This article summarizes the findings and recommendations of NASBE’s 2013 Study Group on Deeper Learning.
Prior to walking across the graduation stage, Tarshea Williams, a senior at Envision School in Hayward, California, stood before her teachers and gave a presentation on her senior capstone project, the culminating activity of a four-year effort that asks the essential questions of “Why is education important?” and “How does your work show you are an educated person?” (available at http://ow.ly/tBhYu). As her teachers peppered her with questions during her 90-minute project defense, Tarshea discussed a variety of her learning experiences, including her research on the learning needs of students with disabilities, her internship working at a school supporting students with speech therapy needs, and her application of Freud’s psychoanalytical lens to characters in Chinua Achebe’s *A Man of the People*, among other areas. What’s more, Tarshea didn’t just describe what she did over four years—she synthesized research, communicated her understanding, and evaluated her learning needs and goals on her path to becoming one of the first students in her family to enter and, hopefully, complete post-secondary education. In short, she engaged in a process of deeper learning that demonstrated her readiness for college, career, and civic success.
Deeper learning represents an education that not only facilitates mastery of academic content, but other key competencies as well, including, but not limited to, critical thinking and problem solving, effective communication, collaboration, learning how to learn, self-regulation, and academic mindsets important for success in college, career, and civic life.
Policy-makers who want to support students like Tarshea at scale must grapple with a thorny question: “How do we create education policies to prepare youth for the world they’ll enter tomorrow when our imagination and thinking is often limited to the world we live in today?” Those who grapple with this essential question recognize a significant challenge: the world, its opportunities, and its complexities—including speed of communication, development and use of technology, global connectedness, and other trends—have altered what it is that students are expected to know and be able to do. It has been said many times, but it bears repeating: In a global economy and an evolving society, failure to prepare all students to meet these new demands represents a significant barrier to success for students, their communities, states, and the nation. The challenge for state policymakers in this era is, then, to design an education system concrete enough to meet the real and imminent needs in their states today, while being nimble enough to rapidly adapt to changes in the future.

To help policymakers meet this challenge, NASBE convened a study group on “The Learner and Learning: 2013 and Beyond,” composed of members from 13 state boards of education. Members of the group heard from experts, engaged in deeper learning exercises, and discussed a wide range of related issues in order to determine:

- what is meant by deeper learning, the skills that are the basis of this concept (see the “Defining Deeper Learning” textbox), and the need for deeper learning now and in the future;
- the relationship of related abilities such as creativity and innovative thinking to deeper learning;
- the types of learning environments that help facilitate deeper learning competencies; and
- a policy framework through which state boards of education can address deeper learning.

This report summarizes some of the challenges and opportunities facing the 21st century learner and the study group’s recommendations on what states can do to help promote learning environments that prepare students for college, career, and civic success.

**Looking to the past, evolving into the future: trends that define the educational landscape**

Preparing students for the challenges and opportunities of the future does not mean we throw away everything we have already learned about a quality education. For example, providing opportunities to scaffold knowledge based on existing experience, using that knowledge to solve new problems, and practicing self-regulation and reflection have been written about extensively in literature building upon Bloom’s Taxonomy and other frameworks for quality teaching and learning (see graphic). This being the case, the two key questions state policymakers must answer are 1) “how do we adapt what is known about high-quality learning environments to address important trends facing education and the broader society?” and 2) “how do we provide equitable access to these learning environments to all students?”

To answer the first question, we will look at three trends that highlight policy challenges states must address.

**A globally connected world ushers in a new imperative of high standards for all.**

As global economic changes move inexorably forward, the need to educate all students to high standards has become impossible to ignore. In a 24-7 connected world, it is increasingly difficult to separate individuals by zip codes, not to mention borders—and international outcomes on education measures such as PISA show that U.S. students remain in the middle of the pack at best when compared with their international peers. Because Detroit is no longer competing only with Cleveland for jobs, but also Seoul and New Delhi, a new national equity imperative has
emerged: “all hands on deck.” In a global, all-hands-on-deck economy where no individual’s talent can afford to be wasted, states must think through ways to address barriers to learning for their most disadvantaged students—including low-income, special needs, and English language learner students—so as to harness the full individual, intellectual, and creative capacities of their citizens in the future. In this way, failure to effectively educate all students not only fails the potential of the individual student, it also creates significant economic difficulties for local communities, states, and the nation.

