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Connecting the Many Moving Parts to Achieve College and Career Readiness

The importance of preparing students for postsecondary education as an economic development and job creation strategy is clearer than ever. Employers across the United States need a workforce that can tackle complex and advanced tasks. Business leaders are looking for candidates who possess credentials that certify appropriate knowledge and skills — and in many cases they are not finding individuals who meet their needs. Despite the recent recession and a persistent unemployment rate, there were 3.5 million unfilled job openings nationwide as of January 2013.[1] In high-tech industries, the skills needed by employers are expected to outpace the supply of qualified workers in the coming years.[2]

It is estimated that 63 percent of all jobs nationwide will require training or a credential beyond high school by the year 2018.[3] Bachelor's degrees are not the only credential employers are seeking: nationally, there are 29 million middle-skills jobs available today.[4] Those jobs pay $35,000 a year, on average, and require less than a bachelor's degree, but more than a high school diploma, such as employer-based training, industry-based certifications, apprenticeships, postsecondary certificates, or associate's degrees.

Credentials and Earnings

Possessing a credential beyond high school has very real effects on the earnings of individuals. In 2011, median earnings for a college graduate were approximately $46,960, compared to around $31,184 for an individual with an associate's degree and an estimated $23,936 for a high school graduate.

(Note: 2011 median earnings were estimated using 2011 fourth quarter data. Source: U.S. Census Bureau (2013). "Estimates of Income and Earnings by Selected Demographic Characteristics: 2011 Fourth Quarter.")

Students recognize that postsecondary credentials are vital: nationally, more than 70 percent of high school graduates enroll in some type of postsecondary training within two years of graduation.[5] However, despite their aspirations to earn a postsecondary credential, many students get caught in a costly cycle of remediation. In 2011, states and students spent an estimated $3 billion on remedial education.[6] More than 50 percent of students at two-year colleges, and almost 20 percent of those entering four-year colleges, require remedial courses, dramatically reducing the likelihood they will eventually complete their degree or credential. For many of those students, their journey towards a postsecondary credential ends before it even begins because they are not prepared for the rigors of postsecondary education.

Across the country, states are working to ensure that all students leave high school ready to succeed in college or career training. **Forty-nine states and territories, the District of Columbia, and the U.S. Department of Defense schools have adopted the Common Core State Standards (CCSS) in English language arts and mathematics.** The CCSS are designed to align with college and career readiness by the end of grade 12 and prepare students for success in entry-level college coursework without the need for remediation. Six states, including two that did not adopt the CCSS, have been working with their higher education systems to ensure alignment through the Southern Regional Education Board's *Strengthening Statewide College/Career Readiness Initiative*. Both initiatives present states with an opportunity to share resources and strategies for implementation. States that have adopted the CCSS have begun implementing them to varying degrees, but all are working towards full implementation by the 2014-15 school year. In a similar effort to align science education with college and career readiness, 26 states participated in the development of the Next Generation Science Standards, which were released in early April (see below).

The Next Generation Science Standards

Many existing state science standards were not designed to meet the level of technological and scientific literacy required in today's workforce. Twenty-six states worked together to develop the Next Generation Science Standards to address this need. Each state identified teams, which included policy leaders, higher-education faculty, K-12 teachers, and science and business community members, to work on the development of the standards. The Framework for K-12 Science Education, prepared by the National Research Council, was used as a basis to ensure scientific validity and accuracy. The standards focus on core ideas, cross-cutting concepts, and scientific practices that students should master in preparation for college and careers.

THE ROAD AHEAD

The shift to rigorous standards and assessments demands difficult and systemic change — always a challenge for states. As states progress toward full implementation of rigorous college- and career-ready standards, several key challenges lie ahead. States will need to effectively address the implementation issues below to establish K-12 education systems that are truly aligned with the demands of college and the workplace. In each instance, **strong gubernatorial leadership and consistent communication is key**. Strategies governors may employ include coordinating internal and external communication, meeting with editorial boards, and fostering collaboration among K-12 and higher education to ensure everyone is working towards the same ends.

Implement new, aligned assessments

Aligned assessments are a critical component of implementing any new standards. The CCSS are scheduled to be widely assessed in the 2014-15 school year. Two interstate consortia — the Partnership for Assessment of Readiness for College and Careers (PARCC) and the Smarter Balanced Assessment Consortium (SBAC) — are developing comprehensive, online assessment systems aligned to the CCSS (44 states are participating in one or both of the consortia). The shared assessments will allow for real comparisons of student achievement across states. The move to online testing allows both consortia to develop innovative item types that will provide an assessment of deeper student learning. This includes assessing students on more rigorous academic content; the ability to think critically and solve complex problems, work collaboratively, and communicate effectively; and master how to learn. This type of assessment is more expensive than the types of assessment traditionally used by states, which is why the opportunity to collaborate through the consortia and share development costs is so important. Recent estimates show that state spending on assessments of reading and mathematics averages from $25 to $27 per pupil.[7] Economies of scale are allowing the consortia to offer states a higher level of sophistication for roughly the same cost. However, in order to fully capitalize on this opportunity, **governors can manage the transition from their current state assessment systems to the more rigorous assessments to ensure one is not layered on top of the other and that the new assessments strengthen the ability of teachers to improve student learning.**

As the 2014-15 school year draws nearer, states are confronting several challenges as they gear up for the new assessments. Transitioning from paper-and-pencil tests to a completely digital system will not be an easy lift for many states, and leaders will have to consider their technological capacity. Many forward-thinking states already have invested in educational technology for instructional purposes.

