

Transforming High Schools: Performance Systems for Powerful Teaching

Teaching quality is recognized as the most powerful school-based factor in student learning. This does not mean, however, that all teachers have powerful effects on student learning. Considerable evidence points to the enormous variation in teaching practice as a fundamental problem in improving high schools.¹ The national policy community recognizes that in order for the United States to compete in a global knowledge economy, the concentration and distribution of effective teachers in secondary schools must be dramatically improved. Fundamental policy questions remain unanswered, however, about what approaches are best to ensure teaching quality.

Beginning in the 1980s, reports such as *A Nation at Risk* documented the links between education and the economy and ushered in a new paradigm of standards-based reform and test-based accountability.² Since then, even though the nation's educational investments have increased by about 3.5 percent annually, limited progress has been made to ensure that all students graduate with the communication and problem-solving skills essential to succeed in an advanced economy.³ During this time, and culminating in 2001 with the passage of the No Child Left Behind Act (NCLB), educational policies focused primarily on increasing school-level performance. Over the past decade, however, educational research has shown that differences in the quality of classroom teaching *within* schools surpasses the differences in instructional quality *between* schools. What matters far more than the school a student attends is the teacher she or he gets, particularly in high-poverty high schools, where teaching tends to be idiosyncratic.⁴

Analyses of longitudinal data files reveal that having an effective teacher versus having a less effective one can lead to enormous differences in achievement-test-score gains among students within the *same* school.⁵ William Sander's work in Tennessee showed large differences between the gains elicited by the most effective teachers (about 52 percentile points per year) and the least effective (about 14 percentile points per year).⁶ Moreover, teachers exerted an accumulating influence—the residual effects of having a poor teacher proved devastating. A student's poor performance persisted with little evidence of improvement despite his or her subsequent placement with more effective teachers. In a similar vein, a string of five highly effective teachers has been shown to overcome the achievement deficits between low-income students and their more advantaged peers.⁷

The disparity in teaching quality has seriously compromised the nation's international standing and capacity to compete globally. Even though U.S. fourth-grade students score among the best in the world, by grade ten students are about average in reading and science and below average in mathematics on the 2009 Programme for International Student Assessment (PISA).⁸

Administered to fifteen-year-olds in thirty-four nations of the Organisation for Economic Co-operation and Development, PISA measures students' ability to apply content-area knowledge to the new challenges of the increasingly modern workplace. The results show that American high school students fall far below their counterparts in top-performing countries such as Shanghai–China, Korea, Finland, and Canada. Moreover, socioeconomic disadvantage has a “particularly strong” impact on student performance in the United States—17 percent of the variation in student performance in the United States is explained by students' socioeconomic background, compared to only 9 percent in Canada or Japan.⁹

Lessons from high-performing countries underscore the premium of providing teachers with quality training and support to deepen their knowledge and extend their skills in ways that improve students' mastery of challenging content.¹⁰ Nations that have succeeded in accelerating the pace of improvements in students' achievement share a commitment to professionalized teaching and accord high status to teachers, recognizing that the quality of an education system cannot exceed the quality of its teachers. They move training closer to the classroom, enable teachers to share their knowledge and spread innovation, and emphasize teachers' ability to diagnose learning gaps and apply a repertoire of pedagogical strategies to address them. Teachers receive ample training and support to develop strong content knowledge and the specific instructional techniques that are appropriate for the subjects they teach. Teachers become top-notch instructors by engaging in ongoing opportunities to develop inquiry skills and improve their practice in a highly disciplined way.

Ontario, Canada

Despite one of the highest rates of immigration per capita in the world, Canada ranked among the top ten countries on measures of reading, mathematics, and science on the 2009 PISA.¹ Ontario, the largest province in Canada, with 40 percent of the population—13 million people—achieved major gains in achievement and graduation rates following the implementation of a strategy of professionally driven educational reform from 2003 to 2010 under the leadership of Premier Dalton McGuinty. The Ontario strategy reversed previous top-down initiatives that failed to focus directly on improving the act of teaching and learning and to enlisting the support of teachers and school leaders. To sustain improvements, Ontario's education ministry set new priorities that included improving the instructional core of classroom teaching, attending carefully to detailed implementation, and affording teachers with opportunities to practice new ideas and learn from colleagues.