**The nature of the job market and what students must know and be able to do have changed, demanding cross-disciplinary application of knowledge.**

The education students receive must prepare them for the job market of tomorrow, not the job market of yesterday. Several characteristics of this new economy will undoubtedly affect how students are educated for the future, including:

- **Reduced demand for memorization for recall.** There is less and less demand for memorizing isolated facts for recall when these facts can be drawn within seconds from a smartphone; instead, there is a greater demand for individuals to memorize, synthesize and then utilize knowledge to solve new and complex problems. Note that this does not mean knowledge of content in many areas is no longer necessary—just that memorizing some specific bits of information may not be as important as it was in the past. For example, in American history, it is still important to know that the Great Depression of the 1930s followed the Roaring Twenties, and even that the Depression was precipitated by a stock market crash. It is not so important to know that Black Tuesday of the Wall Street Crash occurred on October 29, 1929.

- **Technological advancement.** Technology has not only flattened the world—as Thomas Friedman and others have written extensively—but it also continues to alter how work gets done. Activities ranging from manufacturing to accounting are now becoming increasingly automated and individuals in these and other fields have been forced to apply new skills in new contexts;

- **High rate of career changers.** Individual job tenures are becoming shorter. The Bureau of Labor Statistics has found that individuals between the ages of
25 and 34 stay at jobs one-fourth as long as people between the ages of 55 and 64.4

These and other factors highlight the new reality that students enter an economy where they will be expected to think critically and creatively, apply knowledge to new complex problems, collaborate and communicate with individuals across different disciplines and cultures, remain adaptable to changes in technology and the economy, and engage in a continuous process of life-long learning. Consequently, state policymakers and educators must reflect on how current and future educational experiences facilitate these and other key 21st century competencies.

**trend**

A faster, ever-changing world demands nimble schools.

The 21st century is defined by practically instantaneous communication. The annual report by a leading cloud platform provider, Akamai, stated that global Internet and connectivity speeds increased again in the last year by 17 percent,5 highlighting the continued emergence of a faster, more interconnected world. This trend demands that students not only become more adept in this faster world, but that the school systems that educate them also become more responsive to new changes and opportunities. Just as businesses must continually innovate to stay ahead of the curve, education systems must continue to become more adept at facilitating innovation (and must do so while keeping in mind that some educators, in the pursuit of cutting-edge learning environments, can be lured into mistaking educational fads for meaningful innovation). To stave off the resulting innovation fatigue, it is important that even as states remain committed to innovating, the innovation pursued must be clearly defined and in line with the comprehensive learning vision of education that each state and state board decides on.

Given these trends, developing an education system that meets the challenge set out in this report—to create a system that is concrete enough to meet the real and imminent needs in states and nimble enough to adapt to changes in the future—is no easy task. To address the trends highlighted above, a system must accomplish at least three broad and difficult goals. It should be:

1. Built on a foundation that can address both academic and non-academic barriers to learning in a holistic way, comprehensively accounting for the nature of learners and their needs and the nature of a 21st century global and technological society;
2. Designed to prepare all students for both the knowledge and skills they need to succeed in college, career, and civic life; and
3. Dynamic enough to continuously innovate and adjust to future changes and opportunities.

The next section highlights some actions states can take to address these goals. These action steps form the core recommendations on deeper learning from the NASBE study group.

