



NBPTS[®]

National Board for
Professional Teaching Standards

1525 Wilson Boulevard, Suite 500

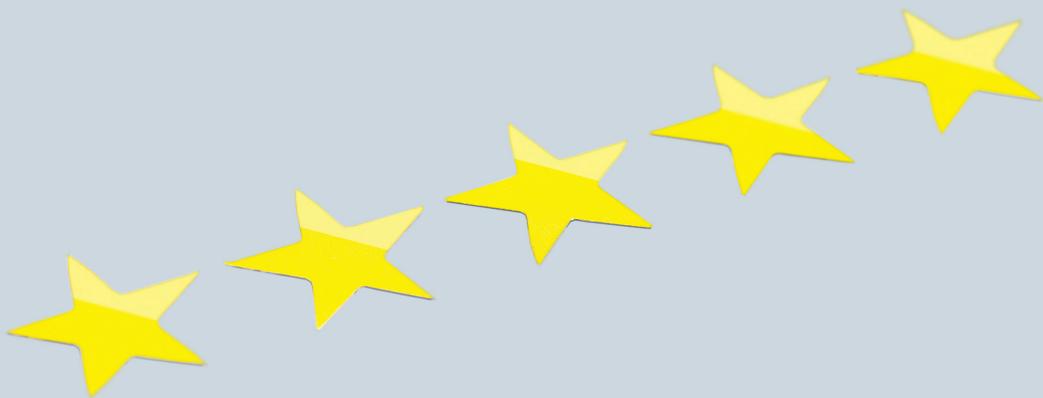
Arlington, VA, 22209

1-800-22TEACH

www.nbpts.org

Student Learning, Student Achievement:

HOW DO TEACHERS MEASURE UP?



EXECUTIVE SUMMARY

A REPORT BY THE
Student Learning, Student Achievement Task Force

National Board for Professional Teaching Standards

Student Learning, Student Achievement: **HOW DO TEACHERS MEASURE UP?**

Student Learning, Student Achievement

TASK FORCE

CHAIR Robert Linn, *NBPTS Certification Council Member*

MEMBERS Lloyd Bond, *Professor Emeritus, University of North Carolina at Greensboro, and Senior Scholar Emeritus, the Carnegie Foundation*

Peggy Carr, *Associate Commissioner, Assessment Division, National Center for Education Statistics*

Linda Darling-Hammond, *Charles E. Ducommun Professor of Education, Stanford University*

Douglas Harris, *Associate Professor of Educational Policy Studies, University of Wisconsin at Madison*

Frederick Hess, *Resident Scholar and Director of Education Policy Studies, American Enterprise Institute for Public Policy Research*

Lee Shulman, *President Emeritus, Carnegie Foundation, and Charles E. Ducommun Professor Emeritus, Stanford University*

NBPTS STAFF

CHIEF PROGRAM OFFICER Joan Auchter

EDITORIAL CONSULTANTS Robert Johnston, *The Hatcher Group*

Mark Toner, *CommunicationWorks*

Lisa Towne

A full copy of this report is available at nbpts.org/studentlearning

Foreword From the NBPTS President

The National Board for Professional Teaching Standards (NBPTS) welcomes the efforts of federal, state, and local policymakers to find new ways to ensure an accomplished teacher for every student in America. The National Board has advanced this mission since its inception in 1987. Today, that mission is carried out by the tens of thousands of National Board Certified Teachers (NBCTs) nationwide—each of whom completed the National Board’s rigorous assessment process to demonstrate his or her competence in their teaching field.

Policymakers are right to want to link teacher evaluation to student performance as part of these efforts. Understanding how student learning and achievement can be measured and linked to the efforts of teachers has been of utmost importance to our work. We welcome initiatives that advance this understanding and translate new knowledge into ideas that can improve classroom teaching. Such advances have implications beyond individual NBCTs because we know that many of these teachers become mentors, teacher trainers, and school leaders. Improving how student performance is incorporated into teacher evaluation inevitably will influence practice at all of these levels.

At the same time, we must proceed carefully. As we have learned, such evaluations will be valid and relevant only if they are fair, accurate, and not limited to a single measure of teacher influence and effectiveness. If we do not get it right, the nation will lose a valuable opportunity to advance and improve teaching practice.

