing Schools*. <http://www.nga.org/portal/site/nga/menuitem.6c9a8a9ebc6ae07eee28aca9501010a0/?vgnextoid=0fac4f5e2e5cf110VgnVCM1000005e00100aRCRD&vgnextchannel=6d4c8aaa2ebbf00VgnVCM1000001a01010aRCRD>
- ³⁰ McKinsey & Company. (2009). *The Economic Impact of the Achievement Gap in America's Schools*. <http://www.mckinsey.com/client/service/socialsector/achievementgap.asp>