**study group recommendations**

1. **Support a system that comprehensively addresses the nature of learners and the unique needs of individual students.**

As highlighted earlier, in a global economy it is essential that all, not simply some, students are prepared with the skills and competencies important for college, career, and civic success in the 21st century. This is obviously much easier said than done; after all, as most educators will attest, effective education depends on far more than lessons and classrooms—learning takes place within a broader educational, social, and emotional context. Indeed, the best prepared lesson in the world can fall on deaf ears if a student feels hungry, hopeless, or unsafe. It is equally well known that student academic outcomes are affected by a multitude of factors, many—such as student health,6 the overall school climate,7 and social and community capital—that fall largely outside the control of the classroom teacher.8 Therefore, failure to address the broad range of students’ needs risks the success of subsequent investments.

While challenging, meeting students’ needs in a comprehensive manner is by no means an unattainable goal. To help address to learning, educators and other school staff must be empowered to identify student challenges in a proactive, preventive manner, be trained in addressing the needs of students holistically, and be sufficiently knowledgeable and supported in referring students to other resources when challenges exceed their capacity and expertise. While it is true that schools cannot do everything, many states are taking steps to help schools create a stronger foundation for deeper learning by ad-
Through most of the 20th century, academic instruction in schools went on in much the same way: students completed individual work that largely included studying books and completing worksheets, memorized facts, took tests, and received individual grades, often based largely on their ability to recall information. In some cases students deemed academically capable were placed on a college track, while their less academically successful peers were placed on a vocational track. Learning was isolated to disciplines, confined to a classroom, within school hours—along with some homework on the side—and all students in a class received largely the same type of instruction. Technology lay at the periphery of instruction and opportunities to apply learning to real life situations were rare.

For many reading this article, this represents our own education, and for many years it served students and the country fairly well. Nevertheless, continuing this education model is likely to be costly to both individuals and the nation for two reasons: first, too many students in this environment become disengaged, slip through the cracks, and drop out of the system; and second, the world has evolved with new demands and opportunities and continuing this mode of learning will short change even those who would likely succeed in the traditional system.

Changing from Old to New Education Systems

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To better meet the needs of all students, educational practices and the policies behind them must continue to evolve. For example:

- Because success in college, career, and civic life demands that students be able to think beyond individual disciplines, work collaboratively in diverse settings, synthesize knowledge, use technology in appropriate ways, and solve complex problems, students’ learning tasks must reflect these and other deeper learning competencies.

- Because students’ needs and learning styles are diverse, educators must be empowered to expand who delivers learning as well as where, when, and how learning takes place, seizing opportunities to personalize student learning opportunities whenever possible in order to prepare all students for both postsecondary education and multiple careers.

- Last, but not least, because of continuing changes in technology, in the world economy, and in the education knowledge base, and because making significant changes in policy and practice will inherently involve some mistakes, creating this system will be an iterative process—meaning policy governing schools must be dynamic and open to changes when necessary.

**School Changes Required for Deeper Learning**

<table>
<thead>
<tr>
<th>Old School</th>
<th>New School</th>
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<tbody>
<tr>
<td>More individual work</td>
<td>More collaborative work</td>
</tr>
<tr>
<td>College or career ready</td>
<td>College and career ready</td>
</tr>
<tr>
<td>Preparation for one career</td>
<td>Preparation for multiple career changes</td>
</tr>
<tr>
<td>Learning takes place within disciplines</td>
<td>Learning takes place across disciplines</td>
</tr>
<tr>
<td>Technology is at the periphery</td>
<td>Technology is integrated into learning</td>
</tr>
<tr>
<td>Less memorization for recalling facts and content</td>
<td>More connecting prior knowledge with new content, and more synthesizing and hypothesizing to solve new and complex problems</td>
</tr>
<tr>
<td>One-size-fits-all instruction</td>
<td>Personalized learning environments</td>
</tr>
<tr>
<td>Learning confined to the classroom and school calendar</td>
<td>Any time, any place learning</td>
</tr>
<tr>
<td>Schools and policy governing schools prone to sluggish change</td>
<td>Schools and policy governing schools respond dynamically to changing needs and environments</td>
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dressing the nature of today’s learners, and their academic, personal, social, and emotional needs. The following recommendations represent examples of actions states can take to strengthen this foundation:

**Develop standards that meet the complete needs of the learner.** States and state boards are charged not only with approving core academic standards, but providing guidance and quality standards around a range of topics that contribute to a well-rounded education, including everything from physical education and nutrition to social—emotional learning and postsecondary counseling. The standards and supports states provide districts and schools can ensure that barriers to learning, including physical and mental health problems, are addressed preventively and that learning environments are conducive to deeper learning. Moreover, these standards do not have to be separated from a broader vision of ensuring students have the knowledge and skills to be college, career, and civic ready—they can be mutually reinforcing.