The role of the district was to align its personnel and hiring policies with the overall strategy, and to support the teachers and school leaders engaged in a continuous learning and change process taking place in schools. “The Ontario strategy differs from a number of other reform efforts. . . . The architects of the reforms drew upon organizational theorists like Peter Drucker and Edwards Deming rather than economists. From this viewpoint, the problem was more to do with lack of knowledge than lack of will, and the key to motivation was not individual economic calculations but rather the chance to be part of successful and improving schools and organizations.”

The press to ensure equitable opportunities for all students demands different solutions than those applied over the past several decades—not only to raise the level of students' preparedness but also to address the enormous achievement gaps based on race/ethnicity and income. U.S. schooling continues to be compromised by a fragmented system of teacher training and development that depends mostly on inputs—academic degrees, years of experience, and paper and pencil licensure exams—that are poor predictors of later effectiveness in the classroom. In



addition, measures commonly used to evaluate practicing teachers do not assess competencies that differentiate teaching performance, predict teachers' future effectiveness, or provide quality feedback or information to improve practice or training programs.¹¹ Current systems for conferring professional status neither generate detailed information about a teacher's performance that can inform decisions about hiring and placement nor provide feedback to support professional learning.¹²

This policy brief examines standards-based approaches that hold promise for shaping a common vision of skilled teaching commensurate with the national goal of preparing all students for college and careers. Numerous studies confirm that teachers are the most significant school-based factor in improving student achievement, particularly for the most challenging students. Yet, while the current mantra is that *teachers make the difference*, John Hattie, professor of education and director of the Visible Learning Labs at the University of Auckland, contends that this notion is not quite right. "Not all teachers are effective, not all are experts, and not all teachers have powerful effects on students. . . . The important consideration is the ways that teachers differ in their influence on student achievement—what it is that makes the most difference?"¹³ Some teachers who undertake certain teaching acts with appropriately challenging curricula while also showing students how to think or strategize about the curricula produce powerful effects on student learning.

Enough is known about effective teaching to act on a broad scale. Highlighted in this brief are successful prototypes for assessing teaching performance that have been shown to be effective in improving teacher performance, student learning, and teacher education. The pending reauthorization of the federal Elementary and Secondary Education Act (ESEA), currently known as NCLB, offers an opportunity to improve high schools by ensuring that systems are in place to build the teaching profession based on validated performance measures. The brief concludes with a set of policy recommendations to improve the consistency and quality of teaching in high schools. It calls for legislation, regulations, and incentives to help states and districts attend to the central role of human capital and the priority of fostering the expert performance of teachers in order to create high-quality learning environments for high school students.

Creating a Systems Approach to Teacher Performance

The centerpiece of ESEA, the federal law for K–12 education, set teacher quality—based largely on whether teachers are subject-matter certified—as a major policy priority when it was reauthorized as NCLB in 2001. In the past two years, a flurry of federal programs such as Race to the Top funds, Investing in Innovation, and the School Improvement Grants have positioned teacher "effectiveness" rather than teacher "quality" as a centerpiece of federal policy. As a result, in the run-up to the reauthorization of ESEA a national debate has emerged in relation to defining teacher effectiveness and identifying the means to leverage improvements in teaching.

To date, a great deal of the policy debate on teacher effectiveness has centered on the use of student test scores for determining whether teachers receive merit pay or are fired. Strategies that attach high stakes to teachers' contributions to gains in student test scores alone will not lift the performance of the 3.5 million teachers in the public education workforce.¹⁴ There is profound inconsistency in the argument that professional preparation and licensure to assure teacher quality is irrelevant and that evaluation systems that identify good and bad teachers for purposes



of reward and dismissal will suffice.¹⁵ As with other professions—such as medicine and law—policies and practices need to cement the connections between standards for competent performance and the knowledge base on effective teaching.

Marcy Singer-Gabella, professor of the practice of education at Vanderbilt University and Peabody College, says, “Good teachers connect students with challenging subject matter, search for and recognize significant elements of student thinking, and respond with carefully chosen instructional strategies to assist students in taking the next steps in learning. These dimensions of good teaching are difficult to assess, but the answer is not to abandon the effort.”¹⁶

Teachers need deep content expertise along with knowledge of development and learning in order to make content meaningful to diverse groups of learners. They must understand how students’ learning develops within a subject area, the nature of gaps in students’ understanding that may arise, and the strategies that can address students’ evolving needs.¹⁷ At the same time, there are numerous ways to teach skills, and thus teachers not only need to be able to reflect on their instruction with others, they also need to use formative assessments to determine how much students know and can do as well as where and why they might be struggling—and modify instruction based on student responses.

