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M y colleague Robert Hull has long urged state boards of education to step back so they can get a good view of the whole system: not just the graduation requirements, school accreditation, teacher and leader preparation and development, or accountability systems in isolation but the connections among all areas of education policy in their orbit around student learning standards. These standards have gravity determined by the weight that states assign them in their decision making. This issue is about aligning the planets.

Robert and Don Long put standards-based reform in historical context, arguing that the Every Student Succeeds Act in many respects returns education governance and reform to its roots. Morgan Polikoff offers up five attributes that state policymakers ought to be looking for as they mull changes to their accountability systems—or any other policies, for that matter.

A number of articles in this issue trace the efforts of state boards, state education agencies, and districts to align aspects of their education systems with learning standards.

John Smithson shows us the research and tools that enable North Carolina and Michigan to determine how tightly classroom instruction in their schools lines up with learning standards and state assessments. Such work is not for the faint-hearted, he warns, but then adds: “States willing to undergo the rigors of such an evaluation will have demonstrated a commitment to assessing the accountability of the system itself, and not just a part of it.”

Virginia state board member Diane Atkinson describes the board’s ongoing collaborative efforts to create a Profile of a Graduate, which the board believes can change the high school experience for Virginia students in ways that prepare them better for life and work.

Confronted with the achievement gap challenges faced by many urban districts, Prince George’s County Public Schools in Maryland focused on stoking the pipeline of school leaders, while ensuring that standards for what leaders are expected to know and do dovetail with student expectations, as well as state and national leadership standards. Douglas Anthony and Pamela Shetley write of their work to marshal a network of universities, the state education agency, district leaders, the Wallace Foundation, and other stakeholders to help make this happen.

Two articles deal with the role of teacher professional development in helping students meet high standards. Jennifer Russell and her colleagues lay out a Tennessee initiative for training and deploying coaches statewide to scale up improvements in teaching math. Their framework revolves around a shared understanding of key coaching practices and evidence-based feedback.

In the anchor leg of this issue, Learning Forward’s Stephanie Hirsh urges state boards to step boldly into five roles in equipping teachers to help students meet high standards. Boards must first set the tone, vision, and policy that encourage schools to develop learning systems and a professional learning culture that will truly transform teacher learning. “These words do not describe better workshops or programs,” Hirsh writes. “They describe the type of support that all educators need to improve their practice daily and deliver better outcomes for students.”
The transition to the 115th Congress and Trump administration has proved as tumultuous as many political observers expected, and education policy has been no exception. Education leaders on Capitol Hill have clashed over implementation of the Every Student Succeeds Act (ESSA), proposed changes to Medicaid that could affect district services for low-income and disabled students, and the president’s fiscal year 2018 budget request.

In an abridged version of the budget request published in March, the president asked for a $9 billion decrease (13 percent) in the U.S. Department of Education’s budget but did not detail how all programs would be affected; a full budget is expected to be released as this issue goes to print. Appropriations measures are subject to filibuster in the Senate, and therefore the president would need 60 votes to secure passage, making steep cuts difficult. Nonetheless, the proposed budget telegraphs administration priorities:

- zeroed out funding for ESSA Title II, which supports teacher and leader preparation, and 21st Century Community Learning Centers, which funds summer school and after-school programs;
- increased School Choice Initiatives by $1.4 billion, including $168 million for the Charter Schools Program, $250 million for a new private school choice program, and $1 billion more for Title I with the goal of encouraging school districts to adopt open enrollment models and funding portability systems;
- kept level funding for Individuals with Disabilities Education Act programs;
- decreased funding for two college awareness and outreach programs for disadvantaged youth, GEAR UP and TRIO, by $104 million and $92 million, respectively; and
- proposed eliminating 20 other categorical programs. The document does not specify the full list of target programs but does reference Striving Readers, Teacher Quality Partnership, Impact Aid Support Payments for Federal Property, and international education programs.

The fiscal 2018 budget is unlikely to move through the process until at least the end of the year, but the appropriations committees will be busy working on it. Meanwhile, appropriations leaders have been trying to finish up on fiscal 2017. Congress was expected to pass a long-term continuing resolution in late April to keep government going until the next fiscal year, but it may make a last-ditch effort to pass an omnibus spending bill instead.

Senator Lamar Alexander and Congresswoman Virginia Foxx plan to focus on reauthorizing the Higher Education Act (HEA) and the Perkins Career and Technical Education Act. HEA reauthorization may create opportunities for state leaders to influence the work of educator preparation and induction programs, including ensuring new teachers arrive in the classroom better prepared. Congress’s work on HEA will likely also spark a conversation about improving connectivity between systems at secondary and postsecondary institutions so that educators have access to the data required to better serve their students. Perkins has been an important source of funding for career and technical education (CTE).

Given the Trump administration’s focus on American manufacturing and equipping workers to be more globally competitive, the CTE reauthorization could assume increased importance. NASBE plans to look for opportunities to collaborate with other CTE leaders to ensure the bill addresses state and district needs, including growing dual and concurrent enrollment programs.

Commissioner Ajit Pai, currently serving as chair of the Federal Communications Commission as he awaits the Senate to confirm him, has said he favors changes to the operation of the E-rate program. He also recently withdrew the federal authority of nine communications companies to provide broadband services through the Lifeline program. He stated that they need state and not federal approval to participate in the program, which helps ensure students have access to home broadband. Observers are also closely watching the new administration’s plans for two open FCC seats.

Figure 1. ESSA on State Board Agendas by Month, January 2016–January 2017

Source: NASBE, State Board Insight database
State board members are busy people who come to the table with diverse experience: Some are educators, and some are doctors, lawyers, businesspeople, activists, and stay-at-home parents. Only a handful of state boards of education have staffs large enough to help members stay on top of important issues or identify research on what works. Unsurprisingly, one of the things NASBE staff hears most is that members value connecting with one another to learn what their states have in common.

NASBE tries to be the connective tissue for its members. We are their policy shop. Our webinars inform members about education research or policy developments. Our publications highlight best practices. Our conferences help members connect and share experiences. And now NASBE has an interactive platform, State Board Insight, to take this knowledge sharing to a new level.

State Board Insight tracks and supports state policy leadership and innovation. Drawn from publicly reported state board meeting minutes and agendas, the database covers all state board information and action items related to the Every Student Succeeds Act (ESSA). Trend analyses by NASBE staff highlight compelling state stories and the critical role state boards play. Most important, however, is its potential to help state board members, researchers, journalists, educators, and community members uncover key insights.

For example, a state board member might decide to replicate Hawaii’s practice of highlighting an innovative school program or teaching strategy each month in its “Bright Spots” report. Or a state board that is struggling to connect with stakeholders might draw inspiration from the DC board’s use of interactive panels and discussions to engage stakeholders at its meetings. State Board Insight can make light work out of the task of identifying examples of different approaches.

As NASBE’s communications director, I get calls from reporters looking for data or trends in state education. Such inquiries may go something like this: “I’m working on a story about how states are supporting professional development to advance ESSA implementation. Are any state boards discussing this?” A quick search reveals that 17 states discussed teacher professional learning and practice under ESSA in 2016, and Alaska and Arkansas acted to better align teacher policies with ESSA requirements. A closer look at the data also shows that some states are engaging stakeholders on this issue, a potential lead for a reporter looking for that angle.

State Board Insight also helps NASBE respond more nimbly to state board needs. ESSA is a critical issue for state boards. Three in four respondents to NASBE’s member survey in the fall of 2016 listed ESSA as a top priority. But where are they bumping their heads?

Previously, NASBE developed resources based on what we thought members needed. Now we can concretely identify what issues are top of mind and align resources accordingly. We can facilitate connections and collaboration between states working on similar issues. Or we can suss out things no one is discussing but that we believe they may want to take up. The ability to offer such targeted support is a chief goal of NASBE, and it will be more important than ever as states navigate ESSA implementation.

We, the Media

Renée Rybak Lang
Communications Director
Social media sites like Facebook, Twitter, Instagram, Google+, Flckr, LinkedIn, and the like can provide valuable tools for conversation and communication between state boards of education and their constituents. In particular, social media offers these benefits:

- instant communication with constituents at little to no cost and at lightning speed;
- an easy way to share board priorities with the public;
- more visibility for the board and the ability to keep the public informed about work they are doing for students; and
- the opportunity for board members to have conversations with constituents they might not have had otherwise.

Because social media is a powerful force, state board members need to be cognizant of how effectively they use it and avoid common pitfalls:

- Once it is posted, a social media message is forever available; even deleted posts can be retrieved.
- Not everything on social media is accurate or truthful.
- Board members cannot control the responses they receive to their posts.
- Remember, “you have the right to remain silent; anything you say can be used against you in a court of law”—or, for that matter, in any other proceeding—to discredit you.
- Your comments can affect your role as a board member.

More than one official has become an unflattering example of social media use gone bad. On February 6, 2017, parents and other members of the community called for the resignation of Joseph J. Barragan, an Alvord Unified School District board officer, based on posts he made to a personal social media page. The now-deleted posts include support for “a wall like the one in Israel to keep Muslims out” and comments about sterilization of prisoners. The California school district “officially condemns the inflammatory and offensive individual personal comments” yet also recognized Barragan’s right to free speech as a private citizen. The district stressed he does not speak for it on these issues. Barragan has since denied writing the posts and says his account was hacked. He has declined to resign.

In Pickering v. Board of Education, 391 U.S. 563 (1968), the U.S. Supreme Court held that a teacher may not be compelled to shed the First Amendment right they would otherwise enjoy as a citizen to comment on matters of public interest in connection with the operation of their school. The court sought to balance the interests of the teacher as a citizen to comment publicly and the interest of the state as an employer in efficiency of services performed.

Likewise, state board members do not shed their First Amendment right. They may still speak as private citizens on matters of public concern if they identify that they are doing so in a private capacity and not as a board member. However, this private speech may disrupt or derail the work of the board.

Thus one must tread lightly. There are five things state board members should keep in mind as they use social media:

1) Stop and think before you post.
2) Choose your words carefully.
3) Keep it neat and keep it clean.
4) Stick to posts about board priorities and do not get pulled into politics.
5) Keep it positive. Remember the Thumper rule (Bambi 1942): “If you can’t say something nice, don’t say nothing at all.”
State boards seek a perfect balance on the seesaw between innovation and regulation.

Robert Hull and Don Long

Standards-Based Reform: Everything Old Is New Again

While much about the direction of federal education policy and regulation is murky, one thing remains clear. The Every Student Succeeds Act (ESSA) passed the torch of educational leadership back to the states, giving them a broad range of authority they have not exercised for decades. A Wall Street Journal editorial called ESSA “the largest devolution of federal control to the states in a quarter-century” while the New York Times referred to it as “the end of an era in which the federal government aggressively policed public school performance, and returning control to states and local districts.”

What exactly does this shift mean for state boards of education? ESSA provides unparalleled responsibility and opportunity for all states—regardless of the scope of their state policy authority: responsibility for crafting a coherent set of state policies to drive improvement of educational outcomes for all students and opportunity to craft a system that fosters local and school-level innovation and creativity.

There is a natural tension between regulation and innovation, but they are two sides of the proverbial coin. Good state education policy articulates rigorous educational outcomes and accountability measures focused on excellence and equity. It leaves much of the “how” to those closest to students in the classroom. How can regulation and innovation be wed in a unified, effective system? The answer lies in the foundational standards that mesh policy and practice into a symbiotic, reciprocal cycle of mutual improvement.

Therefore, the shift ESSA represents could foster greater innovation and effective instructional practice. At the same time, it gives state boards a tremendous opportunity to build a comprehensive
system of policies that ensures high levels of learning for all students. The key is fidelity to comprehensive, well-articulated standards that drive the development of both policy and practice.