There are many examples of state standards addressing students’ comprehensive needs that also reinforce deeper learning and other competencies essential to student success. For example, the Illinois standards for social and emotional learning include three goals: 1) develop self-awareness and self-management skills to achieve school and life success; 2) use social-awareness and interpersonal skills to establish and maintain positive relationships; and 3) demonstrate decision-making skills and responsible behaviors in personal, school, and community contexts. Similarly, the National Health Education Standards adopted in some form by many states call for students to analyze health issues and demonstrate their knowledge through a variety of means. By adopting and implementing these and similar standards, states not only ensure that important barriers to student learning are addressed, they also foster in students the capacity to invest themselves in their work and become lifelong learners.

**Train educators to meet the needs of an increasingly diverse student body.** While clear standards are an important start to creating conditions for effective learning, they are simply words on a page until both new and experienced teachers and staff are adequately trained and prepared to bring them to life. Census estimates have projected that racial and ethnic minority groups combined will comprise more than half the U.S. population under 18 by 2018; other analyses show that low-income students already make up the majority of students in the southern and western regions of the United States. Further, nearly half of first births today are to unmarried women, most of them in their twenties. This is a concern for educators because “children born outside of marriage—including to cohabiting couples—are much more likely to experience family instability, school failure, and emotional problems.” If teachers are ill-prepared to meet the needs of this increasingly economically, culturally, and socially diverse student body, they and their students will be at a disadvantage. These demographic trends are behind the move in many states to incorporate competencies on teaching to a diverse population among their professional learning standards.

For example, the Massachusetts Professional Standards for Teachers and subsequent state evaluation and professional development systems include teachers having instructional planning and engagement approaches that support students from diverse backgrounds and the ability to assess and make instructional adjustments based on differences in student needs such as their background knowledge, learning skills, and proficiency in English. These standards, if applied and supported effectively, can help create more dynamic, engaging learning environments for all students in a preventive and proactive, rather than reactive, manner.

**Support a school climate conducive to deeper learning.** In addition to supporting stronger teacher-student relationships that develop a foundation for deeper learning, states and their schools are also focusing on school climate outcomes to help facilitate these learning environments. The quality of learning environments—and particularly school climate—can affect students’ comfort with taking learning risks and in collaborating and communicating with peers and adults in the school.

Ohio has been one of the state leaders in addressing this issue. Through a collaboration between the Ohio State Board and Department of Education, the state released school climate guidelines that provide districts clear benchmarks on removing barriers to learning, facilitating community engagement, and making
direct connections between school climate and student learning. By delineating more comprehensive visions of school climate, states like Ohio help create a foundation for more complex learning experiences that facilitate deeper learning.

Empower schools to leverage external partnerships to meet learners’ needs comprehensively. There will always be challenges some students face that will go beyond what school efforts to improve school climate and train teachers can do to help; teachers are not, after all, trained to be optometrists, dentists, psychologists, or social workers. Given the importance of student health and well-being in enabling students to focus on learning, it is as important for educators to be as aware of what they cannot do to improve conditions for learning as it is to know what they can do. With this understanding, schools can be ready to refer students to community partners while protecting student and family privacy and safety—and such partnerships can in turn yield great benefits for schools and their students.

Connecticut is one leading state in approaching education of youth in a more comprehensive manner, incorporating this more comprehensive strategy into the state’s “2012: The Year for Education Reform in Connecticut” plan. In addition to reforms around reducing red tape and supporting school innovation, the plan highlights key comprehensive supports that provide the foundation for student learning, including strengthening the state’s support for community schools, an approach designed to leverage services across sectors to meet a broad range of students’ needs and help engage students in deeper learning opportunities in their communities. Through the support of comprehensive education strategies such as community schools, policymakers can encourage a system that removes barriers to learning for significantly more students and makes deeper learning more attainable.