Schools must be organized to spread effective practice. Judging teachers on their performance without providing feedback or the means to improve practice and student learning contributes to a sense of “learned helplessness.” Moreover, good teaching has a multiplier effect—positive teacher effects build on one another, thus contributing to the collective capacity of the entire staff to advance student learning to high levels.¹⁸ The lack of formative feedback and support to help teachers improve is particularly harmful in high-poverty high schools, where teachers have less access to excellent peers and mentors. A study by the National Center for Analysis of Longitudinal Data in Education Research finds that teaching quality in high-poverty schools was not uniformly worse than in low-poverty schools. However, the researchers did find that the diversity in effectiveness varied far more in high-poverty schools and that the least effective teachers in these schools were worse than those in more affluent schools.¹⁹ Without opportunities to engage with others to examine and improve instructional practices, teachers’ performance in high-poverty schools plateaus after a few years.

In contrast, exemplary high schools succeed in improving student learning and narrowing achievement gaps by building the human capital to deliver excellent classroom teaching.²⁰ For example, the fifteen exemplary high schools showcased in the 2009 report on the Achievement Gap Initiative at Harvard University focused on teachers’ professional learning and collaboration.²¹ These high schools were organized to provide teachers with inquiry-based learning opportunities that expanded their expertise in carefully selecting strategies to engage students and support their learning of advanced concepts and skills. Teachers worked in tandem to examine the quality and depth of assigned student work and to make decisions about instructional practices and individual learning needs in relation to challenging learning goals.

Policy leaders have begun to recognize that in too many high schools teachers cannot produce the kind of learning needed to prepare students for college and careers because they have neither the knowledge nor the systems to support them.²² *Serious and systematic efforts are needed to improve the effectiveness of entering and practicing teachers.*²³ More than ever, teacher development must be rooted in evidence about effective teaching and anchored in an integrated



system of rigorous college- and career-ready standards and assessments. The new common core state standards, internationally benchmarked and adopted by almost all states, will help attenuate some of the variation in teaching practice by clearly defining the competencies all students need for college and career success. They also call for new ways of teaching that are consistent with how students learn and advance toward greater competency and subject mastery. Nevertheless, how well they are implemented will depend on teachers' expertise in establishing challenging learning goals and success criteria. They must make content accessible to diverse learners, provide them with explicit feedback, and carefully choose strategies to deepen their understanding and help them achieve the standard of expected performance.

The nation lacks a practical set of standards and assessments to measure the quality of teachers' work and their ability to instill student learning throughout the career continuum. Despite an extensive knowledge base about effective teaching, there continues to be a troublesome breach between research and policy.²⁴ In order to achieve large-scale improvement and attain levels of performance on par with the highest-performing nations, a systems approach, anchored in a shared conception of quality teaching, is needed to continually assess and inform educator development through the career.

Teacher Performance Assessment Consortium (TPAC)

The good news is that efforts are currently underway to achieve a system of reliable, valid, and nationally available performance assessments from a teacher's point of entry through the development of accomplished teaching. Twenty states have joined the American Association of Colleges for Teacher Education, the Council of Chief State School Officers, and Stanford University to create the Teacher Performance Assessment (TPA), a common initial licensing assessment that can be used nationwide to make preparation and licensing performance based.

U.S. States Involved in TPAC			
California	Massachusetts	New York	Washington
Colorado	Michigan	North Carolina	West Virginia
Illinois	Minnesota	Ohio	Wisconsin
Iowa	Missouri	Tennessee	Idaho
Maryland	New Jersey	Virginia	Wyoming

Source: American Association of Colleges for Teacher Education, Council of Chief State School Officers, and Stanford University, "Teacher Performance Assessment (TPA)."

This consortium, consisting of teams made up of representatives from state education agencies and more than seventy teacher preparation institutions, has launched a three-year pilot beginning in 2011 with the goal of full implementation as early as School Year (SY) 2012–13 in five states. Other states will decide about adoption after the pilot test period, when they have had some experience with the assessment. The consortium has completed the design of the assessments in the initial licensing areas that will be piloted while completing the design of the remaining licensing areas, which will be field-tested along with the first group of assessments next year. The performance measures will be validated using value-added analyses, observations and interviews of candidates completing the assessment and the first year of teaching, and interviews with faculty and program administrators on the use of assessment data.