A major decision that states will make through their participation in the consortia is where to set proficiency cut scores. **Governors will need to be vocal in their support for establishing cut scores that provide an accurate measure of whether a student is prepared for the demands of college or a career-training program.** If cut scores are set too low, students will continue to graduate from high school underprepared for college or workforce-training programs. However, if cut scores are set appropriately, states will need to build coalitions to address the drop in test scores in the initial years of the assessments (see page 7).

Prepare for drops in reported performance

When a state raises standards or implements new assessments, student scores are likely to drop as the system realigns to the new expectations. If the public has not been presented with a compelling case for higher standards, a backlash can occur when test results are released. Open, honest communication and clear messaging is key to this aspect of the transition. When **Tennessee** raised its standards with the Tennessee Diploma Project, bipartisan state leaders, led by the governor and a broad coalition of community partners, worked hard to raise public awareness about the need for higher standards for Tennessee students. They also explained that test scores would drop not because performance had fallen, but because the bar had been raised. In 2009-10, the number of students scoring proficient dropped from about 90 percent in both reading and math to 51 percent proficient in reading and less than 35 percent in math. Despite the dramatic drop in scores, the public buy-in that Tennessee had built for its new standards helped state leaders keep the system focused on raising achievement for Tennessee students and avoid political fallout.[8]

Kentucky took the score drop issue head-on and focused communication efforts on the need to raise the bar for all students. When Kentucky received the first round of test scores using the new assessments in the fall of 2012, as expected, proficiency scores dropped by 30 to 40 percentage points across the board. Political leaders suffered little public outcry over the results, however, because the score drop issue had been clearly and consistently explained to stakeholders well ahead of time as part of the state's new college- and career-readiness plan. Kentucky's political leaders were able to illustrate the importance of higher expectations and prepare stakeholders for the possibility for lower scores as a necessary part of the process.

Examples also exist where lack of public understanding resulted in lower expectations for students. **Florida** changed its cut score on the statewide writing assessment, resulting in a 54 percentage point decrease in the students deemed proficient. The public was not adequately prepared for the change, leading to substantial public outcry. As a result, the State Board of Education decided to lower the passing score back to its previous level.[9]

Consider impacts on other reforms

It is important to identify ways the new assessments might affect accountability systems and other reforms. **The real possibility of lower reported student test scores during the transition to new content standards and assessments has implications for various policies, and it is vital that states address them before the tests are administered.[10]** For example, many states are now working to connect student performance to teacher and principal evaluations. Other states are considering new ways to grade schools and districts, such as adopting letter grades. In many cases, both of these policies rely, at least in part, on measures of student growth; however, it will be difficult to compare scores from current assessments to the new assessments, and states need to make plans to manage this transition and communicate those plans to educators and the public. For example, states that use student growth as an accountability measure will have to determine how, or if, they can measure growth from the old assessments to the new assessments, and if not, how they will weight their other measures during the first few years of the new assessments.

Ensure and sustain stakeholder support

States are well underway implementing the standards that they created, and now it is even more crucial for governors to communicate the value and importance of this shift with the public and other state-level stakeholders, especially state legislators. Nationally, roughly half of state legislators have two years of experience or less and therefore were not a part of conversations about CCSS adoption.[11] Some individuals are unaware that states led the development of the CCSS and mistakenly believe it was a federal initiative. **As changes take effect, public resistance could emerge unless a consistent, encouraging message on the need for, and the value of, more rigorous standards is delivered.** It is crucial for all stakeholders to understand why rigorous standards are critical for improved student outcomes.[12]

Secure meaningful involvement of higher education and business communities

Now, more than ever, the communities representing higher education, business, and K-12 must work together to accelerate the momentum towards providing students the education they need to be successful. The higher education and business communities must confirm that the assessments are valid — that is, that students who meet the higher standards are ready to succeed in a first-year course at a two-year or four-year institution, or a career-training program. **As the "consumers" of K-12 education, both communities should be active participants as states identify cut scores and graduation requirements.** Beyond the validity issue, effective collaboration with key stakeholders is invaluable as states continue to make the case for more rigorous standards. Those collaborations contributed to the success of Tennessee and Kentucky navigating the score drop issue. (For more information on building successful coalitions to maximize impact, see page 10.)

Governors can convene key parties in K-12, higher education, and business and create mechanisms that ensure ongoing collaboration. In addition, governors can allocate financial resources to ensure that their education priorities are adequately supported and that resources are allocated efficiently to get the greatest return on a state's educational investments. (For more information on increasing returns on education investments, see page 20.)

Building Coalitions to Accelerate Momentum and Results

Scaling up is a consistent challenge in education reform. Schools, districts, and communities may find success in implementing various models and practices, but policymakers' attempts to broadly apply these lessons rarely translate into successful systemwide reform.[13] Even when a model is successfully replicated in another school or district, the overall effect is still isolated to a few communities. However, early evidence from regional initiatives suggests that **systemic change is possible if non-profits, government, businesses, and the public are brought together around a common agenda to create collective impact.** When policymakers shift from thinking about isolated initiatives to thinking broadly about shared goals among coalitions of stakeholders, they tap into the potential to deepen and broaden the gains from education reform.

Collective Impact:

(noun) long-term commitments by a group of important actors from different sectors to a common agenda for solving a specific social problem

Historically, three obstacles have impeded the success of systemic education reform:

- **The disconnect between K-12 and postsecondary education:** Traditionally, university, community college, and K-12 systems have typically set college readiness expectations independently of one another. That creates confusion and disillusionment for students who succeed in K-12, only to find themselves in need of remediation once they enter postsecondary education.[14] High remediation rates result in wasted taxpayer dollars and low postsecondary completion rates. In addition, there may be a lack of understanding of, or commitment to, the dramatic changes that must take place in educator preparation programs to adequately prepare K-12 teachers and school leaders. As a result, far too many teachers and principals are graduating from programs under-prepared for the challenges they will face in today's schools.