As a leader in teacher assessment and development, NBPTS is taking steps to ensure that the ongoing conversation about teacher evaluation will be rich, research-based, and reflective of various approaches. One lesson we have learned from years of refining how we evaluate accomplished teaching in 25 certification areas is that we must constantly reflect on our practices. That means asking some of the most thoughtful people in the field for their thinking, input, and even constructive criticism.

To further our understanding of how teachers are assessed in a new era of school improvement, NBPTS extended an invitation to several leaders in education evaluation, research, and policy. We asked them to participate in a series of conversations, share their collective knowledge, and then recommend how the National Board can strengthen its own work in this area while also continuing to be a leading source of information for the field.

.....

If those of us involved in this effort do not get it right, the nation will lose a valuable opportunity to advance and improve educator evaluation.

.....

The result of this important and thoughtful work is summarized in this white paper, which we are proud to share. This paper also includes several compelling recommendations that the National Board will consider in its future work. We look forward to drawing from this conversation and the resulting recommendations to steer National Board Certification and the field to better evaluation of accomplished teaching that builds an even stronger link to how our children learn and succeed in school.

Joseph A. Aguerrebere, Ed.D.

President and CEO

National Board for Professional Teaching Standards

Overview

Advances in education data systems, measurement models, and practice-based research give us an opportunity to refine the meaning and identification of accomplished teaching. As a leader in identifying accomplished teaching, the National Board for Professional Teaching Standards (NBPTS) has convened a Student Learning, Student Achievement Task Force to study how it can continue playing a defining role in this new era. Made up of experts in assessment, school reform, and measuring teacher quality, the task force outlines in this white paper new methods of evaluating teachers' impact on student learning. Its recommendations are intended not only

.....

Today, advances have made it increasingly possible to incorporate direct and systematic evidence about student learning into measurements of teacher quality.

.....

to improve the National Board Certification process, but also to provide guidance to the entire education community about appropriate ways to ground teacher evaluation in student learning.

Since its inception, the National Board's focus on the connection between accomplished teaching and student learning has been guided by a simple premise: the hallmark of accomplished teaching is student learning. NBPTS believes that the success of teachers in promoting student learning should be a defining measure of teacher quality. This simple but critical belief can be better realized because of the advances in applied assessment, technology, data systems, and test-based accountability models since the National Board's inception. Twenty years ago, the requisite systems did not yet exist, so any effort to identify accomplished teachers had to rely almost entirely on expert evaluations of teaching practice. Today, advances have made it increasingly possible to incorporate direct and systematic evidence about student learning into measurements of teacher quality.

Fulfilling this aspiration will include evaluating teachers on how well they help children learn across the breadth and depth of the curriculum. To meet this challenge, two issues must be addressed and were studied by the task force. The first issue is the tendency to rely primarily on achievement tests in a few grades and subjects to determine teacher effectiveness, to the exclusion of other subjects, grade levels, domains of learning, and evidence about teacher performance.

The other important factor pertains to the critical distinction between student learning and student achievement. Although the two terms are often used interchangeably, they convey profoundly different ideas, particularly as they relate to teaching. In brief, *student achievement* is the **status** of subject-matter knowledge, understanding, and skills at one point in time, while *student learning* is the **growth** in subject-matter knowledge, understanding, and skills over time. It is student learning—not student achievement—that is relevant to defining and assessing accomplished teaching.

In an attempt to measure student learning, many growth models have been developed. Of those models, the “value-added” approach has emerged as the method of choice to estimate the contributions that specific teachers and schools make to the growth in student learning. But while value-added models place necessary focus on important student outcomes, they remain constrained by technical issues involving the nature of tests, data quality, and the appropriate application of statistical models and methodologies. As we explain in greater detail later, even with better assessments, there will always be challenges in determining how much each teacher contributes to student learning. Education is a complex process with many actors, including teachers, principals, tutors, reading coaches, librarians, and—perhaps most important—parents. For this reason, thoughtful evaluations of teacher performance must combine direct evidence of student learning such as “value-added” data and examinations of teaching practice. Gains in student learning must always be examined within the context of teaching practice to ensure that they are connected to what teachers are doing in the classroom.