Research has shown that rigorous, validated, standards-based performance measures can be a powerful tool for capturing how teaching is enacted in a complex context as well as providing feedback for continuous improvement. The TPA is based upon successful portfolio assessments



such as California’s Performance Assessment for California Teachers for initial licensure and Connecticut’s Beginning Educator Support and Training (BEST) for professional licensure. Over the last two decades, validity studies have shown that well-designed teacher performance measures can differentiate between effective and ineffective teachers and significantly predict their students’ value-added achievement on state tests.²⁵ For example, studies found that a one-unit increase in the BEST portfolio scores was associated with a 50 percent increase in students’ gains on Connecticut’s reading tests during the course of a school year.²⁶ In addition to serving accountability purposes, these highly structured measures have demonstrated a formative impact on teacher learning, instructional practice, and program improvement.

“This is a phenomenal time to be involved in discussions about teaching,” says Singer-Gabella. “The press for assessment and accountability—while at times uncomfortable—provides a rich opportunity to work toward a common language about good teaching, establish points of focus for training and support, and align systems for assessing practice and providing feedback on how to improve teaching and learning.”²⁷

Performance Assessment for California Teachers (PACT)

The TPA is based on the highly successful preservice teaching performance assessment, the Performance Assessment for California Teachers, or PACT. In 1998, California enacted legislation requiring all teacher candidates to pass a state-approved teaching performance assessment with demonstrated validity and reliability in order to earn an initial teaching credential.²⁸ The goal was to maintain multiple pathways to a teaching license and ensure that regardless of the pathway, candidates meet state teacher standards. In 2002, a consortium of universities, led by Stanford University, launched PACT, and the assessment is now used by thirty-three teacher education programs including both traditional preservice teacher education programs and alternative certification programs offered by school districts and a charter management organization.²⁹

Beginning in 2007, and based on extensive reliability and validity studies, the California Commission on Teacher Credentialing approved PACT assessment for teacher licensing. The data is aggregated for use in program improvement and state accreditation review. Following PACT implementation, a number of teacher education programs reported on their relative success in using the PACT data to evaluate and improve their programs. Extensive interviews with teacher education faculty highlighted their increased collaboration and deep engagement in revamping coursework, assignments, and fieldwork after closely examining the new kinds of data on candidates’ classroom teaching.³⁰ Charles Peck, professor of special education and director of teacher education at the University of Washington, concluded, “PACT implementation raised issues with candidate learning outcomes in a way that challenged faculty to attend to areas of teaching that are critical to engaging and supporting student learning, but traditionally underdeveloped in teachers’ repertoires.”³¹

Assessing Performance: The Teaching Event

The TPA project builds on the PACT assessment as a starting point for developing a nationally available instrument for evaluating beginning teachers completing a preservice program. The core of the assessment is the Teaching Event, a documentation of three to five days of teaching



and learning in a subject-specific area. This highly structured process requires teacher candidates to submit evidence of their practice and its outcomes, based on lesson plans with adaptations for special education students and English learners, video clips of instruction with teachers' commentary, case studies of individual students, and analyses of assessments and student work. The evidence is assembled in response to very specific tasks and prompts that provide data about critical aspects of teaching linked to standards of student learning and standards of teaching.

Five tasks included in PACT have been condensed into three for the TPA: planning instruction and assessment; engaging students and supporting learning; and assessing student learning. Two other dimensions—reflection and “academic language,” the ability of teacher candidates to develop students’ language skills—are focal points for judging performance throughout the event. The area of “academic language” continues to be refined and broadened given the widespread recognition that many students, not just English learners, need explicit support in using disciplinary terminology and understanding complex texts. For example, the assessment of secondary English language arts requires candidates to plan instruction so that students are able to understand a “big idea” or essential question by analyzing content material. The assessment focuses on what secondary students are learning and what candidates know about their students. Candidates must submit written commentary about how that knowledge informs their decisions about sequencing learning tasks and selecting instructional strategies.