- **The time horizon for education reform:** Governors who see the big picture and have initiated a comprehensive effort to improve student achievement know that this work takes time. Results will not be seen immediately, and the initial outcomes will not always be apparent or positive. For example, when standards are raised, test scores will fall as the system realigns to the the new expectations. (See discussion of reported score drop on page 7.)

- **The siloed nature of state agencies and funding structures:** State agencies tend to operate in silos, often with separate initiatives and funding streams that target the same populations. Although agencies such as state departments of education, higher education, and health and human services may have common objectives, state funding mechanisms and governance structures often provide little incentive for — or even impede — collaboration.

BRIDGING THE DIVIDE

Given these challenges, the prospect of comprehensive change can seem daunting. Yet strong gubernatorial leadership can pave the way for lasting reform. An education governor drives reform by using the bully pulpit and pulling political levers to solidify public support, build coalitions, and set the appropriate policy context.[15] **Governors are uniquely positioned to oversee the entire education pipeline, from early education to postsecondary education and, thus, have the opportunity to ensure their systems prepare all students for success in the workforce.**

Research by John Kania and Mark Kramer indicates that successful examples of collective action typically have five conditions that promote the alignment of systems and lead to powerful results.[16] Although the work has focused more on local and regional initiatives, the elements apply to governor-led efforts as well.

- Successful initiatives establish a common agenda, including a shared understanding of the problem and vision for change. In 2006, a coalition of **Delaware** stakeholders, including the governor, education, business, and civic leaders, established *Vision 2015*, a plan with six specific components designed to provide a world-class education to all students in Delaware. This effort laid the foundation for the state's first-round *Race to the Top* award.[17]

- To know if goals are being met, shared measurement systems are vital for performance management and joint accountability. In **Maryland**, Governor Martin O'Malley's *StateStat* uses 11 measures that span from pre-K through college graduation to ensure that the state is on track to meet a target of increasing student achievement and school, college, and career readiness by 25 percent by the end of 2015.[18] **Utah** Governor Gary Herbert's *Education Excellence Commission* developed metrics to measure his stated goal of having 66 percent of all Utahans hold a postsecondary degree or certificate by 2020.

- Partners must be willing to coordinate their work through mutually reinforcing activities and ensuring consistent, continuous communication to build trust and buy-in. **Arizona**, **Kentucky**, and **Tennessee** have each mastered these elements in their successful college- and career-readiness coalitions. (See case studies on pages 12-13.)

- A separate backbone support organization, with staff and resources to convene and coordinate partners, is imperative to successful and expedient reform.

Governors can bring together their cabinet members and agency heads to develop a common agenda and look for ways to provide the flexibility, unifying metrics, and accountability that engender collaboration. By engaging partners in the business and policy communities, **governors can drive home the importance of college- and career-readiness and find allies in bringing about the needed changes.** Many states already have organizations with a strong presence that are working to improve education; those groups can play a pivotal role in rallying public support and lending credibility to the effort when times get tough. Such organizations can also assist the transition from one administration to the next, ensuring that reforms and goals are sustained.

The following case studies highlight states that have been able to sustain reforms through strong coalitions committed to the same vision and agenda.

Tennessee

The *State Collaborative On Reforming Education* (SCORE) was founded by former U.S. Senate Majority Leader Bill Frist to support and strengthen public education in Tennessee. Its work focuses on research-based policy advocacy, strategic communications, progress monitoring, and sharing best practices. In 2010, Senator Frist and Governor Phil Bredesen launched the *First to the Top Coalition*, a statewide alliance of more than 30 business, community, and education groups to support statewide education reform.[19] As part of its work with the coalition, SCORE launched the *Expect More, Achieve More* campaign to prepare parents and the broader public for the new *Tennessee Diploma Project* standards. (See page 7 for more about how Tennessee handled the initial drop in scores.)

SCORE works to foster sustained leadership in education.[20] In 2010, SCORE worked to ensure that all gubernatorial candidates had a solid understanding of education reform and co-hosted primary and general election gubernatorial debates.[21] Governor Bredesen has, in part, attributed the success of Tennessee's Race to the Top application to a letter signed by all candidates committing to continue the reforms. As the baton was passed from the Bredesen Administration to Governor Bill Haslam's Administration, SCORE's role in the *First to the Top Coalition* helped provide continuity.

SCORE has earned bipartisan respect, making it a credible partner to respond to stakeholder apprehension over aspects of the reform plan. When teachers and principals expressed concern over Tennessee's new teacher evaluation model, Governor Haslam asked SCORE to conduct a statewide listening and feedback process in December 2011.[22] During a period of six months, SCORE held public roundtables, conducted an online questionnaire sent to all teachers and principals, and conducted in-depth interviews with leaders in Tennessee and across the nation. With the information gathered, the organization made recommendations for the State Department of Education and State Board of Education to consider as they work to refine the evaluation system.