**Back to the Future**

In many ways, ESSA harkens back to the future. The epicenter of innovation in education has always been at the state level. States have also been the vanguard of common educational standards from the earliest days of U.S. history. Standards-based education stretches back to colonial America and the new republic, emerging in its distinct modern form in the early 19th century.

Benjamin Franklin, George Washington, John Adams, and Thomas Jefferson all envisioned an expansive role for the state in funding, planning, and developing a public education system to meet the needs of the emerging democratic, commercial republic. For example, Franklin proposed in 1749 that Pennsylvania establish a public academy for the education of adolescents. The 1780 Massachusetts Constitution, drafted by John Adams, included the first legal requirement for public education and directed the legislative and executive branches to maintain public schools because “wisdom and knowledge, as well as virtue, diffused generally among the body of the people, [is] necessary for the preservation of their rights and liberties.” Similarly, Jefferson introduced “A Bill for the More General Diffusion of Knowledge” in the Virginia Assembly in 1779.

In the educational landscape of the new republic, reformers and state legislators used standards as a way to define and improve the curricula in public universities and then pushed them downward to private high schools to better prepare students for higher education. In his farewell address upon leaving office, President Washington urged establishment of public schools because “virtue or morality is a necessary spring of popular government.” Because of citizens’ role in driving policymaking in a democracy, “it is essential that public opinion should be enlightened,” he added. Standards remained a powerful tool to express the country’s values and goals and to propel a more ambitious curriculum that would give all students the opportunity to advance toward higher education.

In his 2008 book, *Grading Education, Getting Education Right*, Richard Rothstein traces the history of American public education through significant changes in standards, which reflected the political and policy debates, as well as the social and economic conditions, of the times. Rothstein argues that today’s narrow focus on achievement outcomes in English language arts, mathematics, and the sciences has compromised the system’s original focus on a holistic, broad set of goals: basic skills in reading, writing, math, science, and history; critical thinking and problem solving; appreciation of the arts and literature; preparation for skilled employment; social skills and work ethic; active citizenship and community responsibility; physical and emotional health; self-confidence; respect for others; and the ability to resist peer pressure.

Education reform remained firmly in the hands of local and state leaders until the mid-20th century, with expert advice from commissions, committees, and thought leaders primarily based in institutions of higher education. In 1965, President Lyndon Johnson advanced and signed the Elementary and Secondary Education Act (ESEA) as part of his war on poverty. ESEA asserted a dramatic new federal role in education to ensure equity, and it reinforced standardized testing as a means to address achievement gaps for poor students. To ensure that schools would be accountable for their use of new federal funding to achieve the goals of ESEA, Congress required them to evaluate and report on the effectiveness of their efforts. During the rising Cold War tensions of the 1970s and 1980s, the federal government further stressed the importance of academic standards in mathematics and science.

As technological change transformed industries and occupations, fears of a decline in U.S. global economic competitiveness also drove the standards-based reform of the 1970s and 1980s. In 1983, the National Commission on Excellence in Education published *A Nation at Risk*, which provocatively attributed the economic decline to “a rising tide of mediocrity” in public education. Its call for reform centered on the development of national academic content standards.

In response to this influential report, the Carnegie Forum on Education and the Economy issued *A Nation Prepared: Teachers for the 21st Century* in 1986, a report that emerged from its convening of policymakers, educators, teachers’ associations, and business leaders.
It passed Congress with overwhelming bipartisan support in 2001 and was signed into law by President George W. Bush on January 8, 2002.

The Pendulum Swings

With ESSA, the pendulum of education policy has swung back, and the levers of control are once again in the hands of states. State boards must now reaffirm what they value and make student learning the cornerstone of all their policy, strategic planning, and decision making. The only way they can do so is by establishing a comprehensive system of policies rooted in rigorous standards that knit policy and practice together. A well-articulated, agreed-upon system of standards can ensure equity of access and quality for all students while driving a comprehensive system of improvement for all schools.

But state boards must be strategic and intentional in the design process. In December 2014, NASBE introduced the Standards-Based Leadership Framework, in which all state education policies align to student learning standards and are designed for consistency across framework categories to create a coherent system (figure 1). The framework organizes policies into six categories: expectations, curriculum, materials, measures of effectiveness, accountability, and professional learning.

The requirement for standards and aligned assessments has been a feature of federal legislation since 1994.

Subsequent reauthorizations of ESEA, especially the No Child Left Behind Act, expanded the federal influence on states’ educational systems. It recommended strengthening standards in teaching, and it led to the creation of the National Board for the Professional Teaching Standards in 1987. Governors and other state leaders were also taking the initiative. The 1986 meeting of the National Governors Association was devoted for the first time entirely to education, and the governors proposed holding educators accountable for results in student achievement, not inputs. A 1989 national Education Summit attended by the governors and President George H.W. Bush emphasized standards-based reform and culminated in The National Education Goals Report: Building a Nation of Learners. The National Council on Education Standards and Testing (NCEST) was established in 1993 to develop bipartisan national standards and testing for K-12 education. While this effort was unsuccessful, the requirement for standards and aligned assessments has been a feature of federal legislation since 1994. Moreover, standards-based reform became firmly entrenched at the state level—particularly in California, Kentucky, Maryland, Massachusetts, North Carolina, and Texas—as well as through other national efforts in associations for education professions and academic content areas.

Figure 1. Standards-Based Leadership Framework
Within each, additional standards set expectations, define quality, and encourage innovation in schools and classrooms. A unified system of policies permits state boards to exercise their responsibilities without stifling local innovation and creativity.

If it is used strategically and faithfully, the framework can help state boards as they navigate ESSA implementation. For example, most state boards have authority over the standards for teacher preparation programs as well as licensing and certification regulations. As part of a state's ESSA plan, boards ought to ensure that these standards are both aligned to student learning standards and that they cohere with other policy areas.

But aligning the policy web is merely the first step. Once SBEs have aligned their policies, they must operationalize the system by continually revisiting, developing, refining, and extending it. This process becomes a way of planning, leading, and living as a board. A board's strategic planning begins with learning standards at the center and moves outward to corollary policies (figure 2). By this process of continuous improvement, the board guides ESSA implementation systematically and also leads by example.

Perhaps the most difficult part of operationalizing a standards-based system is decision making. The process is the obverse of strategic planning. While planning begins with standards and moves toward actions that improve student achievement, decision making points back to the center: How does each choice the board makes serve the core mission? How does it ensure coherence to all parts of a state's ESSA plan?

ESSAs success will largely be judged by how well state boards implement it over the long term. Rushed implementation will fall flat. States must play the long game and keep the end in mind. Fast-forward to a time 10 to 15 years hence when Congress once again reauthorizes ESEA. Will Congress laud state boards as examples of strategic, thoughtful leadership that resulted in high levels of student achievement and vastly improved schools? What will state boards' legacy be when ESSA expires? If boards start with that end in mind, they will exemplify the proactive legacy leadership that will truly benefit students and schools.

How does each choice the board makes serve the core mission? How does it ensure coherence to all parts of a state’s ESSA plan?

Robert Hull is executive vice president and Don Long is director of teaching, leading, and learning policy at NASBE.
Instructional Change

Student Learning Context

Policy Attributes

- Consistency
- Specificity
- Authority
- Power
- Stability
- Alignment to standards

Pedagogical Improvement

- Class size
- Prior achievement
- Demographics
- Teacher education
- Teacher experience

Improved achievement

Narrowed achievement gaps
Increasing the Odds That Policy Reforms Will Improve Performance

The Every Student Succeeds Act (ESSA) gives state boards of education a tremendous opportunity to revamp education policy. The federal government will have dramatically reduced influence over issues related to standards and accountability systems. States will have increased freedom to revise state standards and assessment systems, change the weights on test-based performance measures in accountability systems, and include a greater variety of non-test measures for accountability than was possible under No Child Left Behind (NCLB). In short, the new law gives state policymakers the opportunity to implement their own ideas for reform. Yet they will do so with the sobering knowledge that many past reform efforts in education have failed to promote real change.

To increase the likelihood of policy success, state policymakers will need to incorporate five ingredients in their education reforms: consistency, specificity, authority, power, and stability. This “policy attributes framework” has been used to study comprehensive school reforms and standards implementation, among other policies. The framework points toward features of policies that make them more likely to achieve meaningful change in schools. Figure 1 shows a simplified conceptual model for how the policy attributes might affect instruction and student learning.

### Consistency

The first and perhaps most fundamental attribute is consistency. Consistency refers to the extent to which policies provide educators coherent messages about what they should be doing. Too often, educational policies send conflicting, confusing messages, forcing teachers to choose between competing visions or encouraging them to simply check out and ignore the policies altogether.

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**Figure 1.**

Five ingredients to cook up coherent state accountability policies.

Morgan S. Polikoff

www.nasbe.org
The most obvious example of inconsistency in state policy is when standards and assessments are not well aligned. For example, state tests under NCLB routinely failed to assess large swathes of the content in state standards, sending teachers the message that those portions of the standards were less important to teach. Another example is when states have had multiple accountability systems. For instance, California had both Adequate Yearly Progress—the federal accountability measure—and the Academic Performance Index—the state accountability measure—during the NCLB era. Different systems sometimes have given different answers about which schools were doing well and which were in need of improvement.

A consistent state response to ESSA would start with a clear guiding vision from state policymakers about what the goals of education are. From this vision, goals might be distilled into a set of measures and indicators so that educators can understand their progress toward the goals. Finally, some of these measures might be included in the accountability system, reinforcing the goals through the application of rewards or sanctions. The key in thinking about consistency is that state policies should be pointing in the same direction. If states have multiple accountability systems, each telling teachers to focus on different things, they will likely focus on none of them. If there is coherence, there is the possibility of change.

States should of course build consistency into their policy approaches on the front end, but they should also investigate consistency on the back end. Alignment methodologies offer one way to demonstrate consistency, showing the extent to which assessments, curriculum materials, and professional development align with content standards to support instructional change. Regardless, policymakers should pay careful attention to issues of coherence as they revise policies—otherwise there may be a tendency to drift away from the goals over time.

**Specificity**

Specificity, also sometimes labeled “prescriptiveness,” describes the extensiveness and level of detail of a policy. For instance, content standards could be general (e.g., “students will multiply fractions fluently”) or specific (“Interpret the product \((a/b) \times q\) as \(a\) parts of a partition of \(q\) into \(b\) equal parts; equivalently, as the result of a sequence of operations \(a \times q \div b\)”). Similarly, accountability goals could be vague (e.g., “rates of chronic absenteeism will decrease each year”) or specific (“chronic absenteeism, defined as students being absent 10 percent of days or more, will decrease in each school by half by 2021”). It is not hard to see that more specific policies are clearer and easier for educators to understand; therefore, they are more likely to guide behavior.

For ESSA accountability, it is important that standards and accountability systems provide specific guidance. This might be achieved through supplementary documents such as curriculum frameworks, which help teachers translate the standards into practice. Districts, schools, and teachers rely on these kinds of documents when they are making decisions about how to instantiate the standards through the adoption and use of curriculum materials, for instance. State boards have a role in bringing the expertise together to create and disseminate these resources. Similarly, for accountability policies, documents and training might explain to educators what the goals and measures are and how the data will be collected and analyzed.