Trained assessors who are knowledgeable about teaching and learning in the assessment’s subject area score each portfolio, assigning a score of 1 to 4 based on standardized rubrics for each task. The process of scoring allows those involved in training and evaluating teachers—including university faculty, district supervisors, cooperating teachers, and principals—to look at common evidence of teaching practice and jointly determine whether it meets challenging standards of practice. The ratings are further moderated and audited centrally to ensure that evaluations of teachers’ performance are valid and reliable. A powerful element of the scoring process is making the act of teaching and learning visible. A well-designed assessment provides a common language and vision for what quality teaching looks like. It results in “a shared knowledge and competence among teacher educators since in scoring their work, every scorer and every person preparing them has to have some understanding of how you support students with special needs or how to ensure that academic language is addressed.”³²

When connected to licensure and evaluation, the data from performance assessments can impact the practice of individual teachers and leverage continuous improvements in preparation, induction, and professional development. For example, in California, when PACT data revealed weaknesses in candidates’ competencies in developing language skills in English learners and in using assessment to guide instruction, programs responded by creating practical strategies—such as common lesson frameworks—for ensuring integration of these elements throughout the preservice program. “The value is in examining evidence of teaching and making joint decisions through the scoring process about how effective the individual teacher is. It becomes a powerful way of understanding teaching practice and informing how all of those responsible for training and evaluating teachers can improve their own practice,” says Peck.

National Board Certification Program

The progenitor of these successful teacher performance assessments is the widely recognized National Board Certification for experienced teachers. Established in 1987, the National Board



for Professional Teaching Standards (NBPTS) has developed a standards-based approach to assessing teachers in twenty-five certificate areas, which are defined by the subject and developmental level of students. Candidates must complete a series of subject-specific online exercises and submit a portfolio of evidence of their performance and practice including videotapes and related commentary, lesson plans, and documentation of student learning over time. The portfolios are scored by trained raters who are knowledgeable in the same teaching field using rubrics that define vital dimensions of teaching as the basis of the evaluation.

Used in all fifty states, the District of Columbia, and hundreds of school districts, the NBPTS has granted advanced certification to more than 91,000 teachers nationwide since its inception. Large-scale studies in a number of states and districts confirm that the National Board Certification assessment process succeeds in identifying teachers who are more effective at producing student learning gains.³³ A 2008 congressionally mandated, comprehensive evaluation by the National Research Council affirmed that students taught by National Board Certified Teachers (NBCTs) make greater gains on achievement tests than students taught by other teachers.³⁴

Other, smaller studies have revealed important distinctions in the teaching practice of those who passed the certification assessment and those who did not. The findings showed that NBCTs promoted deeper learning in their instructional design and classroom assignments by setting high expectations, challenging students to solve problems, and prompting students to think about the nature and quality of their work.³⁵ The National Board Certification process has been found to produce positive impacts on teacher retention and improving practice. NBCTs report that the process of analyzing students' work and assessing their own actions in relation to professional standards is valuable in improving their teaching. The process illuminates how well they are able to engage learners, assess students' current knowledge and skill development, and alter instruction to advance students' performance.³⁶

National Board Certification, however, is only available to an experienced teacher on an individual basis. The best practices of these portfolio systems, anchored in rigorous teaching standards, hold promise for broader application, but only as part of a coherent set of policies designed to shape professional norms and practices within schools and districts. Focusing attention solely on the effectiveness of the individual teacher reinforces the "egg carton" model of schooling, where teaching takes place largely in isolation.³⁷ High schools must be organized to spread effective practice where teachers work in an interdependent fashion to increase their expertise and ability to advance student learning. Teachers' roles must be differentiated so that NBCTs can serve as collaborators and "change agents" in transforming the culture of learning in high school classrooms. To that end, NBPTS is working with states and districts to build teacher capacity in high-need schools through systemwide application of its standards-based professional learning and assessment process.



Montgomery County Public Schools (MCPS)

During the 1980s and 1990s, Maryland's Montgomery County Public Schools (MCPS)—at 144,000 students, the sixteenth-largest district in the nation—experienced enormous increases in the percentage of students of color, English learners, and low-income students. Beginning in 1999, under the leadership of Superintendent Jerry Weast, MCPS created an innovative partnership with the local union, the Montgomery County Education Association (MCEA). Together they began building the collective capacity of the union's 11,600 teaching professionals toward the goal of producing a world-class system. MCPS launched a comprehensive strategy to graduate 100 percent of high school students, 80 percent of whom would be ready for college by 2014. To achieve these ambitious goals, the district-union partnership established its Professional Growth System (PGS), anchored in teacher performance standards and based upon the NBPTS Core Propositions. The PGS uses a qualitative approach to teacher evaluation and professional growth and focuses on continuous improvement through feedback, analysis of student learning, and refinement of teaching practice. Since then, MCPS achieved exemplary results, outperformed all other Maryland districts in Advanced Placement, boasted the highest graduation rate in the nation among large school districts, and significantly reduced achievement gaps. In 2010, the district received the Malcolm Baldrige National Quality Award and was a finalist for the Broad Prize in Urban Education.^a