Arizona

Expect More Arizona is a statewide movement dedicated to making Arizona education the best in the nation.[23] In January 2012, *Expect More Arizona* launched the Arizona Public Engagement Task Force to direct several important CCSS efforts and to circulate information widely. The Task Force is made up of four statewide foundations, representatives of early childhood and postsecondary education, the state school board association, and two corporations. It is guided by an advisory council that includes additional state partners. To bring a consistent message to people across the state, *Expect More Arizona* united with Governor Jan Brewer's office and the Arizona Department of Education in a communications initiative that shared information about the more rigorous standards. The group is creating tools for different audiences; its website features resources for parents, educators, concerned citizens, media, students, business leaders, and policymakers. Its extensive alliances across the state allow for quick dissemination of information and deep stakeholder engagement, all with the goal of supporting implementation of the Arizona's Common Core Standards.

Arizona is also generating great cooperation through Governor Jan Brewer's *Arizona Ready Education Council* (formerly known as the Governor's P-20 Council). The Council includes leaders of the state's education systems, as well as from business, charter schools, and local schools and districts. The governor and Council are working to meet four key goals in education by 2020:[24]

- Increase the percentage of third graders meeting state reading standards from 73 percent to 94 percent;

- Raise the high school graduation rate from 75 percent to 93 percent;

- Increase the percentage of eighth graders achieving at or above basic on the National Assessment of Educational Progress (NAEP) from 67 percent in math and 68 percent in reading to 85 percent in both areas; and

- Double the number of students receiving baccalaureate degrees to 36,000 per year.

Kentucky

Kentucky's *Prichard Committee for Academic Excellence* has a long history of leading collaboration and public engagement for education reform.[25] The Committee began as a government-appointed group in 1980, designed to improve higher education in Kentucky. Several years later, the Committee re-organized to become a non-profit advocacy organization focused on improving all levels of public education. The Committee currently has more than 100 members from across the state, including businesspeople, educators, parents, and other stakeholders. Most recently, the Committee has partnered with the Kentucky Department of Education, Chamber of Commerce, and the Kentucky School Boards Association as part of its *Ready Kentucky* initiative. The initiative seeks to educate teachers, parents, and other stakeholders about the state's new academic standards and accompanying changes in Kentucky's schools. Kentucky's recent success in managing drops in proficiency scores (see page 8) can be attributed to the Committee's work with the Kentucky Chamber of Commerce and other organizations to disseminate accurate information and timely messaging. In 2012, Governor Steve Beshear partnered with the Committee to establish the *Governor's Commonwealth Institute for Parent Leadership*.[26] The initiative is designed to engage and educate parents to be strong and effective leaders in Kentucky's schools and builds upon the 16-year record of a similar program developed by the Committee.

Developing and Supporting Effective Teachers and Leaders

Articles, research and policy papers, books, and reports invariably begin with a statement that teachers are the most important school-based factor for student success.[27] Unfortunately, despite that acknowledgement, there are simply too few highly skilled teachers in our nation's schools to ensure that all children have access to effective teaching throughout their K-12 experiences. Research shows that poor and lower-performing schools are consistently staffed at higher rates by new, inexperienced, and less-effective teachers than are wealthier and higher-performing schools.[28] **Governors and their education teams can improve educational outcomes in their states by building a pipeline to supply effective teachers for all schools.** If students were *consistently* taught by excellent teachers, most of the achievement gap could be closed in just five years.

But teachers are only part of the solution. Principals are the second most important school-based factor in improving student achievement.[30] Effective school principals are critical to improving student learning, particularly in low-performing schools. In fact, there is no documented instance of a successful school turnaround that did not include strong, effective leadership.[31] Principals effectively improve instruction through their role in setting high expectations for all students and adults in the school; hiring, evaluating, and developing effective teachers; and holding everyone in the building accountable for the success of all students. A growing body of research indicates that the time, energy, and resources allocated to improving teacher effectiveness will fail to reach their full potential if states do not also focus on strengthening principals' expertise.[32]

To put far more students on the path to college and career readiness, states must improve their systems for training, evaluating, supporting, and incentivizing educators. Governors are uniquely situated to lead those efforts. To improve the overall effectiveness of states' teacher and principal workforces, governors can utilize

a number of policy levers along the educator pipeline, including: establishing state standards for effective teaching and school leadership; recruiting and rewarding better talent to become teachers and school principals; using the educator preparation program approval process to raise admission standards, align curriculum to the realities of today's schools, and hold programs accountable for quality; changing certification to require demonstration of the ability to teach or lead; aligning professional development to address weaknesses identified through the evaluation process; and improving working conditions for educators.

Although nearly all states are pulling these levers to some degree, few states can tackle the entire pipeline at one time to produce the quality and quantity of teachers and principals needed to staff all schools statewide. Therefore, governors can enhance and expand the impact of their efforts by focusing on three of the key policy levers:

1. Strengthening preparation program approval;

2. Refining educator certification to focus on demonstrated competency to apply knowledge and skills; and

3. Enhancing state teacher and principal evaluation systems and their link to targeted professional development.

STRENGTHEN THE QUALITY OF EDUCATOR PREPARATION PROGRAMS

Far too many new teachers and principals are not prepared well enough to teach and lead on day one, and educators currently on the job don't have consistent access to high-quality professional development. **Researchers and national policy experts generally agree that educator preparation programs need dramatic improvement** — admission standards are too low, as is the quality of curriculum and internships. State requirements for the approval of educator preparation programs vary drastically. Fewer than half of the nation's preparation programs are currently nationally or state accredited.[33] Through their executive agencies, governors oversee program approval — a powerful policy lever to improve educator preparation. In 39 states, the governor appoints the officials or board members who establish and enforce approval regulations that can influence programs in the following ways:[34]