**Authority**

Simply put, educators have to buy in to a policy before they will implement it. This buy-in is gained through the authority vested in a policy. Policies can gain authority through many means. Certainly, laws themselves have authority—legal authority. Policies can also gain authority through becoming part of social norms. For instance, it is now more or less standard practice that teachers will use content standards to guide their instruction, whereas this was not the norm 30 years ago; content standards now have normative authority. Policies can also gain authority through leadership—charismatic or persuasive leaders may lead educators to believe that a policy is “good” and in the best interests of their children. Policies can also simply be popular, lending them authority from popular support. Of course, there are other ways policies can gain authority, but the key is that policies must have buy-in in order for educators to implement them long-term.
The best way for states to build authority for their policies is to make good ones—policies that teachers naturally want to support. Policies that are fairer (that don’t punish teachers or schools for things that are outside their control), that are not overly punitive, and that align with teachers’ existing beliefs would likely be more widely supported.

But policymakers can also build authority intentionally, and this may be especially important for the continued success of a policy. For example, policymakers should actively seek the support of influential scholars, education organizations, parent groups, or teacher unions by including these groups in the creation of the policy. ESSA in fact requires stakeholder engagement, and state boards and state education agencies should ensure that this engagement is not pro forma but meaningfully contributes to state policy decisions—this will build authority. In addition, they should create opportunities for educators to provide feedback on the policy during its creation and revision. Explicitly explaining the rationale for the policy and promoting its utility directly could also build support. In short, it is not simply enough to create a policy and assume that teachers will buy in. Efforts to create authority should be intentional.

Power

Sometimes it is not enough to encourage implementation through authority. For instance, policies might run counter to educators’ beliefs, making them less likely to be implemented. Alternatively, some educators, while not opposed to a policy, may be perceived as not exerting the requisite level of effort in implementation. Extrinsic motivation might, in these cases, facilitate changes in beliefs or effort. Power involves the use of rewards (for good behavior or performance) and sanctions (for bad behavior or performance) to motivate desired responses to policies.

There is little doubt that power—that is, consequential accountability for performance—can motivate improvements in school practices and student learning. Dozens of studies over the last several decades show this clearly. For instance, Florida’s A-F accountability policy produced school policy and instructional changes (e.g., block scheduling, common planning time), and these changes were associated with improved student performance in low-performing schools.6

However, there are weaknesses to a power-focused approach to policy. Certainly one challenge is that the effects of power-focused policies are likely to be short lived; when the rewards and sanctions go away, the incentives to perform do as well. This stands in contrast to authority-based policies, which may be more likely to promote long-lasting change by affecting “hearts and minds.” Policies focused on power can increase the likelihood of undesirable unintended consequences. For instance, consequential accountability, especially if the goals are unattainable, might be more likely to lead to gaming behaviors or even outright cheating.

Finally, power distorts behavior toward the measures used to mete out rewards and sanctions. If those behaviors are important and good predictors of life outcomes, this may be a good thing. If they are bad predictors or crude proxies, such distortions could be harmful. In short, while policies based on power can clearly motivate desired changes, they should be used judiciously and designed with an eye to minimize unintended consequences.

Stability

As education policies come and go, educators may grow weary and develop “reform fatigue.” As policies rapidly change, they may decide it is simply easier or better to ignore new policies on the assumption that they will only change again shortly. The fifth policy attribute—stability—describes the commonsense notion that policies that stick around are more likely to have an impact. There are many reasons for this, such as the ability of teachers to develop more knowledge about the policy over time. It is not to say that policies should never change, but rather that policies should be given a chance to be implemented and mature before they are changed. One of the major struggles of education policy is that initiatives come and go with new administrations, both at the local level and at the state and (to a lesser extent) national levels. These initiatives are often implemented quickly, given a short window to take effect, and then evaluated (often crudely) in an attempt to demonstrate results. It is almost certainly the
case that the rapid-fire turnover of education policies reduces the implementation strength of any one of them.

Aligning Policies

The policy attributes framework offers a useful set of hypotheses to guide the development of policies for standards, assessments, and accountability systems. Several concrete suggestions flow naturally from consideration of these attributes.

1. Start with the vision. If there is not a clear vision—a powerful goal that the state wants to achieve—there is little hope of building a strong, aligned policy system. The vision should be clear and specific, ambitious but attainable. Key stakeholders have to be included in developing the vision to build buy-in.

2. Build out supportive policies to align with the vision. Once the vision is in place, assemble experts (both practitioners and researchers) to help build a system of policies that will help achieve the vision. Establishing coherence in policy is essential for effective implementation, and coherence should flow from vision down to goals down to specific measures.

3. When it comes to alignment, don’t trust, but verify. Focusing on alignment during policy development is important, but it is not enough. Far too many studies have shown that policies thought to be aligned with standards, such as curriculum materials and assessments, are not.7 While state boards of education may not have the budget or staff to do this work themselves, opening up policies and assessments to scrutiny from external experts can and should be an expectation, and they can ask pointed questions about whether this work has been done and about the results.

4. Devote resources toward building support and capacity. Without support from educators, no education policy is likely to succeed. Educators and the general public may need guidance to understand new policies and why they are important. Those implementing the policies will need capacity-building support if new knowledge and skills are required. In short, policies are not self-implementing, and they should be designed with that in mind.

5. Use rewards and sanctions, but as fairly as possible. The first response to poor performance should be to improve it through support. But states need to establish clear bottom lines, and they need to enforce those bottom lines when they are not met. Consequently, policies emphasizing power are needed. However, research lays out clear principles for designing accountability systems, and state policymakers should follow those.8 Perhaps the most important of these principles is that the systems must be fair to teachers and schools serving historically underserved student groups. Unfairness will result in unintended consequences and negative incentives that may create more harm than good.

6. Evaluate progress and tweak often, but make larger changes sparingly. States will make some major changes when they first implement ESSA. Once those changes are in place, the evaluation of policy implementation and effects should be ongoing. Dollars allocated toward good data and research will likely pay dividends in more effective implementation down the road. When state policymakers identify flaws in their ESSA policies, they should tweak them. But broader changes should be held off, because policies need time to mature and produce their desired effects. Furthermore, constantly changing policies undermine stability and coherence and harm morale.

ESSA offers states the opportunity to make fundamental changes to their accountability systems, and they should. In a time of turbulence for state political leaders, state boards of education can serve an essential role in ensuring that these policies are well designed and implemented thoughtfully over time. Boards can demonstrate real leadership by focusing their policies on a core vision, building support for the vision and capacity for implementing the vision through policy, aligning policies and evaluations, and showing patience with implementation. State boards that make these choices are more likely to see their ESSA efforts pay off with improved implementation and better effects on students.

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8 This model is adapted from Polikoff, “Association of State
A standards-based model of reform has dominated public education for 30 years. Under the Every Student Succeeds Act (ESSA), it will continue to dominate education policy. But is that model working? State boards of education share an intrinsic interest this question. While there are many ways to investigate it, one approach that shows promise treats standards-based education as a testable theory and offers empirical tools that show policymakers, administrators, and teachers how well it is functioning in their state, district, school, or classroom.

John Smithson

The Science of Standards-Based Education

New tools let educators compare actual classroom instruction against standards and point them toward how to align the two.
it also appears that the sun travels around the earth, the surface of which appears relatively flat.

A 1998 study by Gamoran and Porter et al. (including myself) demonstrated an important connection in education that may seem obvious. Because we focused primarily on investigating the impact of alternate strategies for increasing student success in high school mathematics, we were able to demonstrate a predictive link between opportunity to learn and content coverage (regardless of pedagogical practice). While that was not the major finding or focus of the study, it was important nonetheless. Not because of what it said about education (yes, students can learn what they are taught) but what it said about our instrumentation. And those findings have been replicated twice—on large-scale populations, across academic subjects, and across states—using high-stakes standardized assessments. The results point to a variable that, even after controlling for prior achievement and the effects of poverty, consistently predicts student achievement in large-scale applications.

Consider the implications. Our findings indicate that while prior achievement and poverty remain the strongest, most consistent predictors of student achievement, close behind is an additional predictor related to something that teachers affect.
of student achievement, close behind is an additional predictor related to something that teachers affect. That additional predictor is students’ opportunity to learn, defined as the content of instruction that students actually experience—what we call the enacted curriculum.

For states that were paying attention, these studies indicated that efforts to better align curriculum to academic standards could be expected to lead to higher achievement scores. But how would an educator or state board member know that instructional alignment has improved or that efforts to make it so have been successful?

Enter the Surveys of Enacted Curriculum (SEC), which marries the Porter content instrument and a traditional-style survey to comprehensively collect teachers’ opinions and beliefs, professional development experiences, instructional practices, and content coverage. The content portion of the survey uses a three-step process to collect information from teachers regarding content coverage. The first step is to identify those topics from the SEC content topic list that the teacher covered to some extent during the reporting period. In the second step, teachers report how much time they spent on those topics for which they reported coverage. The response options are “slight coverage (less than a class period/lesson)”; “moderate coverage; (1 to 5 classes/lessons)”; and “sustained coverage (more than 5 classes/lessons)”. In the final step, teachers report on the relative emphasis they give to five categories of expectations for student performance for each of the topics they covered. The labels and examples of the five categories vary slightly by subject area, but all reference essentially the same general categories of performance expectations: 1) recall; 2) perform procedures; 3) demonstrate understanding; 4) analyze information; and 5) integrate/synthesize information. It is this connection between topic and cognitive demand that sets SEC data apart and provides its predictive power.

SEC data can be used to create a detailed description of instructional content that can then be compared with a similar description of the state’s learning standards or relevant assessment in order to observe similarities and differences between the descriptions. Figure 1 provides an example of two content maps, in this case displaying descriptions of the academic content embedded in the Common Core State Standards for mathematics (on the left) and language arts and literacy (on the right). Similarities and differences between the content descriptions of standards maps like these and the content descriptions of instruction provided anonymously by teachers can be captured quantitatively, and at a very detailed level, to paint a picture of the extent to which classroom instruction and the relevant content standards overlap.

The idea is to provide teachers, administrators, and policymakers information on instruction and its relation to standards and performance expectations in order to make informed decisions about how to increase student achievement. Given the link we have established between opportunity to learn and achievement gains, it seems reasonable to expect that efforts to bring standards and instruction into sync will lead to improved student learning as measured by state assessments (assuming the standards-based system is functioning as expected).

**Michigan’s Statewide Approach**

No state has done more to align curriculum using these tools than Michigan. Although Michigan was an early adopter of the SEC, like many states it has used the tools episodically as new initiatives arise. So I was pleasantly surprised when Karen Ruple, program manager for the MI Excel Statewide System of Support at the Michigan Department of Education, called a few years back expressing interest in using SEC data with Michigan’s designated priority and focus schools. The Excel program provides Michigan’s most challenged schools support in improving student achievement through an array of services, including the SEC. Sustained by the efforts of a well-trained cadre of curriculum specialists and others drawn from the state’s intermediate support agencies, Michigan today uses SEC extensively to improve curricular alignment under its MI Excel umbrella.

Realizing that the SEC represented a fairly complex data set that required substantial training and support before it could be used to effectively engage teachers, Michigan invested in the development of web-based training modules...
The vertical or y-axis for each of these charts provides a list of topic areas based on the SEC content taxonomy for each subject. The horizontal or x-axis reports a series of cognitive demand categories. Measurement is made at the intersection of these two dimensions, and results are reported as the relative emphasis of academic content across the full standards document. The z-axis reports the relative emphasis for each intersection of topic and cognitive demand, so that the sum across all intersections equals one for each chart. The most emphasized content for mathematics across grades K-12 is Number Sense at the cognitive demand levels of procedural and conceptual (demonstrate) understanding. The most emphasized content for language arts, reading, and literacy across grades K-12 is Critical Reading at the cognitive demand level of analyze information.
for teachers and administrators. The department also pulled together a leadership team from the state’s intermediate service agencies to provide additional support to teachers and administrators in getting the most out of the SEC information.

The impact of these efforts on instruction and students’ opportunity to learn can be tracked through the results reported by the SEC system each spring, and changes in instructional alignment can be examined over time.