To ensure consistency and coherence in setting student expectations, MCPS conducted internal studies to identify the Seven Keys to College Readiness—such as completing Algebra I by eighth grade and scoring at least 1650 on the SAT. To develop a highly skilled professional staff capable of delivering high-level content to all students, the district established a common language and shared conception of teaching quality in alignment with the NBPTS core propositions. MCPS developed coursework based on Studying Skillful Teaching, the Research for Better Teaching (RBT) model. All leadership and supervisory staff who observe and evaluate teachers must complete the RBT course—Observing and Analyzing Teaching—that provides training in analyzing multiple sources of evidence in relation to teacher performance standards and student learning. Teachers also have access to extensive online course offerings such as *Take One!* Developed by NBPTS, the course offers all teachers the opportunity to study the standards for their teaching discipline and complete a video portfolio to improve their practice in relation to student learning.

The PGS also incorporates the Peer Assistance and Review (PAR) program, by which novice and underperforming teachers are evaluated, mentored, and, if necessary, dismissed. The MCEA and district play central roles to ensure transparency and credibility in the process. Consulting teachers, many of whom are NBCTs, mentor, observe, and provide feedback to help their peers align their instruction with norms for excellent teaching practice. Since the program's inception in 2000, the PAR program has supported more than five thousand new and underperforming teachers. Of those, about 460 underperforming teachers have left the MCPS teacher corps, while more than four thousand have exited PAR and entered PGS as successful teachers. A New Teacher Induction program is provided to experienced teachers entering MCPS for the first time as well.

Based on a formal evaluation, all teachers develop a multiyear professional growth plan, which is integrated into school plans and informs collaborative professional development. Experienced teachers receive financial support to pursue National Board Certification, and full-time teachers who are board certified receive salary bonuses from the state and district. In this way, the PGS leverages accomplished teaching by enabling teachers to chart their individual development as well as to share their pedagogic skills throughout the system. NBCTs—now a cadre of about six hundred, as of 2010—serve in multiple roles, including serving as staff development teachers who are assigned to every school at all levels.^b

^a Interviews with MCEA and MCPS staff on December 16 and 17, 2010; Montgomery County Public Schools, *Teacher-Level Professional Growth System Handbook* (Rockville, MD: Montgomery County Public Schools, 2008–09); *National Board for Professional Teaching Standards: Profiles in Excellence: Montgomery County, Maryland: A Districtwide Coalition to Improve Teaching Through National Board Certification* (Arlington, VA: Author, September 2010); *Montgomery County Public Schools, Application for 2010 Malcolm Baldrige National Quality Award* (Rockville, Maryland, May 2010).

^b Jerry Weast, personal communication, January 20, 2011.



Outcomes and Policy Implications

The overarching goal for developing rigorous, reliable, and valid teacher performance assessments is to establish a more coherent national policy environment for teacher licensure, recruitment, and evaluation. The sharpened focus on the individual teacher has revealed the imperative of increasing the role that systems, organizations, and institutions must play in enhancing the consistency and effectiveness of teachers at scale. In 2001, the National Research Council report on teacher licensure called for “research and development of broad based indicators of teaching competence including assessments of teaching performance in the classroom.”³⁸ Over the past ten years, research has shown that rigorous, validated, standards-based performance measures can accurately differentiate between effective and ineffective teachers, significantly predict their students’ value-added achievement on state tests, and support individual and institutional learning.³⁹ They can support stronger teaching and inform better personnel decisions to ensure that only well-prepared and effective teachers are instructing secondary students.

The Teacher Performance Assessment Consortium (TPAC) plans to develop two prototype performance assessments that define skilled teaching—one for teachers completing a preservice program, and one that districts can use to continue supporting and evaluating teachers throughout their careers. In addition, a technology platform will be designed to support scorer training and calibration and to house a database on teacher performance. States and districts can use performance data to inform state policy for issuing initial licenses, accrediting programs, and planning induction as well as improving inservice development and professional learning programs.⁴⁰ A set of “accelerated states”—Massachusetts, Minnesota, Ohio, Washington, and Tennessee—have committed to full pilot implementation of the TPA during SY 2011–12. These and other participating states are exploring policy options that would incorporate the use of the TPA depending on the results of the pilot.