- **Admissions Standards:** Currently, most teachers come from the bottom two-thirds of college classes, with nearly half coming from the bottom third as measured by a combination of GPA and SAT and ACT scores.[35] Governors can emphasize the importance of encouraging the best and brightest students to become educators. For example, **Mississippi** Governor Phil Bryant recently signed into law S.B. 2188, which increases standards for entry into Mississippi teacher education programs — students must have a 2.75 GPA on pre-major coursework and either score a 21 on the ACT or pass the Praxis Core Academic Skills for Educators assessment.[36] In addition, **Connecticut's** State Board of Education recently approved a series of new criteria aimed at strengthening teacher preparation, including a proposed increase in the minimum GPA required for entrance to a program. In a recent report, the American Federation of

Teachers — one of the country's national teacher unions — also called for raising the bar for entrance into teacher education programs and higher standards for new teachers.[38] States could require universities to set a higher bar for entrance into principal preparation programs as well to discourage applicants who do not intend to become principals.[39] Too often, candidates enter those programs only to advance their salary levels and do not continue their career paths to become principals.

- **Curriculum requirements:** Teachers must have the knowledge and skills to effectively deliver rigorous content, and principals must know how to serve as instructional leaders. States can use program approval authority to ensure educator preparation program curriculum is aligned with the new, more rigorous standards and assessments. The College of Education at Lipscomb University in **Tennessee** has launched the *Ayers Institute for Teacher Learning and Innovation*, which focuses on improving teachers' practice by working with an advisory council comprised of deans of education and arts and sciences, as well as cross-disciplinary faculty. The council is collaborating to develop training for faculty, curricular resources, online content modeling best teaching practices around college- and career-ready standards, and assessments for teacher preparation programs.[40] In **Illinois**, a recently passed law requires principal preparation programs to meet new standards and curriculum requirements focused on instruction and student learning.[41]

- **Program monitoring and accountability:** Governors can also improve educator preparation by using appropriate data to monitor the effectiveness of program graduates and holding programs accountable for the performance of the graduates they produce. To do this, states are linking the performance of teachers and principals with their preparation programs. **Louisiana**, **New Jersey**, **North Carolina**, and **Tennessee** all use value-added analyses of student outcomes to identify strengths and weaknesses in teacher preparation programs.[42] **Louisiana** goes a step further and uses the data for program accountability — preparation programs that are minimally effective are given time to improve; however, those that fail to do so within a defined timeframe can lose accreditation.

REFINE CERTIFICATION TO FOCUS ON A DEMONSTRATION OF THE ABILITY TO TEACH OR LEAD

States should consider changing from the traditional test of knowledge approach to certification to one that places greater emphasis on the demonstration of expertise and competency — evidence of the ability to teach or lead. For example, 23 states are using *edTPA*, a teacher performance assessment, to evaluate aspiring teachers.[44] The assessment — aligned to the Common Core State Standards (CCSS) and the Interstate Teacher Assessment and Support Consortium (InTASC) standards — requires teacher candidates to demonstrate the knowledge and skills essential for improving student learning. Both certification and recertification can also be used as a tool to ensure educators have the ability to help their students meet the new college- and career-ready standards. In 2010, **Indiana** developed new teacher standards aligned to the CCSS and created certification exams tied to those standards.[45] States are also

enacting changes to principal certification that require school leaders to prioritize instructional leadership and show evidence of skills to improve the quality of teaching in their schools. For example, **New York** is in the process of developing new assessments that measure performance, rather than just an individual's knowledge, for initial and professional certification of principals. The principal certification assessment will include a performance assessment portfolio and a multiple-part written assessment. In order to receive professional certification, applicants will be required to demonstrate a positive effect on improving teaching and student learning.[46]

ENHANCE EDUCATOR EVALUATIONS AND IMPROVE PROFESSIONAL DEVELOPMENT

States across the country have allocated enormous resources to reform the way teachers and principals are evaluated, supported, and, in some instances, provided incentives to improve performance. For example, Race to the Top states, with **Delaware**, **Rhode Island**, and **Tennessee** leading the way, have made the redesign of teacher evaluation systems a hallmark of their reform efforts. Although many states are placing significant focus on teacher reforms, they are slower to turn their attention and resources to evaluating and supporting principals. The success of teacher evaluation processes depends on principals' expertise to evaluate and develop teachers. Just like teachers, principals must be fairly evaluated, supported, and developed, especially in the lowest-performing schools.

Governors can increase the likelihood that teacher and principal evaluation systems improve the quality of student learning statewide through four specific policy levers:

Multiple Measures

Governors should require annual teacher and principal evaluations based on teacher performance standards that are assessed using multiple measures.[47] The Bill & Melinda Gates Foundation's *Measures of Effective Teaching Project* (MET) examined whether effective teaching can be measured and, if so, how best to do it. The key finding from a study sponsored by the project was that evaluations using a combination of student surveys, student achievement gains, and teacher observations were better predictors of teacher effectiveness than any one measure alone and more predictive than teachers' years of experience and level of education.[48]

Principal evaluation should also include multiple measures. The process can involve measurement of the quality of principals' leadership practices and their direct impact on school conditions, school culture, instructional quality, and student achievement.[49] **New Jersey's** principal evaluation system, slated for statewide roll out in 2013-2014, includes measures such as student growth, administrator goals, principal practice, and evaluation leadership, which measures how well the principal implements the state's new teacher evaluation system.[50]

Evaluator Training

No matter how well-designed, the success of any evaluation tool depends upon the knowledge and training of the evaluators. Effective evaluator training is essential to maintain the integrity of new evaluation systems. Examples in **Michigan** and **Tennessee** demonstrate the importance of high-quality evaluator training by revealing a disconnect between teachers' observation ratings and the performance of their students on assessments.[51] The majority of evaluators are principals, and although most can identify their best and worst teachers, they struggle with differentiating teacher performance for the approximately 60 percent of teachers whose effectiveness is average or near average.[52] To conduct evaluator training, Tennessee hired the National Institute for Excellence in Teaching (NIET) to lead a four-day training for all teacher evaluators. Trainees were required to pass an inter-rater reliability exam at the end of the training. The state will use its regional system to train evaluators to ensure high-quality and consistent implementation of their evaluation system.