A couple of caveats: First, even clear evidence of increased curricular alignment might be discounted simply because it is based in part on teacher reports. Without added evidence that the increased alignment was also associated with increased student performance, the data’s validity can be questioned. Second, even with evidence of a link between instructional alignment and achievement, it is important to distinguish the alignment target. If the predictive validity we see is based on instructional alignment to the assessment, we have only established the validity of the survey and assessment instruments and fallen short of testing our bigger initial question about the viability of the standards-based education system. True, a link between instructional alignment to a test and achievement does provide evidence to support the fundamental assertion of education that students are more likely to learn what they are taught (all else being equal), but standards-based education goes one step further, and it’s a big step.

To date, there is anecdotal evidence of school-based increases in instructional alignment, combined with increased achievement scores, leading in some cases to schools’ removal from the list of Michigan’s most challenged schools. However, the state has not yet undertaken a systematic study of the link between instructional alignment and student achievement. For an example of a state looking closely at the link between instruction, assessment, and student achievement, we have to turn to North Carolina.

North Carolina Examines Assessment Validity

North Carolina, like Michigan, was one of the original states to develop and use the SEC instruments and has participated in several multistate studies using SEC data, most recently a study into the learning opportunities of English language learners. Not long after the completion of that study, Tammy Howard, director of accountability services for North Carolina’s Department of Public Instruction, contacted me about the possibility of conducting a validity study of the state’s assessment program. In 2015, the department approved a three-phase empirical study of whether North Carolina’s assessment program functions as intended (i.e., increased alignment to standards will lead to higher achievement on the assessment).

My colleagues and I are two-thirds done. In Phase I, we established the alignment characteristics of all of the assessment forms for all of the assessments for all of the assessed grades in math, reading, and science by conducting content analyses of each test. In Phase II, we surveyed a representative sample of teachers and provided each participating teacher a confidential, personalized alignment report comparing their reported instruction to the state’s standards for their own reflection and in consideration of their participation in the study, along with a series of webinars for district and school leaders on the purpose of the study and the data requested from teacher surveys. In Phase III, under way now, the state is providing the necessary student assessment data (with full confidentiality protocols in place) to conduct the tests for predictive validity.

Once we receive the student performance data, we will conduct two types of statistical tests. The first is to see if alignment of instruction to the assessed content helps to explain test performance, and the second is whether instructional alignment to state standards predicts test performance.

Failure on the first test would lead us to question the validity of the instructional and assessment descriptions (but not the original hypothesis of whether students are more likely to learn what they are taught, which in addition to being self-evident has already been confirmed and replicated, as noted above). If we get a positive result on the first test but fail to predict achievement with the second, then we have a quite
The skills analysis chart above reports student performance results for assessed content (in this case a series of high school mathematics classroom assessments). Red indicates that the majority of students failed the items related to that content, while green indicates the majority of students responded correctly to items assessing that content. Blue indicates that more than 85% of students responded correctly to the assessed content. Yellow indicates that about as many students answered items related to that content correctly as incorrectly. White tiles indicate content that was not assessed. Circles inside a tile indicate that results are based on a limited number of items. The larger the circle, the less reliable the results reported for that content.

different situation. Under those circumstances, the instrumentation will have been validated, but the system would have failed. There could be any number of reasons why this might be so, and a negative finding here would beg further investigation to determine the nature of the problem. Even then, we would have gathered sufficient descriptive data to be reasonably confident that a careful review would likely reveal areas where one or another component of the study did not function as expected, thereby suggesting changes in method or instrumentation likely to increase our understanding of the connection between instruction and achievement.
Even if the North Carolina test is successful on both fronts, the question will remain whether other state education agencies will be emboldened to pursue this type of systemic evaluation themselves. The potential payoff is huge, but the risk to those responsible for accountability and assessment program design or implementation is not trivial. States willing to undergo the rigor of such an evaluation, however, will have demonstrated a commitment to assessing the accountability of the system itself, and not just a part of it. I suspect such willingness will go a long way toward garnering support for—and faith in—the state’s accountability and assessment programs among local superintendents, administrators, and teachers.

What’s Ahead

Call me an optimist, but I am most excited about what it means to succeed in the effort to validate North Carolina’s assessment program because that would not be the end of the story but just the beginning.

Consider the possibility of all teachers having available to them training on opportunity to learn and data on instructional alignment such as that available to teachers in Michigan and with the kind of achievement data soon to be available in North Carolina. Performance data collected on an assessment instrument that has been analyzed using SEC methodology can be reported in a unique data display that clearly highlights distinct areas of academic content where students are succeeding or not. Such information, in conjunction with the opportunity-to-learn data, provides teachers a powerful tool for targeting instruction, helping them determine what works, what doesn’t, and what to do about it (figure 2).

The utility of such data extends further, though. Many factors affect student achievement. While SEC does not directly address many aspects of students’ learning opportunities, it can help point the way toward a better understanding of what actually is going on in the classroom.

Qualitative research, while critical in increasing our understanding of classroom dynamics and student learning, is rarely able to demonstrate a solid connection to achievement gains on any large-scale basis. While much of the difficulty lies in the challenges of conducting large-scale qualitative studies, another important element is that the effects being sought are generally buried in the statistical noise or measurement error reflected in the data set. Instructional alignment, or opportunity to learn, can assist in reducing a large amount of that noise, thereby increasing the sensitivity of the qualitative measures of interest in demonstrating an effect on achievement.

Much of this is hypothetical and perhaps overly hopeful. But we have done the necessary groundwork and have a pretty good sense of the predictive capacity of the SEC measures. I therefore eagerly await the opportunity to put all the pieces together from the work in North Carolina and Michigan to demonstrate not only the viability of the standards-based approach to education but also the potential the SEC model offers in support of a science-based approach to education.


3There have even been cases where schools chose to continue using the SEC tools even after removal from the list despite having to foot the bill (as the state covers SEC use only among listed schools).


5Note that North Carolina does not employ a curricular alignment initiative comparable to Michigan’s. The purpose of the SEC data collection effort in North Carolina was to collect a representative sample of instruction across the state for use in the study.

Consider the possibility of all teachers having available to them training on opportunity to learn and data on instructional alignment.
Tennessee Scales Up Improved Math Instruction through Coaching

Initially fueled by resources from a Race to the Top grant, Tennessee state leaders undertook an education reform agenda to improve teaching and learning. Tennessee helped lead the national movement toward college- and career-ready standards. The logical next step was to support teachers and students as they aim for those higher standards. Yet given their distance from classrooms, state policymakers and leaders typically find it challenging to influence what happens there.

If students are to meet higher standards, all educators in the system have to learn how to engage students in reasoning about complex ideas. But what levers can state boards of education and state education agencies pull to support the professional learning that makes this possible? A research-practice partnership in Tennessee may shed light on this question. The group’s task was to support mathematics teachers across the state through instructional coaching.

The Role of Coaching in a Standards-Aligned System

Alignment with state learning standards was part of Tennessee’s systemic reform strategy from the beginning. The Tennessee Department of Education, with support from the governor and legislature, invested in instructional materials, teacher and leader training, and a teacher evaluation system, all of which were aligned with new state standards. For example, several hundred educators were selected through a competitive process and trained to serve as professional development leaders. After intensive professional development from the Institute for Learning,1 they were charged with turning that training around and delivering it to other teachers. In the summer of 2012, 13,000 Tennessee educators participated in teacher-led mathematics training. More than 25,000 educators (representing over 40 percent of all Tennessee K-12 teachers) enrolled in optional trainings the following summer. The state’s education department also provided standards-aligned instructional materials for use at local districts’ discretion. For example, content experts in mathematics contracted with the Institute for Learning to develop lesson guides for high-level, cognitively complex instructional tasks, videos of teachers instructing students on carrying out the tasks, and videos designed to deepen teachers’ understanding of mathematical ideas.2

Evaluations of these training sessions revealed that teachers appreciated them, particularly the fact that their peers were leading them. More important, these teacher leaders may have had a lasting impact: State analyses found that teachers in buildings with a summer professional development leader scored higher overall on the state’s assessment than did teachers in other schools.

Much energy and time went into these trainings and materials. Yet research suggests that this strategy alone is insufficient to produce the instructional change necessary to ensure that all students can meet ambitious standards.3 When they are well designed, workshop-based, short-term trainings can increase teacher knowledge, which is important for improving teaching practice. However, making instructional practice more rigorous and conceptually demanding is not a trivial undertaking. Full mastery requires engaging in the skills to be learned with guidance from a more expert...
practitioner, and through job-embedded learning opportunities.

In theory, an instructional coach fits the bill, providing long-term, job-embedded support around key instructional skills. Indeed, many schools in Tennessee (and elsewhere) hired such coaches with Race to the Top funds. However, the investment in coaching nationwide has likely not yielded its full potential. Research suggests that coaching programs have variable outcomes due in part to implementation challenges such as insufficient coach training, guidance, and support. For example, coaches chosen because they excel in teaching math to children may know little about adult learning. Additionally, coaches are often asked to take on duties that have little connection to teacher learning, such as running testing programs and providing remedial instruction for students.

**TN Math Coaching Project**

Researchers at the University of Pittsburgh, professional development providers from the Institute for Learning, and the Tennessee Department of Education began partnering in 2014 to create the TN Math Coaching Project as a way to prepare classroom teachers who were now stepping into full-time coaching positions. We built on Tennessee’s earlier investments in a standards-aligned system and are now focusing on training full-time instructional coaches to work with teachers as adult learners, with teachers reconsidering their practice and taking ownership of it. And we developed a mathematics coaching model to guide schools and districts in building mathematics coaching programs.

We focused on instructional coaching because it can be a critical link in the standards implementation process. Good coaches support teachers intensively so they can help students think and reason in complex ways. In our model, we specified practices that characterize quality coaching while also helping the coaches adapt the model to the needs of their local teachers and to accommodate local priorities.

Over two school years (2014–15 and 2015–16), we specified and elaborated our coaching model by trying it out in schools and collecting and analyzing data on its effectiveness. During three improvement cycles each year, coaches and teachers shared data about their practice, researchers and professional developers analyzed that data, and coaches, state leaders, professional development providers, and researchers changed the model based on that analysis. In subsequent cycles, coaches put the refinements to the model into practice. See sidebar example (page 25).

Our analyses provided promising evidence in support of the model. Participating coaches did in fact use its key coaching practices during the two school years, as evidenced by videotaped coaching interactions. Likewise, partner teachers improved their capacity to provide rich opportunities for students to understand key mathematical concepts. A more formal test of the model’s effectiveness through a quasi-experimental study with a new group of coaches and teachers is under way.

Fundamentally, our model aims to ensure that schools and districts are getting their return on investment in coaching by focusing on particular practices that help teachers improve. Our coaching framework identifies these key practices and includes a coach-teacher discussion process and a stance that coaches take in their work with teachers and for their own continuous improvement.

**Three Key Coaching Practices**

Drawing on the Institute for Learning’s extensive experiences with coaching, we identified three key practices: (1) deep, specific conversations about the instructional triangle; (2) mathematical and pedagogical goal setting; and (3) evidence-based feedback. For example, coaches have deep, specific conversations with teachers during prelesson planning, helping them identify what students should learn as a result of the lesson (the goal), anticipate how students might approach complex tasks, and identify moves they might make in order to shift students’ thinking in ways that align with the goal of the lesson.

**The Coach-Teacher Discussion Process.** We designed a process to guide one-on-one coaching cycles that incorporates these key coaching practices (figure 1). The routine includes four phases. First, the coach and teacher identify a
mathematics task and learning goals. Second, the coach and teacher meet to plan for the lesson. Third, the coach observes the teacher teaching the lesson and gathers evidence about teaching and student learning. Finally, the coach and teacher meet to discuss the evidence and reflect on the lesson.