In addition, approaches must be crafted to shift the model from the individual as the sole unit of authority and responsibility to next-generation systems that recognize the importance of professional collaboration, transparent practice, reflective and collective inquiry, and joint accountability. Since the 1990s, research studies show the benefits and potential of organizational strategies that foster higher levels of teacher collaboration and peer learning.⁴¹ A recent MetLife Survey of the American Teacher documented that most teachers believe that they share responsibility for student achievement, that their success is linked to that of their colleagues, and that increased collaboration in schools would have a major positive effect on student achievement.⁴² This is essential in order to transform high schools from the traditional conveyor-belt, teacher-driven model (*what is taught*) to a student-centered, learning-driven model (*what is learned*). This shift requires developing a shared concept of what good practice looks like, building it on a fact-based inquiry into what students are learning, and working with others to develop approaches to improve that learning. The teacher performance assessment conjoins the act of teaching with student learning and makes visible how teachers exercise professional judgment to help students advance to the next level. From the syntheses of more than fifty thousand studies and eight hundred meta-analyses of student achievement, Hattie concludes, “The remarkable feature of the evidence is that the biggest effects on student learning occur when teachers become learners of their own teaching.”⁴³



Emerging policies that focus primarily on an individual teacher's value-added contributions to student test score gains depend largely upon solo performances, thus perpetuating the notion that teaching is private, behind closed doors, and rarely questioned or challenged. Value-added models have great utility in pointing out the uneven teaching high school students receive. Nevertheless, in addition to concerns regarding the reliability and validity of value-added estimates, these measures do not produce information about why one teacher is more effective than another, nor do they reveal what changes in practice are needed, either individually or collectively, to ensure that students' experience over time will be consistent, coherent, or successful.⁴⁴

High-performing systems, in contrast, foster peer-based forums where teachers work across classroom and grade-level boundaries to share effective teaching and learning practices toward the common goal of educating all children to their maximum potential. They focus on the professionalization of teachers, clearly define the criteria for high-quality teaching and student work, and design plans and incentives for broadly inclusive adult learning.⁴⁵

Federal Recommendations

The pending reauthorization of ESEA offers the opportunity to improve high schools by ensuring that systems are in place to build the teaching profession based on validated performance measures. Policymakers must make sure that the many pieces of reform are carefully integrated to produce maximum improvements in teacher development and effectiveness. Federal policies can address the fundamental misalignment of standards, assessments, and accountability systems to ensure that high schools graduate students who are college and career ready; align definitions of teacher effectiveness with rigorous standards; and act in concert with states and districts to improve the consistency and quality of teaching in high schools. Career advancement and professional licensure should be based on evidence of effective teaching using measures of practice along with growth in student learning.

Federal, state, and district policies must work in tandem to shape a human capital system that cements the connections between regulatory policies and effective teaching through the design of a performance-based system. The following policies call for legislation, regulations, and incentives to help states and districts attend to the central role of human capital and the priority of building the expert performance of teachers in creating quality learning environments for high school students.

In order to support educator development in high schools, federal and state policies should do the following:

- **Embrace high expectations and goals for all students by establishing college and career readiness as the core mission of the K–12 education system.** The reauthorization of ESEA and federal grant making should support the state-led adoption and comprehensive implementation of common standards and aligned assessments toward advancing college and career readiness. State policies to strengthen educator development must be anchored in an integrated system of rigorous standards, comprehensive assessments, and instruction. Tests for accountability purposes should measure the breadth of rigorous standards for college and career readiness, capture important higher-order skills, and yield growth measures in student learning.



- **Encourage states working with practitioners to create standards of practice that define quality teaching based on what teachers need to know and be able to do to elicit targeted student performances embodied in common standards and assessments.** Standards of practice—common to other professions such as medicine and law—are needed to ensure a shared vision of teaching and learning that advances students along the pathway toward the standard of expected performance. Policies to support educator development must ensure that teachers have the content knowledge and corresponding pedagogical practices to support secondary students’ acquisition of deep content learning and high-level skills.

The federal government could encourage states to create rigorous, validated standards of practice as a precursor to designing evaluation systems. State standards can set a vision for quality teaching that informs all aspects of teacher development—coursework and clinical components of preparation, licensing practices, evaluation systems, induction, and ongoing professional development.