Linking Evaluation Results and Support

Without a feedback loop tied to professional development, evaluation systems may lose credibility and value among teachers and principals. Governors should invest in the infrastructure to collect, link, and analyze professional development over time. Funding could be tied to professional learning that is shown to improve student performance and reallocated toward ongoing, high-quality training for educators to correct shortcomings identified through their evaluations. Without attention to using the evaluation to improve a teacher's or principal's effectiveness, public education will continue to waste millions of dollars on low-quality professional development. In addition, the resulting evaluation systems will mainly identify the weakest teachers that need to leave teaching, but fail to identify the strengths and weaknesses of the majority of teachers and principals who will stay in teaching and need to improve their practice.

Extending the Reach and Impact of the Most Effective Teachers and Principals

Once a high-quality evaluation system is capable of identifying effective educators, that information can be used to recruit, retain, and extend the reach of the most effective teachers and principals to more schools and students, especially those that need them the most. Current recruitment, placement, incentive, and retention policies and strategies do not take full advantage of possibilities for highly effective teachers and principals to advance in their careers and work with as many students as possible. Current technology provides new configurations for teaching and learning and can be used as a "force multiplier" to expand the reach of the most talented teachers.

Governors can consider state policy changes that provide the most effective educators with opportunities to fill a variety of teaching and leadership roles and greater flexibility to advance in their careers and earn higher pay without entirely leaving the classroom.[53] In addition, governors can explore extending the reach of highly effective teachers through the use of technology, incentives for taking on larger class

sizes, and new roles to mentor inexperienced or struggling teachers. The 2013 education reform package set forth by **Iowa** Governor Terry Branstad was passed by the legislature in May 2013 and includes a Teacher Leadership and Compensation System designed to raise starting teacher salaries, enhance career opportunities with differentiated pay and responsibilities, and provide incentives for teachers to work in high-need schools.[54] The governor is set to sign the bill in early June.

THE GOVERNOR'S ROLE

Teachers and principals are the most important resource in public education. Success is largely dependent on the interactions between students and teachers, and teachers and principals. A lack of a sufficient number of highly effective teachers and principals in every school creates barriers to success for a large percentage of students across the country. For far too long, teachers were viewed as interchangeable, and principals were viewed as the building manager or disciplinarian. Governors can help change that view and accelerate the pace and scale of improving talent in public education. Using key state policy levers, governors can affect the talent that enters the educator pipeline and the quality of training they receive at the beginning of, and throughout, their careers. Governors can also better balance the attention and resources being paid to improving the quality of teachers and principals throughout their states, especially in the lowest-performing schools. Bringing about these changes will take strong leadership from governors as they challenge many of the fundamental structures of public education. But that is what it will take for today's students to be well-prepared for success in postsecondary education and the workforce.

Reallocating Resources to Improve Achievement and Attainment

While economic conditions continue to improve, many states are struggling to get back to pre-recession spending levels in public education. As states scrutinize the expenditure of each new dollar to achieve the greatest return on investment, governors are also considering how best to reallocate existing resources to improve the educational achievement and attainment of their states' students.

State education budgets increasingly face pressure from other areas of state government, especially Medicaid and pensions. In fiscal year 2012, state Medicaid expenditures increased more than 16 percent nationally, while K-12 spending increased by only 3 percent and higher education spending fell by 2.7 percent.[55] The competition for resources between education and other areas of state government is happening at a time of ever increasing expectations in K-12 and higher education. Forty-nine states and territories and the District of Columbia have begun to implement the Common Core State Standards (CCSS), a common set of high expectations for students in mathematics and English language arts/literacy developed by states. Students who are proficient on those standards will be well-prepared to enter college or a career-training program without the need for remedial education. While many states and districts will need to increase expenditures to help all students meet the higher standards, better utilizing existing resources is a crucial first step. Simply increasing budgets without rethinking the use of current resources is not a fiscally sound practice and is unlikely to produce the desired effect on student learning.

On the postsecondary side, despite spending twice as much as the average industrialized country on higher education, the United States continues to slide in the percentage of young adults with an associate's degree or higher. In only 20 years, the United States has fallen from the top of the pack to 16th among developed nations in postsecondary attainment among 25-34 year olds, placing great strain on the economic competitiveness of businesses operating across the country and the future well-being of United States workers.[56] Despite recent reductions in state aid to higher education in the majority of states, state funding continues to be the largest unrestricted source of funding for public higher education. Accordingly, governors and other state policymakers continue to have significant leverage over the priorities, effectiveness, and efficiency of their public higher education systems.

OPPORTUNITIES FOR RESOURCE REALLOCATION

State efforts to align policies and finances will set the stage for innovation and successful implementation of reforms across K-12 and postsecondary education. By leading strategic reallocation, governors have the opportunity to spur dramatic increases in educational achievement and attainment for all students even in tough economic times.