While this process critically supports a routine for instructional improvement, it also can inform and guide other processes that involve coaching, such as professional learning community meetings.

**The Inquiry Stance.** Inquiry characterizes the stance our coaches take in their work with teachers and in the ongoing improvement of their own practice. Coaches try to engage teachers in making sense of their practice and defining ways to improve it. Coaches use statements that begin with “I notice” and “I wonder” rather than directives about what teachers should do.

Inquiry also characterizes how coaches implement the coaching framework in their own school or district context. For example, some coaches were getting pulled away from coaching work to support other school functions. These coaches experimented with ways to better communicate with principals and district leaders on their need to protect scheduled time to follow through on the discussion process with their teachers.

Our model also includes a combination of face-to-face sessions, webinars, and opportunities for coaches to apply what they are learning to their practice. We are thereby catalyzing a network of instructional change agents. So far, we have trained two cohorts of coaches representing 30 Tennessee districts (20 percent of the total). Our goal is to expand and sustain the network to support transformation across the state.

**Lessons for Other States**

There are compelling reasons for state boards of education and state education agencies to get involved. Without a state-designed, state-executed plan, support and training of teachers falls to districts and schools, which perpetuates variation in performance and inequality. That is, more affluent districts and those with
operated at the district or school level, so a state that wants improvement across all its districts and schools will have to find ways to promote it statewide. What can state policymakers do? First, a state-specific coaching model can be disseminated to districts throughout the state. The model should underscore coaches’ need for guidance in how they work with teachers and help districts understand ways to make the most of their investment in coaching. States can also publicly disseminate stories about coaching successes and spotlight sessions on coaching in state-sponsored conferences, meetings, and training opportunities.

higher capacity get better at teaching while those serving relatively disadvantaged regions fall further behind. To combat this, the Tennessee Department of Education recognized that they had to do more to shore up the quality of teaching.

In Tennessee, the state board of education’s role was to establish systemic goals through the identification of state content standards, while the department engages in initiatives like the TN Coaching Project to support schools and districts as they implement those standards. Our experience in Tennessee points to a number of ways that state education policymakers and leaders can influence teaching and learning:

Invest in coaches and coach training. Our work contributes to a body of research showing that well-designed coaching programs contribute to teacher learning and improved instruction. Yet coaching is typically funded and
Foster networks to support continuous improvement and scaling up. Building networks is an important component of a state strategy for instructional improvement for several reasons. First, a network can help coaches get access to learning opportunities that their districts lack. Districts typically focus on teachers’ professional learning, but coaches need their own learning and development opportunities. It is inefficient for small districts to provide these opportunities to what may be just a few people. A state or regional network can fill this gap. Second, a network enables collegial, informal sharing of what they have learned. As coaches continue to participate in a network, they can support more novice colleagues locally and throughout the state.

The network has also refined our coaching model. As mentioned earlier, coaches engage in inquiry to overcome implementation challenges. They collaborate with other coaches facing similar challenges, plan tests of new approaches, and share what they learn. For example, coaches have focused on adapting the model to support beginning versus veteran teachers; to attend to students’ conceptual understanding in schools and districts where teachers and leaders have typically emphasized procedure-oriented teaching (e.g., worksheets to practice math algorithms); and to aid literacy coaching. As network leaders, we developed a repository of strategies and tools that coaches identified and tested to respond to these challenges.

Engage in research-practice partnerships. We could not have developed a robust coaching model without a partnership that enabled collaborative engagement in practice improvement. The history of failed educational reform efforts suggests that it is difficult to scale up externally developed interventions while maintaining their design integrity, because those designs typically do not take the many inevitable and diverse local implementation challenges into account. From the start, we sought to learn directly from coaches working under diverse conditions. And we developed guidance for coaches and our training program in collaboration with coaches actually doing the work. Consequently, both practitioners and researchers informed the model.

How can a state tackle the challenge of improving instruction so that all students reach higher, more ambitious learning standards? The road to student achievement runs through improved teaching. Teachers who are well supported and feel that they are part of a larger movement toward more ambitious instruction will flourish, and students will benefit. One of the most promising strategies for supporting teachers is the careful selection and development of instructional coaches. Our Tennessee experience offers states a way to play an active role. By developing and disseminating a statewide model for coaching that is flexible enough to take into account district variation but specific enough to standardize coaching processes in ways that have real impacts, Tennessee state education leaders are contributing to improved teaching and learning at scale.

1The institute, based at the University of Pittsburgh, provides research-based training and development for districts and states.
2In a subsequent analysis using a fixed-effects model (to adjust for selection effects), not only was there a benefit to coaches and participants in the initial training session, participants in schools with a TN core coach also had more advanced questioning than participants without a TN core coach in their school. Thus, when participating teachers had access to a TN core coach, they continued to improve their practice.
5The partner teachers as a group demonstrated growth in their teaching based on expert ratings of video observations. However, many teachers had reached a ceiling on our rubric by the end of two years.
6For more information on iterative cycles and improvement research methods, see G. J. Langley et al., The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (Hoboken, NJ: John Wiley & Sons, 2009).
7The Tennessee Department of Education launched the Read to be Ready campaign to increase Tennessee students’ reading abilities in the early grades. The Read to be Ready Coaching Network is a state-district partnership that focuses on improving K–3 reading instruction. Each of the state’s eight regions has at least one department reading coach consultant who trains district-chosen literacy coaches. The district coaches deepen their knowledge of reading instruction and coaching practices so they can more effectively support teachers in their districts.
Over the past 15 months, the Virginia Board of Education has been redesigning its public school students’ high school educational experience to better prepare them to participate in the global economy. To lay the groundwork for this redesign, we developed the Profile of a Graduate. This profile in turn grew out of a broader review of Virginia’s school accreditation standards, where the state’s accountability system is set forth.

The standards-based reform of the mid-1990s was a critical first step that raised the level of academic achievement among Virginia students. But over the past few years, the Virginia board came to understand that many of its schools had become so laser focused on the state assessment of student performance against the content standards—known in Virginia as the Standards of Learning (SOL)—that they had failed to ensure that students could apply the content knowledge and had developed the skills needed to succeed in the workforce.

Based on current estimates, about 500,000 jobs will be created in Virginia by 2021, many in scientific, technical, or healthcare fields. Even those jobs may be supplanted by others that will dominate the economy for the graduate of 2029—today’s kindergartner. Some of the jobs for which they will be competing do not exist today. And yet students now graduating are not prepared to meet even today’s need, according to colleges and businesses within the Commonwealth. Some require remedial work in English and math upon entering college. And businesses indicate that some newly hired students lack the requisite ability to communicate well, solve problems, or navigate a team environment.

In the midst of economic and workplace change, some things have changed about high school. Certainly, the technology is different from when I attended high school in the early 1970s. However, subjects and course credits have barely changed at all. Consequently, the board sought to expand its view of high school to encompass more development of skills and abilities.

For the board, the journey to redesign high school education in Virginia would begin with study of what others have done to change the high school experience, both in and outside the state. We then listened to the suggestions of many...
partners and educated ourselves and other decision makers about what needs to be done. The result was a proposal that we believe fits Virginia’s needs.

The Journey Begins

In late 2014, the Virginia state board began considering a comprehensive revision of its Regulations Establishing Standards for Accrediting Public Schools in Virginia, part of which concerned high school graduation requirements. The board decided it first needed to determine what skills a graduate should acquire during their K-12 experience and to capture those ideas in a Profile of a Graduate. We wanted the profile to articulate the knowledge, skills, competencies, and experiences students should attain to make them “life-ready,” whether a graduate begins college, work, or military service.

Many Virginians were interested in the board’s work: local school boards, administrators and teachers, school support staff, parents, students, community members, businesses, two-year and four-year colleges, education associations, the governor, the secretary of education, members of the legislature, and the SOL Innovation Committee, which the legislature created.

Some of these groups were engaged in their own activities on the topic during 2015–16, and their work informed ours. For example, the SOL Innovation Committee recommended in October 2015 that the state board (1) develop a Profile of a Virginia Graduate, including critical thinking, creative thinking, collaboration, communication, and citizenship; (2) identify the knowledge and skills necessary to meet the profile expectations; (3) adjust high school graduation requirements; (4) update the SOL to reflect the skills identified in the profile; and (5) identify the types and timing of assessments that align with the profile.

The Profile of a Virginia Graduate was included as part of the governor’s proposed legislation in 2016, which two members of the committee who also sat in the Virginia General Assembly carried to the floor. The enacted legislation (1) removed existing statutory language specifying types of diplomas and credits (thereby giving the board greater flexibility in revising its regulations); (2) required that the Profile of a Graduate identify the knowledge and skills that students should attain; (3) required the board to consult with stakeholders; (4) required that the profile encompass critical thinking, creative thinking, collaboration, communication, and citizenship; (5) gave the board latitude in the development of core skill sets in the early years of high school and establishment of multiple paths toward college and career readiness in the later years, including opportunities for internships, externships, and credentialing; (6) identified a timeline for Board of Education action, with a mandate that the changes apply to incoming freshmen after July 1, 2018.

This timeline kicked off an aggressive schedule of state board information gathering and stakeholder engagement, with the assistance of Virginia Department of Education staff (see table 1). Because the work would be included in the board’s Standards of Accreditation, its Accountability Committee was tapped as the best vehicle for doing the work. To deal with the time constraint, the committee adopted a two-fold plan to engage stakeholders: Some groups made presentations and engaged in direct discussion with the committee, and other groups met in stakeholder roundtables with the board president or vice president, the chairman of the Accountability Committee and the state superintendent, and appropriate department staff. Summaries of these roundtables were provided to all board members.

Education groups were asked to respond to these questions: What is your ability to prepare students in light of the board’s discussion around the Profile of a Graduate? What is already being done that aligns with it? What supports need to be put in place to make implementation successful? Are the dispositions the board is considering the right ones? What are we missing?

Bringing the Profile to Life

The Profile of a Graduate depicted in figure 1 shows four overlapping areas for student learning and achievement that are essential for the life-ready student: 1) content knowledge based on statewide standards and its application; 2) workplace skills and behaviors that promote productivity, relationship building, and problem solving; 3) understanding of the opportunities within civic organizations for community engagement and civic responsibility; and 4) participation in career exploration, planning,
Department staff also prepared 10 decision briefs outlining decisions the board needed to make to operationalize the profile and making recommendations for the board to consider.

1. **Categorize Diploma Expectations as “Standard Credits,” “Verified Competencies,” or “Requirements.”** The brief recommended adding a “requirements” category to the current “standard credits” and “verified competencies” to describe the new diploma expectations. After receiving clarification and preparation. Foundational skills in each area are critical thinking, creative thinking, collaboration, communication, and citizenship.

Yet developing the profile was only the beginning of the board’s work. At our May 2016 retreat, we gave staff at the Department of Education the direction necessary to draft language for revising the Standards of Accreditation, to include the Profile of a Graduate. Board members asked staff to craft more parent-friendly language to describe the profile.