2. Align students’ educational experiences with 21st century college, career, and civic demands.

Beyond laying a basic foundation for deeper learning, states must also continue working to ensure students’ actual educational experiences reflect the goal of college, career, and civic life success. National surveys and research have found the need for more work in this arena. For example, in an extensive analysis of what research shows about student abilities to succeed in postsecondary education, researcher David Conley found that many college students lack key cognitive strategies such as critical thinking and problem solving, as well as academic behaviors such as perseverance and acceptance of critical feedback—competencies considered to be essential to student success in postsecondary education. Similarly, surveys of employers reveal that in addition to lacking basic academic knowledge, new employees are often hobbled by lack of foundational competencies such as areas as problem solving, written and oral communication, teamwork, and self-direction. Clearly, states with the goal of preparing their young people for success must cultivate these competencies in students.

This can be difficult for many reasons, not the least of which is the number of moving parts that must work together to build an education system that facilitates deeper learning, components that include standards, graduation requirements, teacher preparation, and assessment and accountability systems, among others. Rather than taking a piecemeal approach to this challenge, states across the country are approaching education more holistically to ensure students have experiences that lead to college, career, and civic success. The following recommendations represent examples of actions states can take to enable this level of learning:

Develop and communicate a comprehensive vision of college, career, and civic readiness. While policymakers cannot do the on-the-ground hard work of involving students in learning opportunities that foster engagement and deeper learning, they can create conditions where this type of learning is more common. States across the country are working to develop comprehensive visions of college, career, and civic success, including differentiated performance measures that are reinforced across state programs and initiatives.

One example of such an undertaking is the statewide effort in Kentucky to support college and career readiness. The state has not only clarified what it means by college and career readiness, it has established clearly defined benchmarks in pursuit of this goal and unified initiatives around accelerated learning opportunities, secondary school intervention programs, college and
career readiness advising initiatives, and bridge programs to support the goal. These initiatives should ensure that changes implemented are not piecemeal or confined to isolated silos, but comprehensively supported as part of a broader vision of student success.

Provide students with guided awareness opportunities, including incorporating projects as part of high school graduation requirements. Clearly, comprehensively facilitating deeper learning means these changes must go beyond standards and assessments and be focused on actual student experiences. Study group members referred to this as a process of developing “guided awareness.” This means providing students learning opportunities that extend their understanding of postsecondary education, career, and civic life beyond their high school experience, as well as giving them chances to develop deeper learning competencies. Guided awareness opportunities include activities such as postsecondary and career counseling that raise student awareness of future opportunities and applied learning opportunities such as service-learning and work-based learning that enable students to apply what they learn in their classrooms to real career and community issues.

One way states can promote these opportunities is through high school graduation requirements. Maryland’s service-learning requirement is an example of such a policy. In order to receive a diploma, each Maryland senior must complete a service-learning project that meets seven state-defined best practices, including connecting academics to an applied service activity, ensuring reflection throughout the activity, and developing student understanding of the complexities of the issue, project specific skills related to the issue, and the importance of civic responsibility. By helping students experience how their learning relates to issues outside of a textbook, states not only help their students develop skills they will use in the future, but also help answer the age-old question, “why am I learning this?”

Prepare educators to facilitate deeper learning experiences. As with the earlier recommendation of preparing educators to comprehensively address students’ needs, educators will also need support in implementing new teaching approaches that facilitate deeper learning. A variety of instructional approaches have been identified to help facilitate deeper learning, including team teaching; emphasizing broad applicability of concepts; encouraging elaboration, self-explanation, and metacognition; and better utilization of formative assessments. Similarly, research and evaluations have demonstrated that teacher training that encompasses more practice-based professional development, collaborative learning and reflection, and—much like student learning—approaches that facilitate metacognition, help support teachers’ capacities to foster deeper learning in their classrooms. With this understanding, some states, such as Delaware, have advanced teacher observation rubrics, professional development, and collaborative planning time specifically designed to improve teacher practice in these and other areas.