Re-examine Pension Structures

Nationally, under-funded state retirement commitments for pensions, healthcare, and other benefits to public employees are nearly $1.4 trillion. In addition, the incentives that the typical current state pension structure creates in regards to an educator's decisions to enter, remain, and exit from the teaching profession have an important influence on the make-up of the education workforce. Most states limit portability and require long periods in the system prior to full vesting. This often forces new teachers to make a decision early in their careers to leave the profession quickly or stay a lifetime, regardless of their effectiveness. Therefore, not only do state leaders need to address the shortfalls, but they should also consider changing the incentives that are built into the current system. Since teachers comprise the largest employee category covered by state pension plans, any changes can have a significant long-term impact on a state's finances and its educator workforce.

Solutions to pension reforms will vary considerably from state-to-state and are beyond the scope of this brief. But it is clear that governors will need to provide leadership on this issue to manage the near- and long-term financial impacts of state pension funds and create the right incentives for the most effective teachers to stay in public education.

K-12

Re-examine Educator Compensation

Research has shown that teachers and school leaders are the two most important school-based factors in improving student achievement.[57] Their salaries and benefits account for approximately 80 percent of education budgets. Teachers' salaries are generally structured with automatic increases for additional years of experience in the classroom and degrees or course work (also known as a "step and lane" structure). However, research indicates that advanced degrees for teachers, by and large, do not translate into higher student achievement (one notable exception: master's degrees in math have been linked to improved student achievement in that subject).[58] Yet, states spend billions of dollars compensating teachers for both longevity and educational attainment. For example, from 2008 to 2012, the national outlay for master's degree salary increases grew by 72 percent to $14.8 billion.[59]

States beginning to implement policies that better link teacher effectiveness and compensation must be careful to ensure that the measures of effectiveness are directly connected to improvements in student learning. For example, **New Mexico** currently employs a three-tier certification structure for teachers. Each teacher certification level is linked to an increased base salary, and teachers are expected to demonstrate effectiveness and growth to advance to the next level of

certification. Since 2009, New Mexico has allocated nearly $60 million to mandatory salary increases. However, the Legislative Finance Committee found that higher licensure levels were not correlated with increased student achievement.[60] As a result, the state is reworking its certification system to place greater emphasis on teacher evaluations that account for student growth. With the changes, the state hopes to redirect millions of dollars while improving student achievement.

Increase Flexible Use of People, Time, and Resources

Flexibility in how districts and schools allocate people, time, and money does not necessarily lead to improved student achievement or more efficient use of resources. It can, however, with guidance from the state, create conditions that enable innovation to occur. Governors and state policymakers can examine existing regulations and policies that may inadvertently prevent districts from putting resources to their most beneficial use.

For example, research indicates that investments that reduce class size are only effective in elementary schools where class sizes were reduced to fewer than 16 students.[61] Yet many states rely on costly across-the-board policies that apply to all grades and students. By requiring schools and districts to spend funds in that way, those policies can divert available funds from other innovative efforts, for example, increasing the use of technology and extending the reach of their most effective educators through redesigned roles. (For more information on policies to support excellent teachers and school leaders, see page 14.)

Shifting Funding Priorities Across the Education Pipeline

Governors can also reallocate resources across the education pipeline to support improved long-term outcomes. Investments in pre-K, particularly early literacy and numeracy, help create a strong foundation for students to build upon and have proven high returns on investment. Recognizing that, governors in a number of states, including **Alabama**, **Massachusetts**, **Michigan**, **Minnesota**, and **New Mexico**, have proposed significant increases in early childhood funding in their fiscal year 2014 budgets. As governors consider resource reallocation, it is important to consider the education pipeline in its entirety.

State policies that focus on seat time rather than student mastery can also lead to inefficient use of time and resources in schools. Seat time requirements were designed to ensure that students were present for a set amount of classroom instruction, but they limit students' ability to learn at their own pace or in a setting that is most conducive to their individual needs.[62] For example, certain digital learning opportunities permit students to move at their own pace, progressing from one course to the next when they demonstrate mastery, rather than at the end of a semester or school year regardless of how much they learned. States such as **Alabama**, **Missouri**, **New Hampshire**, and **Oregon** have eliminated seat-time requirements that impede online providers' ability to offer mastery-based courses.[63]

As states provide additional flexibility to students and schools, they must ensure that the instruction is high-quality and provided in a safe environment. In **Louisiana's** *Course Choice* program, students take courses from a variety of providers including schools in other districts, institutions of higher education, online learning organizations, non-profits, and businesses. Providers must go through a state approval process before offering their courses for registration. Students are required to take at least one course in their district, and the district retains at least 25 percent of the funding for each student. Any cost savings as a result of students taking a course through the program are shared equally between the state and the district.[64]

Make Financial/Resource Data More Transparent and Accessible

Increasing the transparency of public spending is an effective way to engender public trust. Transparency of financial data is a check against the improper uses of funds, which can arise with greater spending flexibility. It can also identify areas where greater efficiencies could be achieved. States can push districts to report on an expanded set of financial data that enable local educators to identify opportunities and efficiencies while providing a higher quality education.