Interstate Teacher Assessment and Support Consortium (InTASC) Standards

The Council of Chief State School Officers’ Interstate Teacher Assessment and Support Consortium (InTASC) has updated its standards, originally released in 1992, to encompass a new vision for teaching and learning. Released for public comment in July 2010, the development of the Model Core Teaching Standards is an initial effort to articulate effective teaching practice in concert with the goal of preparing all students for college and careers. These standards are based on research and aligned to the Common Core State Standards for English language arts and mathematics.

Unlike the original teacher standards, which focus on the assessment and support of beginning teachers, the new core teaching standards apply to professional practice for all teachers. These standards provide a starting point for the design of performance indicators and rubrics that can be used to assess teaching practice at key points along the developmental continuum of a teacher’s career. The standards are grouped into four general categories: the learner and learning; content; instructional practice; and professional responsibility. Key themes of these proposed standards include a focus on twenty-first-century knowledge and skills, personalized learning for diverse learners, a collaborative professional culture, increased emphasis on assessment literacy, and new leadership roles for teachers and administrators.

For more information, see *State Policy Implications of the Model Core Teaching Standards* at www.ccsso.org/intasc.

- **Support the development of robust assessments that incorporate observational and other performance measures of teaching for the purpose of evaluating, developing, and recognizing teacher effectiveness and informing professional preparation and development.** New methods are needed to evaluate, develop, and recognize teacher effectiveness using multiple measures of teaching practice that may include observations, video records of teaching, analyses of student learning, and lesson plans or other artifacts of practice. Robust performance assessments can serve as the connective tissue between preservice curriculum and clinical training, district-based entry-level and mentoring programs for new teachers, and professional learning and advancement. Policymakers and education leaders will need to determine the performance indicators that can reliably assess teacher competency and provide feedback to support professional learning.



- **Replace the fairly ineffective federal improvement system for high schools within NCLB with requirements for the implementation of coherent state and district systems that prioritize investments in human capital as essential to comprehensive improvements in high schools.** Such reform systems would:
 - *Encourage better state-district policy coordination in designing performance-based human capital systems for developing high school teachers.* States and districts should support systems to develop high-quality teaching by using performance measures based on validated standards of teaching practice. These can provide multiple sources of data for formative and auditing purposes that can be used to both inform high-stakes licensure decisions and support career-long professional growth and advancement.
 - *Create a culture of data-based decisionmaking in all levels of education, including teacher preparation, to support teachers in their efforts to ensure that all students achieve challenging standards and learning goals.* In addition to tracking students' progress toward graduation and college and career readiness, data systems would provide meaningful information from formative and diagnostic assessments to help teachers improve student learning and achievement.
 - *Support staff selection and professional growth systems that foster collegial collaboration in pursuit of high-impact, evidence-based practices consistent with state and district learning goals.* High-performing districts should communicate core expectations for professional practice, invest in adult learning, and create the organizational conditions conducive to meaningful staff collaboration and development.

The Teacher and Principal Improvement Act is worthy of congressional consideration. This proposal would amend Title II of ESEA to provide formula grants to states and school districts to help develop comprehensive evaluation and professional development systems. School districts would also need to work with teacher and principal organizations to develop systems to evaluate the effectiveness of teachers and leaders and provide these professionals with feedback and opportunities for improvement.

Additionally, through Title II of ESEA and Title II of the Higher Education Act, the federal government could provide support to states to strengthen teacher education in partnership with states and high-need school districts. Federal action is needed to fund comprehensive initiatives that support partnerships among states, traditional and alternate preparation programs, and high-need districts in organizing professional education around clinical practice; enhancing induction, mentoring, and professional development; and experimenting with approaches to evaluating teacher practice. These efforts should be fully evaluated.

Conclusion

In order to fundamentally transform education, explicit attention must be given to articulating the conception of high-quality teaching needed to create the conditions for powerful learning in high schools. This brief describes promising standards-based approaches and a national initiative to assess and inform educator development that ensures that high school students are prepared for college and careers. Policy leaders need to develop coherent theories of action to leverage improvements in teacher effectiveness—and thereby attain levels of achievement on par with the



highest-performing nations. Working with practitioners, states and districts need to build an integrated system for developing human capital that is grounded in rigorous standards for teaching and learning.

To achieve these national educational goals, policy leaders must ensure that the roles and responsibilities of actors at the federal, state, and district levels actively contribute to building the expert performance of teachers. They must align systems for assessing teaching practice and providing feedback essential to ensure that the education high school students receive over time will be consistent, coherent, and successful.

This brief was written by Mariana Haynes, PhD, a senior policy fellow at the Alliance for Excellent Education.

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