Create opportunities for educators to more easily access Open Education Resources that support deeper learning. In addition to being better trained, teachers need to be equipped with the materials that support their success. Knowing this, a strategy some states are paying greater attention to is making it easier for teachers and staff to access Open Education Resources. Open Education Resources include items such as course modules and materials, e-textbooks, rubrics, assessments and other tools and techniques used to convey knowledge that are available free to educators.

One state that has been a leader in this effort is Utah. In 2009, the state board of education approved an administrative rule that allows open licensing of materials created by state employees using public funds, including teachers. Rather than being limited to a handful of expensive providers for materials, the state board’s rule enables Utah’s educators to access curricula, assessments, and other materials created by their peers at little to no cost. This initiative and others like it across the country enable teachers, acting as a professional community, to more easily access and share resources that help provide high-quality learning experiences.

3. Enable a system driven by quality and open to innovation.

While the strategies highlighted above are important in removing barriers to and creating opportunities for deeper learning, they don’t represent the end of any state or district’s work. For example, in the early 1990s, as states, school districts, and
states contemplated strategic plans to prepare their students for the future, words like “Internet” and “the web” were likely not incorporated into their documents; just more than 20 years later, few school districts, or companies for that matter, would create a long-term strategic plan without incorporating the use and adaptation of technology.

To fulfill the promise of preparing all students for college, career, and civic success, education systems must continue to respond to trends, opportunities, and challenges within our broader society—such a system must remain dynamic, able to learn from experiences of initiatives that have not worked and expand on lessons from those that have. In many cases, significant changes are needed in state education policy; and increasingly state policymakers are stepping up to make important and difficult decisions to transform the educational experiences of students in their states.

While states recognize the need for change, there are several factors that merit caution. First, children and schools are not simply experimental subjects; applying untested and ineffective strategies in the name of innovation could have serious ramifications—including depriving children of important educational opportunities—that affect their chances for future success. Moreover, districts and schools have to shift resources and efforts to initiate innovative strategies and often feel compelled to implement the next “great reform,” which could lead to innovation fatigue or even successive failures of once-promising initiatives.

States can take several steps to guard against these failures and still foster innovation. These include providing flexibility as opposed to mandates to those interested in implementing an innovative educational approach, ensuring innovations fall within the state’s comprehensive vision of education, providing local capacity-building assistance to support initiatives, and enabling data systems to provide real-time feedback on the successes and challenges of different efforts. With this in mind, following are some steps state boards can take to both enable innovation and ensure the success of the ensuing improvement efforts.

**Engage in important discussions on new educational policies both within and across states.** Through the implementation of the Common Core State Standards, accompanying 21st century assessments, and other policies, states, not the federal government, have stepped up to tackle some of the thorniest education challenges facing the country, often overcoming significant challenges with reduced funding and fewer staff. These efforts have been initiated by policymakers within states, as well as by several notable cross-state partnerships, both large and small. Such efforts range from the broad Common Core State Standards initiative and assessment consortia efforts to smaller examples of state collaboration, such as the Council of Chief State School Officers’ Innovation Lab Network initiative and NASBE’s Deeper Learning Study Group. Through these efforts, policymakers from across states have—and should continue to—come together to discuss issues as detailed as how to design technical assistance to implement new standards and as broad as how to re-design an education system to prepare significantly more students for college, career, and civic success.

**Designate innovation zones and provide waivers; empower the willing.** In light of these bold initiatives, allowing for experimentation of the willing rather than a mandate for all should not be mistaken for sheepishness; it is simply an acknowledgement that there are lessons to be learned from implementing any policy and that a bullish dive into a new policy could, in the long term, do more harm than good. New policies don’t happen in isolation: practitioners must shift resources, re-train staff, and find new ways to evaluate their success. At each of these steps, there are lessons to be learned, and it is better to have committed and willing participants test these waters than have practitioners try to check off a box or work against an initiative. Thus, innovation zones and waivers facilitated by policies in states, including West Virginia, Massachusetts, and others, on topics ranging from school improvement to competency-based education enable states to learn from implementation in a few areas and then, if successful, apply those lessons to schools across the state.