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<tr>
<th>Stakeholder Group</th>
<th>Input</th>
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<tbody>
<tr>
<td>English language learner coordinators</td>
<td>These learners experience particular challenges in earning a high school diploma.</td>
</tr>
<tr>
<td>Governor’s STEM academies</td>
<td>These academies expand options for acquiring literacy in science, technology, engineering, and mathematics and other critical skills, knowledge, and credentials that will prepare students for high-demand, high-wage, and high-skill careers in Virginia.</td>
</tr>
<tr>
<td>Military recruiters</td>
<td>Representatives from the Army, Navy, Coast Guard, and Air Force seek students who are scholars, athletes, and leaders. They also look for resiliency, grit, critical thinking, creativity, collaboration, communication, and citizenship.</td>
</tr>
<tr>
<td>Parents</td>
<td>Parents sought effective communications to help them understand changes in diploma options and career pathways.</td>
</tr>
<tr>
<td>Students</td>
<td>Two students shared the personal significance of year-long senior projects.</td>
</tr>
<tr>
<td>High school innovation planning grantees</td>
<td>Grantees highlighted potential barriers to innovation and where flexibility from state requirements is needed.</td>
</tr>
<tr>
<td>Community college and four-year institutions</td>
<td>Characteristics affecting admissions include students’ college readiness, persistence, self-regulation of their own learning, mastery of academic content; ability to think critically, analyze, and think independently; having an open mind; an ability to contribute as a member of a group; an ability to navigate differences of opinion in a positive and respectful manner; and a desire to achieve goals while serving others. Factors affecting student success include the ability to transition from high school to college, navigate a new environment, build relationships, participate in deep learning, take risks, cope with uncertainty, show resilience in the face of failure and obstacles, display a passion for learning, and take control and manage his or her life.</td>
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</table>
feedback on what falls into each category, the board endorsed the proposal.

2. **Merge the Standard Diploma and the Advanced Studies Diploma into one Virginia Diploma.** The Standard Diploma requires 22 standard units of credit and 6 verified credits, whereas the Advanced Studies Diploma requires 26 standard units of credit and 9 verified credits. The Virginia Diploma would require 25 standard credits and 5 verified competencies. This would represent a significant change, increasing required credits for many students. Board members sought further development, consideration, feedback from parents, and additional data on efficacy before making a decision on the proposal.

3. **Reduce Number of Verified Credits Needed to Earn a Diploma.** Verified credit refers to credit awarded for a course in which a student earns a standard unit of credit and achieves a passing score on a corresponding end-of-course SOL test or an additional

<table>
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<tr>
<th>Stakeholder Group</th>
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<tr>
<td>Business leaders</td>
<td>These leaders sought graduates who display professionalism, ethics, punctuality, hard work, appropriate behavior and dress, communication skill, resiliency, curiosity, adaptability, an interest in life-long learning, database skills, problem-solving, personal and business financial literacy, ability to follow directions and get along with others, business writing, critical thinking, public speaking, and the ability to work in teams.</td>
</tr>
<tr>
<td>Board’s Advisory Committee for Career and Technical Education</td>
<td>Desirable skills include an interest in life-long learning, technical competency, ability to write, ethics, and teamwork.</td>
</tr>
<tr>
<td>SOL Innovation Committee</td>
<td>Provided feedback on the Profile of a Graduate, urging a concurrent look at innovation drivers: standards and instruction, assessment, accountability, and professional excellence.</td>
</tr>
<tr>
<td>Virginia School Board Association's Task Force on Workforce Readiness</td>
<td>Summarized career and technical education in Virginia Public Schools Survey.</td>
</tr>
<tr>
<td>Education constituencies</td>
<td>Board introduced draft Profile of a Graduate.</td>
</tr>
<tr>
<td>Division superintendents</td>
<td>Board introduced the draft Profile of a Graduate and diploma strawman proposal.</td>
</tr>
<tr>
<td>School counselors</td>
<td>Because an increasing amount of their time is devoted to social-emotional/mental health and noncounseling duties (bus/lunch duty, testing), there was agreement that counselor ratios would need to be lowered if they are to address the skills sought in the profile.</td>
</tr>
<tr>
<td>Elementary and secondary school principals</td>
<td>Educators are already moving to more problem-based and experiential learning, but there is also fear, given the ingrained pressure to perform on SOL tests. They agree with the direction the profile takes but posed logistical questions and concerns, especially for school divisions with fewer resources.</td>
</tr>
<tr>
<td>Teachers</td>
<td>Teachers questioned the day to day impact on the classroom, the fit with instructional and assessment protocols, the time for implementation, and whether the Virginia Diploma was flexible enough to meet all students’ needs.</td>
</tr>
</tbody>
</table>
5. Incorporate Applied Knowledge and Skills Credential. The credential may be earned by demonstrated competency in each of the “5 Cs”—critical thinking, creativity, collaboration, communication, and citizenship—and within other domains established by the board. Some board members asked how attainment of these skills would be measured and how they would be aligned with workforce credentials. As with the merged diploma proposal, board members said this proposal needed further development, consideration, and feedback before they could adopt it.

6. Add Internship/Externship Options. This proposal encourages but does not require work-based learning experiences related to students’ career goals or interests. Board members endorsed the proposal.

7. Require Capstone Project. All high school students would pursue independent research
on a question of their choice, engaging their analytical skills and developing a final product that reflects their findings. Board members supported the concept as a component of applied knowledge and experiential learning.

8. Develop Career-Specific Courses/Competencies within Traditional Credit Areas. The board took no action on this proposal.

9. Increase Mathematics Requirements. This proposal would require students to take a course involving mathematical thinking and problem solving in each year of high school and gain at least three mathematics credits. Board members noted the proposal needs further development, consideration, and feedback.

10. Consider Alternate Science Options for the Proposed Virginia Diploma. The board was asked to consider two proposals to meet the science diploma requirement: 1) a sequence of 70 clock-hour (one semester) or segmented treatments of earth science, biology, chemistry, and physics, which can be aggregated for up to two science credits; and 2) a three-credit sequence of integrated, problem-based, applied science courses (140 clock hours each or an alternate credit-bearing designation that adheres to board guidelines to waive 140 hours) that use concepts and laboratory skills and practices from the foundational science areas. Board members asked for a clearer explanation of the proposal, relayed questions from stakeholders, and inquired why coding, technology, and engineering were not included. While it expressed interest in further exploration of alternative approaches for science standard credits, the board did not act on this proposal.

Over the course of the summer of 2016, the board held further public hearings and stakeholder roundtables in Manassas, Williamsburg, Abingdon, and Lynchburg to gather feedback on the critical needs of public schools, the proposed Profile of a Graduate and the redesign of high school, changes to the state’s accountability system, and board recommendations amending the Standards of Quality.

What’s Next

Over 15 months, Virginia’s board made a concerted effort to engage constituencies and educate ourselves about the implications of the changes we were planning. Through the fall of 2016, the board reviewed proposed amendments to the Standards of Accreditation, focusing largely on amendments to put into effect the Profile of a Graduate and the redesign of high school. Board members continued to question proposals in order to better understand the implications for school divisions, asked for additional information, and made concrete suggestions. The proposed regulations came back before the board in January, were adopted, and are now subject to the requirements in the Virginia Administrative Process Act. Following executive branch review, they will be published, and a public comment period will follow. At the end of that comment period, the board can make additional changes based on public comment. Once those regulations become final, the board will begin to provide the guidance, communication, and supports necessary to implement the new requirements.

The board is following a compressed time-line imposed in the 2016 legislation and has felt those time constraints keenly. It is my hope that the comment period will allow for the necessary feedback. Certainly, engagement was extremely helpful to the board as it developed the proposal.

Through the Profile of a Graduate, the Virginia board seeks to ensure that every child who graduates from a public school in Virginia has the knowledge, skills, and attributes and is ready to succeed in life—whether in the military, the world of work, or postsecondary education. The changes that we proposed envision that every student would begin in elementary school to be exposed to different careers. In middle school, each student would take a career investigation course and begin to understand how their individual interests can inform their career choices. The middle school student would create an academic and career plan that would be used to develop a course of study for high school. In high school, students would have opportunities to participate in work-based learning experiences.

This intentional focus on the acquisition of skills and attributes, as well as the more student tailored course of study in high school, is intended to ensure that every student who graduates from a public high school in Virginia has been prepared for what comes next.

Diane Atkinson is a member of the Virginia Board of Education and chairs its Committee on School and Division Accountability.
Urban District Anchors Culture Shift in Standards-Based Leadership Strategy

Douglas W. Anthony and Pamela R. Shetley

The role of the school leader demands the talent and finesse of a chameleon on roller skates. Today’s leader is responsible for the accomplishments of students, the growth of teachers in the school building, and stewardship to the greater community—an instructional leader and not just the manager of people and buildings. The job has proved overwhelming. A 2012 study found that one in four professionals who assume the role of school principal in an urban district resign from the job within the first two years. The average tenure of the principalship as a whole is three to four years, even shorter in low-performing, high-poverty schools.

With its 208 schools, 130,000 students, and 19,000 employees, Prince George’s County Public Schools (PGCPS) in Maryland is one of the country’s largest school districts. Serving a high-poverty student population from urban, suburban, and rural communities, the district requires leadership that can enable its learners to combat the conditions of poverty and meet the rigors of college and the workforce. Despite nationally recognized, innovative initiatives to provide students with arts integration, environmental and financial literacy, and language immersion, Prince George’s faced continual turnover at the executive leadership level over the last 15 years, significant gaps in student achievement, and community mistrust.

In addressing its challenges, the district was mindful of research that suggests that leadership is second only to teaching among school-related factors that affect student learning. A 2011 Wallace Foundation study found an empirical link between leader practice and improved student achievement. Thus, Prince George’s could not tackle student achievement gaps without bolstering the preparation and development of school leaders. And it could not build a pipeline of strong leaders without clear standards for leadership.

The district’s approach was fourfold. It mounted a rigorous search for a capable chief executive, adopted a coherence framework to tie expectations for school leaders to goals for student achievement, collaborated with state and university partners to align the PGCPS Leadership Standards with state and national leader standards, and developed leadership pathway programs based on the PGCPS Leadership Standards.

Sustained Executive Leadership

The district had followed a trail of broken leadership, with four superintendents in 10 years. There was a dire need for intuitive leadership with an unbreakable commitment to an urban school district that comprises children who receive free and reduced-price meals (over 60 percent), English language learners and students receiving special education services (25 percent), and minorities (96 percent). Prince George’s partnered with the Maryland State Board of Education, county executive, and local board of education to identify a leader who could provide focus and sustainability. Kevin M. Maxwell assumed the helm of chief executive officer in 2013, remained for the duration of his four-year contract, and will enter into a second contract this fall. Maxwell’s vision, leadership, and stability have positioned the district to achieve its goals, particularly around leader development. Most important, Dr. Maxwell placed relentless focus on literacy achievement throughout the district, something that had not existed prior to his tenure. Ongoing collaboration among local, state, and national partners support this focus on literacy.

With a progressive superintendent in place and a grant from The Wallace Foundation, the district conducted a gap analysis in 2013 covering communication and community engagement, teaching and learning, operations and finance, and organizational efficiency and effectiveness. As part of that effort, the district set five goals: to ensure that teaching and learning produces college- and career-ready students, transform community relations through transparent communication and relationship building, create an organizational structure centered on...
enhancing teaching and learning, align resources to system priorities, and establish a transition team to conduct a thorough review of the system.

Adoption of a Coherence Framework

The district adopted a Coherence Framework to articulate the interdependence of the parts of the school system and illuminate their alignment with strategies for improving student achievement (figure 1). Prior to its adoption, the district lacked a cohesive system to integrate the strategic plan with knowledge management and an operational system geared toward school improvement and districtwide collaboration.

The framework targets instructional improvement at its core while giving all employees a role in teaching and learning and in increasing student achievement. The framework focuses all sectors of the district, including parents and family, on literacy achievement and expectations for school leadership, and it reflects shared core values:

- Students are our priority, and all students can achieve at high academic levels.
- Families, students, and educators share the responsibility for student success.
- High expectations inspire high performance.
- All staff share the responsibility for a safe and supportive school environment contributing to excellence in education.
- The support of everyone in our community is essential to the success of our schools.
- Continuous improvement in teaching, leadership, and accountability is the key to our destiny.