States also have opportunities to increase efficiency and effectiveness by helping districts benchmark their costs and assisting them with consolidating the purchase of central office services, such as transportation, food services, and human resources. Currently, more than 60 large urban districts participate in a process to measure performance on a broad range of operational functions through the Council of Great City Schools. Those efforts have helped districts identify opportunities for millions of dollars of savings, and the process could be replicated at the state level.[65] For example, in 2012, **Kentucky** began collecting data statewide to benchmark district performance in the following areas: transportation; purchasing; building maintenance; insurance/risk management; and human resources. Additionally, the state created a website where districts can share how they are improving efficiency.[66] Similarly, **New York** recently offered grants to districts to demonstrate savings through management efficiencies.[67]

The New Rules of Performance Funding in Higher Education

1. Goals are essential.

2. All funding is performance-based.

3. Don't get too narrow on metrics.

4. Honor and reinforce mission.

5. Reward serving the underserved.

6. Limit the outcomes to be rewarded.

7. Use clear metrics that are harder to game.

8. Reward continuous improvement.

9. Make the performance pool worth the time and effort.

10. Make sure all the pieces line up with state goals.

Postsecondary

Use Funding and Regulation to Increase Attainment of Degrees and Certificates

Traditionally, states have funded higher education chiefly on the basis of inputs, such as number of students enrolled and prior years' spending. That approach has not led to increases in the number of completed certificates and degrees. In response, governors increasingly are tying state support to an institution's performance — specifically, the progress and outcomes of its students. Learning from previous attempts to tie funding to performance, **Tennessee** set the stage for the new rules of performance funding in higher education (see box). The state's formula is now entirely based on metrics that align with the goal of increased completion. The metrics are differentiated by institution type and all institutions are encouraged to serve traditionally underserved populations. **Nevada** Governor Brian Sandoval's fiscal year 2014 budget proposal includes a new performance funding model for higher education that incorporates new performance funding rules as well.[68]

Governors also set the tone for how to balance efficiency and attainment expectations against requests from colleges and universities for more autonomy. Rather than providing "revenue-based" autonomy that bases the degree of deregulation on the state's financial stake, governors have begun to focus on "performance-based" autonomy that bases the degree of deregulation on an institution or system's contribution to state goals. In **Virginia**, colleges and universities were required to accept a statewide transfer agreement and accountability metrics in exchange for increased autonomy to set their own tuition.[69]

Develop New, Efficient Models for Delivery

Governors can promote policies that enable more efficient models of higher education delivery. Those models include partnering with competency-based institutions, awarding credit based on prior learning, and using technology to redesign introductory and remedial coursework.

Governors in **Indiana**, **Missouri**, **Tennessee**, and **Washington** have led the charge to offer more degree options for students without significant increases in state investment. Rather than shouldering the cost of building their own online institutions, those states have partnered with an existing provider, Western Governors University (WGU), a fully accredited, web-based, non-profit institution that uses an innovative "competency-based" model to help students earn degrees. At WGU, students proceed at their own pace and graduate when they master their subjects. In creating the partnership, governors have directed state authorities to make state financial aid available to WGU students, ensure transfer of credit between WGU and their state universities, and help dislocated workers access online courses and earn degrees. **Wisconsin** Governor Scott Walker recently helped establish the University of Wisconsin "flexible degree," which offers students smaller course segments or "modules" and bases completion on the demonstration of competency.[70] By connecting with an established online institution, those states are reducing the need for capital investments and increasing options for students to obtain credentials and degrees. With the rapid emergence of new online course providers (e.g. Coursera, edX, Udacity), governors should pay attention to the potential value that the emerging market might provide in terms of quality programs and cost savings for students and states.

States also have a critical role to play with respect to prior learning assessments (PLA) on issues such as credit approval, assessments, and transparency. PLA can help workers, returning veterans, and others complete training and degree programs sooner by giving them college credit for knowledge and competencies they have gained outside of the classroom.[71] Students who enter higher education with PLA credits are more than twice as likely to persist and graduate as students without PLA credits, resulting in savings for students and the state.[72] **Colorado** law requires institutions to define and make public their process for determining academic credit for prior learning.[73] **Alabama** defines which assessments are accepted and provides details on how portfolio assessment is to be administered, including who should be assessing the portfolios, the circumstances in which the portfolio assessment process is appropriate, and training of staff.[74]

Additional resource savings can be found in the redesign of remedial and introductory college courses. The *National Center for Academic Transformation* (NCAT) is working with a number of state institutions to demonstrate how technology can be used to produce better results and lower costs. NCAT works with institutions to turn introductory lecture courses into "hybrid" courses that combine sophisticated learning technology with live, in-person, one-on-one instruction and support. That approach has dramatically improved learning results and pass-rates in freshman math and science courses, as well as remedial courses. Although course redesign may require an initial investment from the state for technology upgrades, the long-term efficiency gains can be substantial as redesigns to date have reduced per student labor costs by more than 50 percent in certain institutions.[75]

THE GOVERNOR'S ROLE

Existing budget pressures can be used as an opportunity to revisit state spending and adopt creative solutions for reallocating existing resources and allocating new dollars when they become available to support increased achievement and attainment. Governors are in a unique position to spearhead change by setting budget priorities, adjusting resource levels, changing incentives, and making policy changes necessary to facilitate educational improvement in their states. Specifically, governors can:

- **Align Resource Strategies to Broader Reform.** State resource decisions need to be a key component of the state's broader education reform strategies and decisions. For instance, if the state seeks to implement performance funding at the postsecondary level, the incentives should be aligned to the state's overall higher education goals.

- **Use Policy to Set the Appropriate Context.** Many resource decisions occur at the local school, district, or institution levels, but the state has a crucial context-setting role to play in providing autonomy, establishing goals and accountability, and building the knowledge and capacity of education leaders to make informed resource decisions at the local level.

- **Set an Agenda that Focuses on Critical Resource Areas.** The critical areas where state decisions can significantly influence resources in the system are: the finance system, educator roles, compensation and benefits (both healthcare and pensions costs), and efforts to facilitate, highlight, and fund efficiency improvements, including new delivery models.

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