**Ensure individual actions are part of a comprehensive strategy.** Even as states allow for experimentation through waivers and innovation zones—and even more, when they implement a policy across a state—it is essential that community members
and district and school practitioners see the innovative approach as part of a broader, comprehensive strategy rather than as an isolated effort by a lone reformer. This is all the more important under the current economic situation facing states, districts, and schools across the country: with limited resources in hand, practitioners must know that the initiative they start today will not simply be changed the following year. They must be able to leverage a variety of resources in order to implement a new initiative, which becomes increasingly difficult when schools receive different signals from district or state leaders (for example, when the assessment measures they are held accountable to are misaligned with the programs and goals they are being asked to implement).

In implementing its new proficiency-based education system, Maine has been at the forefront of systemic thinking to prevent this sort of uncertainty, aligning its funding, graduation requirements, professional development, and other policies to support the success of this initiative. Similarly, as states continue to align individual initiatives within a comprehensive vision of college, career, and civic success, they communicate a clear message to stakeholders: an initiative being implemented is not simply a flavor of the month, but a concerted effort to prepare all students for a meaningful future.

**Continue as an on-going partner after a new policy or program is approved.** Once new policies are on the books, it becomes even more important for state policymakers to stay engaged and support efforts throughout implementation. Standards and guidance around implementation efforts are essential for helping local practitioners successfully transition from the world as it is to the world as it should be. In implementing new policies, teachers and principals will have to be trained, standards will have to be developed, and technical assistance and capacity building support will have to be provided, to name just a few steps that distinguish a failed policy from a successful one.

One impressive area where this has been apparent is in states’ implementation of the Common Core State Standards. Most states implementing the standards have successfully (though admittedly to different levels of quality) designed a plan to prepare educators, align instructional materials, provide technical assistance, and provide other supports to assure their success. As states demonstrate that they are willing partners with their districts and schools in implementing an initiative, it not only benefits that initiative, but other initiatives as well, which are buoyed by the confidence engendered by past working relationships.

**Continue investments in data systems and their use to continuously evaluate the effectiveness of policies.** Once a policy is being implemented, it is important for states to gather both quantitative and qualitative data to evaluate the effectiveness of the policy and make adjustments where needed. Beyond using this data at the macro level, states should continue to encourage local decision-makers to use the data to adapt and improve their own practice. Through their investments in longitudinal data systems, more states today have the capacity to do this than ever before. For example, according to the Data Quality Campaign survey of states, by 2012 forty-five states had data storage facilities that could link detailed and reliable data from several areas and another forty-two states had the ability to create reports that include longitudinal statistics on school systems and groups of students.27

Today the primary question is not necessarily the existence of data, but the capacity to use it. States are making substantial efforts to build this capacity. For example, Delaware has implemented a statewide “data coach” system that provides teachers a minimum of ninety minutes of common planning time to facilitate collaboration, data analysis, and strategizing on responding to concerns identified by the data.28 This type of collaborative analysis and use of data can, in turn, facilitate a conversation of not only how a school can improve the achievement of some students, but the depth of learning of all students.

**Conclusion**

In a global economy, it is becoming increasingly important for all students to not only be able to demonstrate mastery of academic content, but also critical thinking, problem solving, and other deeper learning competencies. Fortunately, states across the country are stepping up with the big ideas to do just that by facilitating conditions and learning environments conducive to deeper learning, aligning statewide policies to support the knowledge and
skills students will need to succeed, and creating conditions for their education systems to remain dynamic and responsive to broader social demands. Nevertheless, even states at the cutting edge of these efforts recognize there is still significantly more work to do before we achieve systems that prepare all students for college, career, and civic success and a meaningful future for themselves and our nation.

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