Collaboration with Vested Stakeholders

The district defined the hallmark for leader behavior by creating and adopting distinct PGCPS Leadership Standards aligned to state, university, and national leader standards. These standards provided a common language for

Figure 1. Coherence Framework
what effective school leaders in the district should believe, know, and be able to do. Our district convened many stakeholder groups to help make a one-to-one correlation of the district’s leadership standards with the Maryland Instructional Leadership Framework, the former Interstate School Leaders Licensure Consortium (ISLLC) Standards, as well as the Educational Leadership Constituent Council Standards. This work established a baseline for leader performance that could not only be measured but could be communicated to districts across the country.

The district’s standards for leader practice were then relayed to local university partners, who revamped their leadership development partnership programs to align with them. It is challenging work: University requirements, policies, and restrictions around program offerings hindered our ability to be more flexible and creative in some cases. But through a cohort approach, graduate leadership development, education administration doctorates, and certification programs are offered throughout the district and focus on projects that address areas of need such as poverty, English language learners, special education, social justice, parental engagement, teacher leadership, and leadership sustainability.

The district continues to refine its leadership standards to ensure continuing leader proficiency aligned with current demands of instructional leadership, such as benchmarks established by the Common Core State Standards. We most recently revised the PGCPS Leadership Standards to match the newly adopted Professional Standards for Educational Leaders. By doing so, we help principals gain a better understanding and recognition of their role as school leaders.

### Creation of Leadership Pathways

The district has designed a strategy of leadership development centered on mentoring and coaching to mold strong principals and aspiring principals, and it also developed a standards-based leadership development program, Aspiring Leaders Program for Student Success, in which prime candidates are poised to assume school leadership vacancies as they arise. Previously, the district struggled to maintain a school leadership “bench” that was prepared for the rigors of urban leadership. Now there is a consistent bench of able candidates developed through a program aligned to the PGCPS Leadership Standards (table 1). Moreover, all who join the workforce as principals participate in systemic professional development aligned to the standards.

Throughout this process, PGCPS has used a “progress versus plans” approach. Plans guide the work. But through implementation of the plans, leaders engage in critical learning that has a lasting effect on their decisions and actions. This leadership initiative has sparked significant change across the district. There is now a tiered approach to leadership development, with a broader definition of leaders that includes teachers, school-based leaders, and central office leaders. Our leadership pipeline is stronger and more robust, with candidates ready to take on formal and informal leadership roles. Inherent in this framework is an emphasis on

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| Total Number of New Principal Hires | 37 | 14 | 29 | 19 | 26 |
instructional leadership training. As the role of the school leader has evolved from that of a building manager to that of an instructional leader, PGCP S recognizes the importance of grooming leaders to meet the demands of preparing learners to participate in the global economy. By providing training grounded in the PGCP S Leadership Standards, particularly those standards that speak to the role of instructional leadership, the district renders a preparation program that is focused on improving teaching and learning through coaching. Additionally, the district provides a segue from its graduate and aspiring leadership programs by providing a residency for select leaders who have demonstrated readiness to serve in a quasi-principal role. Assistant principals who have undergone either the ALPSS program or the Assistant Principal Induction Program are required to apply and submit to a rigorous screening, interview, and leadership exercise process for selection into the residency program.

**Implications for State Leaders**

Prince George’s goal has been to expand its bench of highly skilled leaders, with a focus on data analysis, resource allocation, human capital development, and the evaluation of instructional practices, and thereby drive and maximize student achievement.

We learned valuable lessons. First, state education agencies and other partners are indispensable in creating processes for selecting the right individuals. For instance, Maryland has developed a leader tracking system that can monitor individuals’ professional growth and allow districts to more efficiently and equitably identify potential candidates. Partner contributions are particularly valuable in design and monitoring. In general, districts will benefit if state agencies can share how districts across the state align leadership standards and select leaders.

Second, as the role of the school leader evolves, so must the appraisal process for principals and assistant principals. Through trial and error and in collaboration with the Maryland State Department of Education, our district developed a systemwide evaluation tool for principals and assistant principals that bases school leaders’ evaluations on evidence of professional practice and student growth. Previously, the district wrestled with establishing a quantifiable means to assess effective leader practice, a task that requires direct engagement of the state on practices it deems most critical.

State leaders will need systems and structures to support leader development statewide, in addition to helping a district here or there. State boards and state education agencies should make the time to become intimately acquainted not only with the supports the state already offers but also with what districts in their state are developing. State leaders can participate in local events or audit programs to gain insights around their districts’ unique challenges and differentiate the types of support districts need.

In addition, state leaders may find that expertise on leadership development lies buried in unexpected areas within their districts. Some of the districts with the most challenging needs find the most unique solutions, and these approaches could be helpful to other districts in the state. We got into this work by launching regular, purposeful convenings with university and other partners to discuss issues, challenges, and successes. Other districts would surely benefit from such conversations.

State leaders can further assist local education agencies by creating opportunities and structures to share, collect, and analyze hiring, retention rates, and trend data. State leaders and universities should talk with the districts about the candidates who emerge from their programs so district leaders can make informed decisions about placement. Even more important are the discussions about changes needed in educational leadership programs at the university level. When states, universities, and districts are on the same page about the desired quality and characteristics of graduates, they can help to produce able leaders who are ready to assume roles across the state.

Perhaps most important to supporting leadership development is the learning culture that is created amidst this work—reflection on efforts, listening to colleagues, learning together. For our district, many improvements have been made in human resources, talent development, work between and among departments, and systems learning by embracing a learning culture.

State leaders may find that expertise on leadership development lies buried in unexpected areas within their districts.

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Douglas Anthony, Ed.D., is associate superintendent of the Office of Talent Development, Prince George’s County Public Schools, and Pamela Shetley, Ed.D., is the office’s director.
When I was a school board member and district administrator, parents were always asking me, “How can we ensure that our children are assigned the best teacher in the grade level and school?” Parents, educators, advocates, and state policymakers alike want excellence in teaching and learning every day for every educator and student, and this is also the vision that drives my organization, Learning Forward. The Every Student Succeeds Act (ESSA) gives states renewed authority as well as leverage to make this vision a reality. And the role of state boards of education in this process cannot be underestimated.

Consider this theory of action (figure 1). States that accept the ESSA goals of equity and excellence adopt career- and college-ready standards to define their expectations and accountability systems to measure their progress. Lacking a clear strategy for helping students meet higher standards, states will make limited progress. The key move toward enacting this theory of action is an investment in learning systems that give educators the support they need to help students learn.

The goal of a learning system is to have every educator engaging in continuous improvement. At its core, it ensures that every classroom teacher is a member of at least one learning team that meets several times a week to learn and solve instructional problems together. The learning teams engage in ongoing cycles of learning and improvement that are data driven and skillfully facilitated, often by a teacher leader or instructional coach. These learning cycles enable team members to create more focused lessons and assessments and build members’ collective responsibility for all students in the grade level or school. By learning and working collaboratively, educators create a learning culture where they purposely share best practices and expertise across classrooms and schools so all students experience great teaching every day.

ESSA provides states with authority as well as the funding flexibility to support this vision for educator support and development and to set expectations for school systems to do the same. The U.S. Department of Education’s early edition of the consolidated planning application asked states to “provide a description of their systems of professional growth and improvement” if they intend to use Title II funds for professional development. Similar questions appeared in sections related to continuous improvement and monitoring, technical assistance, school improvement, and leadership development. While significant changes have been made in the consolidated applications, states that recognize the importance of investing and supporting their educators could benefit from taking time to answer these questions. When states focus first on how they want teachers to receive the feedback and support they need to improve their practice and thus the outcomes for their students, they are more likely to produce a coherent, aligned learning system.

In addition, the law itself lays the foundation (see table 1) for this vision of a learning system: By our count, Congress included the term “professional development” 79 times. It also includes a revised, much more powerful definition of professional development that is “sustained (not stand-alone, 1-day, or short-term workshops), intensive, collaborative, job-embedded, data-driven, and classroom-focused.” Take note: These words do not describe better workshops or programs. They describe the type of support that all educators need to improve.

Figure 1. Contribution of Professional Development

For students to have a shot at attaining high standards, all teachers must be part of a continuous learning system.

Stephanie Hirsh
their practice daily and deliver better outcomes for students. Discrete professional development events will not improve schools. Only when professional development is embedded in learning systems that support teacher learning teams and other forms of external support will it help educators improve their performance.

States have authority and responsibility for five key components of learning systems: a shared vision and standards, data-driven goals and evaluation, resource alignment, leadership capacity, and sustained implementation and change management.

### Shared Vision and Standards

State boards of education, in partnership with state and local education agencies, have the authority and the opportunity to promote a vision for teaching and learning in the state. Just as student standards set expectations for student success, state education leaders may define the kind of teaching they want students to experience and the kinds of learning they want both students and teachers to experience.

At the heart of this new vision for teaching and learning is a learning culture that recognizes the value of continuous improvement for long-term, sustained gains. State boards can provide a narrative that defines the learning culture and paints a compelling vision of its North Star. For example, such a statement may begin as follows:

> In a learning culture, mind-sets, structures, and practices align to improve individual and institutional practice.

> In a learning culture, every educator is a member of a learning team committed to the success of its students, schools, district, and state.

Achieving this vision does not happen overnight, but it is possible, as several countries and select U.S. schools and school systems have demonstrated. To build a shared vision of high-quality professional learning, the Florida Department of Education organized “learning journeys” for district and school professional learning leaders across the state. Department staff identified organizations in other sectors in which adults continually learn and improve. By visiting organizations with successful learning cultures, district and school leaders experienced new approaches to adult learning. During the 2016–17 school year, participating educators developed and tested model learning experiences aligned to the state vision; they plan to share lessons and scale up their successes.

Vision statements offer one place to start. Other options include adopting new teaching and professional learning standards to describe excellent teaching and quality professional learning. These standards can describe progressions from novice to proficient to exemplary teaching. While detailing the critical elements of professional learning, the standards also provide an affirmation that the state board recognizes the importance of quality professional learning and wants to ensure that educators receive nothing less.

### Table 1. ESSA Support for Components of Learning Systems

<table>
<thead>
<tr>
<th>Shared vision and standards</th>
<th>Data-driven goals and evaluation</th>
<th>Resource alignment</th>
<th>Leadership capacity</th>
<th>Sustained implementation with change management</th>
</tr>
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<tbody>
<tr>
<td>• Leverage ESSA’s updated definition of PD to strengthen quality.</td>
<td>• Use evidence and data to put your vision into practice.</td>
<td>• Use Title I and II funds to advance equity.</td>
<td>• Invest in leadership with ESSA’s 3% set-aside.</td>
<td>• Deepen stakeholder engagement related to learning AND improvement systems.</td>
</tr>
<tr>
<td>• Use ESSA plans to articulate a vision for learning systems.</td>
<td>• Ask LEAs to provide data that support goals and data that will be used to evaluate strategies and drive improvement in local funding applications.</td>
<td>• Leverage School Improvement Grants.</td>
<td>• Advance leadership for equity through Title I.</td>
<td>• Leverage ESSA continuous improvement theme to strengthen implementation.</td>
</tr>
<tr>
<td>• Adopt (or use current) Standards for Professional Learning to establish and monitor baseline.</td>
<td>• Expand collaborative time under Title IV.</td>
<td>• Use Teacher and School Leader Incentive Fund to advance leadership capacity.</td>
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These words do not describe better workshops or programs. They describe the type of support that all educators need to improve their practice daily.
Data-Driven Goals and Evaluation

Data use is both a priority in a learning system and a powerful representation of continuous improvement. Once education leaders establish a vision and set standards, their collection and analysis of relevant data pinpoint the gaps between the standards and the current status. Data about their state and local needs, considered in light of research-based evidence, can help decision makers and planners choose strategies and programs that they believe will narrow the gaps. State boards as well as state and local education agencies must engage in ongoing data analysis and evaluation at multiple levels, including assessing the extent to which programs or strategies are advancing their vision, promoting shifts in teaching aligned with standards of effectiveness, and ultimately, producing better student outcomes. These conversations position state boards of education to make key midcourse corrections or substantive changes when evidence suggests they are not on the path toward their goals.

Foundational to data-driven decision making are policymakers and educators’ knowledge and skills. Without them, decision makers will gain little from data analysis. In addition, policymakers should expect that educators have access to, and are using, data (including student summative and formative measures, attendance, attitudes, and more) as they proceed from goal setting and intentional learning to implementation, monitoring, and refinement. By ensuring these resources are accessible in all schools, state boards can be reasonably confident that teaching and learning will improve every day.

The Massachusetts Department of Elementary and Secondary Education gives districts web-based resources and support for this task. In an interactive learning module, the state provides step-by-step processes to evaluate and improve professional learning.

Leadership Capacity

Principal leadership is second only to teaching in affecting school performance, and it requires attention to recruitment, preparation, evaluation, and ongoing support. Likewise, states need great people to lead the creation and sustained commitment to professional learning systems at every level of the education enterprise. The foundation for effective leadership is effective professional learning. It must equip district, school, and teacher leaders with the knowledge and skills they need to perform their jobs, including the ability to help create a culture of professional learning for everyone else. In top-performing systems, leaders receive sustained, intensive support, experiencing the strategies and practices that they will then facilitate themselves.

State boards of education may use ESSA as an opportunity to revisit performance standards for principal supervisors, principals, and teacher leaders. They may also describe new career pathways to ensure that succession systems are in place. Districts need more teacher leaders to facilitate team learning as well as assume other responsibilities associated with new learning structures in schools. States need long-term plans for recruiting, developing, and supporting leadership at the state, district, and school levels. Such strategies provide the “bench” for sustained improvement and growth.

An example of a “grow your own” strategy is the Maryland Department of Education’s Promising Principals Academy, which prepares and positions the state’s most talented leaders to lead schools toward attainment of higher standards. Superintendents choose two of the most promising assistant principals from each district. Each participant receives coaching from a former principal, and all members of the cohort meet multiple times each year for multiday retreats focused on instructional leadership and core competencies. More than 40 alumni have been promoted within their districts since the program’s 2014 launch.

Resource Alignment

State boards of education have a fiscal responsibility to ensure that state and district resources are allocated in a manner that evidence has shown is most likely to lead to achievement of their goals. Traditional thinking—“this is the way we have always done it”—poses a challenging barrier to realigning resources, however. To surmount it, state boards may ask the state education agency (SEA), local education agencies (LEAs), or both for the rationale and evidence to support their resource allocation decisions. Many resources are available from ED’s What Works Clearinghouse and the Institute for Education Sciences, as well as
nonprofits like Education Resource Strategies. They might follow it up with “deeper dives” into discussions of returns on investments or program results.

State boards may discover that the data they need are hard to obtain. One way to ensure greater access going forward is to request that districts describe how they will collect data and conduct evaluations for all major expenditures.

In addition to investments in people and programs, states and local school systems make considerable investments in time and technology. Similar questions could be asked about the impact of these investments. If a state embraces the vision for the learning team, then it will want to study how time is allocated and consider options for reorganizing the school day and calendar to support team learning.

Sustained Implementation and Change Management

State boards are all too familiar with promises of great results from new programs and strategies that end up yielding little. Poor implementation is one reason. Change theory emphasizes the importance of effective performance management. The final responsibility of the state board, then, is to develop its own performance management plan. That plan may address effective stakeholder engagement, clear communications, well-defined roles and responsibilities, clear action plans, feedback loops, and continuous improvement protocols.

Kentucky exemplifies state-level commitment to managed implementation. The Kentucky Department of Education has created a specialized delivery unit to “build the agency’s capacity in project management, data analysis, and data-driven decision making.” The unit monitors progress on each of the state’s strategic priorities. Furthermore, as part of the agency’s strategic planning, unit staff members participate in cross-functional teams. A statewide teacher advisory council also gives the state commissioner of education input on progress and needs. Finally, the department gives local leaders real-time feedback about their progress through its regional instructional specialists and its work with district teams in its statewide Leadership Networks initiative.

Another critical component of this action plan must be ongoing policy and regulatory review. Policy is often used to provide direction and guardrails. Yet there are times when policies inhibit innovation or adoption of new programs and thus must be changed. State boards can use stakeholder engagement to help them to understand the impact of their policies, what is working, and what is problematic. State boards can use this feedback loop to leverage the best outcomes out of its policy- and rule-making authority.

Conclusion

State boards of education hold primary responsibility for establishing compelling visions for education and ensuring that conditions exist to sustain quality teaching and learning. When states decide to put teaching and learning first, they will find that continuous improvement grounded in learning systems is the most logical strategy. State boards can and should use ESSA to advance efforts to develop learning systems that ensure successful teaching and learning for all.

Ultimately, state boards of education must collaborate to be effective. They will work with SEAs through rule making and planning. They can influence LEA actions by contributing to the local applications for federal funding allocations. State boards, in partnership with SEAs, can guide progress toward the creation of learning systems in every district and school. By raising critical questions aligned to the five essential components, state boards will launch important conversations that move their state closer to the mark: when all educators get daily support needed to ensure that all students experience quality teaching every day. 

1Every Student Succeeds Act (ESSA), P.L. 114-95, Sec. 2102, p. 1925.
2ESSA, Sec. 8002, p. 2096.
4Learning Forward and Education Counsel, A New Vision for Professional Learning.
5Ibid.
“There are two worlds in which we can choose to live. One is called Behind; the other Ahead . . . our choice is clear . . . each of us is potential, each of us is possibility, but only if we Think Ahead.”

—Heartland Foundation Think Ahead Covenant

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—Jennifer James, Ph.D., author and cultural anthropologist

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Policy Attributes.”


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The district organized its work around principles articulated in Jim Collins and Morten T. Hansen, Great by Choice” (New York: HarperCollins, 2011), whose titular maxim grounded the district’s strategic plan, theory of action, as well as its Coherence Framework.

For example, one group included representatives from Maryland Department of Education’s Breakthrough Center, the National Institute for School Leadership (NISL), principals, and central office administrators and executives from the district. See Maryland State Department of Education, Strategic Plan, Theory of Action, as well as its Coherence Framework.


PGCPS partners with Johns Hopkins University, Bowie State University, the University of Maryland-College Park, and McDaniel College. We started by addressing preservice programs at each and then developing a common language around expectations, guided by the district standards.


cont’d from pg 41

Perspective on School Leadership: Leadership Practice as Stretched over People and Place,” preliminary draft prepared for presentation at the annual meeting of the American Education Association, San Diego, (April 2004), https://www.sesp.northwestern.edu/docs/lead-stretchSPISHE.pdf.


Learning Forward and Education Counsel, A New Vision for Professional Learning.

Ibid., p. 39.
The Every Student Succeeds Act (ESSA) dominated the meeting agendas of state boards of education across the country in 2016, according to data in NASBE’s new State Board Insight database (see figure 1, page 3). In particular, state boards used their public meetings to focus on assisting students most in need of support and on engaging stakeholders as their states began preparing state plans to implement ESSA.

State boards frequently discussed English learners, homeless youth, and students in foster care in meetings throughout the year. In fact, 15 states focused directly on students in those subgroups on 30 separate occasions. Although many boards heard broad presentations about all three subgroups early in the year, the number of directly related agenda items tripled following the U.S. Department of Education’s summer release of Dear Colleague letters urging attention to these subgroups. Four states discussed subgroups before June, but twelve states did in subsequent months.

As board members grappled with which metrics to add to their accountability systems, they focused particularly on chronic absenteeism and social-emotional learning during 2016. But board members went beyond discussions about specific indicators. Often, board discussions about accountability systems morphed into explorations of new ESSA opportunities to boost equity and student growth.

With its strong focus on stakeholder engagement, ESSA pressed state policymakers to confront perspectives they might otherwise have missed. In this respect, the law appeared to strike home: Many state boards regularly received updates on stakeholder engagement in 2016, and some board members took active roles themselves, attending stakeholder forums and reporting back to their boards on what they heard.

The District of Columbia State Board of Education brought stakeholders to their meetings for interactive panels and discussions between stakeholder representatives and board members. John-Paul Hayworth, executive director of the DC board, said he expects those discussions in 2016 to affect board decisions down the road. “As an elected board, engagement is at the heart of our decision making,” he said. “The state board is committed to not only doing the talking but taking an active listening stance with every policy decision…. I can certainly say that testimony from students a couple years ago is why we have new health education standards in place today. Testimony from adult learners is why we approved a state diploma as well.”

State boards’ flurry of activity around ESSA issues in 2016 may foretell a strong commitment to rolling up their sleeves on implementation in 2017. They started early: 65 percent of boards that met in January 2016 learned about ESSA mandates just a month after its passage. The majority of state boards that met monthly considered ESSA, including 84 percent in October alone. ESSA was integrated into board members’ deliberations and discussions at two-thirds of all meetings in 2016.

As states finalize their accountability plans and begin implementation of ESSA, NASBE’s State Board Insight database will be tracking all ESSA provisions state boards consider in 2017. State Board Insight will feature trend analysis and highlight the critical work of state boards of education.

On the Agenda

Sarah-Jane Lorenzo
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www.nasbe.org

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What do the Hippocratic Oath and the Carpenter’s Rule have in common? It may sound like a riddle, but it is not a trick question. A state board member recently told me he tries to keep these two maxims in mind every time he makes a decision on education policy.

I laughed when he first said it. But then I realized that, although he is a very funny person, he was serious about this. And now, after thinking about it myself, so am I.

The Hippocratic Oath. All physicians and health care professionals are taught the oath attributed to the Greek physician Hippocrates: Primum non nocere. That is, first, do no harm. In the healing professions, it is not always possible to effect a cure for a sick patient, but at a minimum the treatment given to an individual should not make the situation worse.

(A historical note: The Latin phrase primum non nocere does not actually appear in the original text. The oath itself also might not have been written by Hippocrates and may, in fact, date only to the 19th century. But origins aside, the sentiment still holds.)

What’s good advice for healers is also good advice for education policymakers. There are great challenges ahead for state boards. From choosing a summative assessment to providing support for low-performing schools, your board will make choices that can have a big impact on schools, teachers, and students.

The best way forward is not always clear. (Let’s face it: If we knew how to improve low-performing schools, wouldn’t we have done it already?) But when you are making a decision, your first goal should always be that you will not make things worse.

The Carpenter’s Rule. Carpenters know that there are some actions that do not allow for a do-over. If you cut a piece of wood too short, there is no way to fix it. So the rule for carpenters has always been “measure twice, cut once.”

And really, that is pretty good advice when making education policy as well. Whether your board is selecting metrics for the state accountability system or crafting a policy on teacher preparation, there will be real-world consequences for your decision. Schools will create systems to collect certain types of information, all of which will have to be disaggregated by subgroups. Prospective teachers will—or will not—enroll in a course.

Those choices are not easily undone. So the best advice is to proceed with new policies or changes in a thoughtful way. As I sometimes say, you can make change fast, or you can make change last.

As states begin to implement the Every Student Succeeds Act, everyone who touches a state’s education policy is entering new territory. State boards, state legislators, state education agencies, and governors are all playing new roles and taking on new responsibilities. There is no roadmap.

But you can still scout for road signs that will keep you on the right path. The Hippocratic Oath and the Carpenter’s Rule are two such guideposts toward thoughtful education policymaking in your state.
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