To better understand the complexities surrounding measurements of student learning and their role in the evaluation of teacher effectiveness, the Student Learning, Student Achievement Task

Force, which includes some of the National Board’s most articulate critics, was charged with:

- Describing how student learning and achievement are captured in the National Board’s evidence-based standards and certification process;
- Defining the critical distinction between student achievement and student learning;
- Identifying traditional and alternative approaches to measuring student learning; and
- Evaluating the strengths and limitations of these approaches as measures of teacher effectiveness.

Drawing on the National Board’s quarter-century of certifying highly skilled teachers across all grade levels, more than 20 content areas, and all 50 states, the District of Columbia, and territories, the task force seeks to inform NBPTS and the broader education community of ways to effectively apply new tools, data systems, and technologies. Motivated by the belief that a teacher’s contribution to student learning is the hallmark of accomplished teaching, the task force offers a series of principles and recommendations to guide the use of assessments of student learning as a measure of teacher effectiveness. Such measures should:

- **Be aligned with the curriculum and student learning goals a specific teacher is expected to teach.** Measures of student learning must reflect the specific content of what is expected to be taught. This principle also recognizes the importance of identifying the specific teacher or teachers responsible for gains in student learning, particularly given the fact that learning is a cumulative process, with previous teachers and learning experiences playing significant roles.
- **Be constructed to evaluate student learning**—that is, performance at two or more points in time—rather than a snapshot of student achievement, so that changes in student understanding and performance can be substantially attributed to instruction. This principle ap-

plies with equal force to standardized quantitative measures and more qualitative measures of student learning, such as portfolios of student work, both of which must focus on the students' gains in learning over the period a teacher provided instruction.

- **Be sensitive to the diversity of students**, including those with special needs or limited English proficiency, as well as gifted and high-achieving students. Assessments used to evaluate teachers must be valid for the student populations they teach.

- **Capture learning validly and reliably at the student's actual achievement level.** Measures should be evaluated continuously to determine the extent to which they address the principles of alignment with the range of knowledge and skills to be measured and the ability to capture student learning across the diverse learning needs and backgrounds outlined in this white paper.

- **Provide evidence about student performance and teacher practice that reflects the full breadth of subject-matter knowledge and skills that are valued.** This recommendation addresses the need to identify the extent to which a teacher's practices are connected to and influence student learning. Linking these measures enables a rich and nuanced assessment of on-the-ground practice in context and can capture the complexities of the effects of teaching on student learning over time.

These principles are intended to serve as guidelines in designing teacher assessment systems that reflect student learning and improve teaching practice. We view the challenges in creating such systems as substantial—but not insurmountable, particularly if policymakers carefully evaluate the strengths and weaknesses of varying approaches to assessing student and teacher performance. To that end, the task force believes that National Board Certification should ultimately be a measure of how accomplished teachers are contributing to student learning. While the National Board Certification process already requires teachers to demonstrate multiple examples of student learning, we recommend that the NBPTS:

- 1** Explore strengthening the extent to which student learning is systematically evaluated in each of the 25 certificate areas.
- 2** Explore adding additional evidence of student learning, both created by teachers and from broader assessment measures, to the basket of evidence currently used in the National Board Certification process.
- 3** Continuously monitor research on the impact of teachers on student learning.
- 4** Through the National Board’s research, promote systematic use of methods for evaluating teachers’ effectiveness and impact on student learning.
- 5** Promote the development of teacher skills in designing classroom assessments and interpreting external assessment results, providing appropriate feedback to students, and using measures of student learning as a central element of accomplished teaching.

The task force report underscores the need for educators and policymakers to combine smart measures of student learning with sensible efforts to identify accomplished teaching practice. Its members believe that by reflecting on its own efforts and constantly trying to refine and improve them, and by communicating to other stakeholders the broad principles guiding this effort and the insights that emerge, NBPTS will continue to play a leading role in identifying what both accomplished teachers and high-achieving students are expected to know and be able to do. ★

Essential Criteria for Using Large-Scale Standardized Assessments in Teacher Evaluation Systems

We support the use of large-scale standardized assessment results as one measure in the certification process if they enable the calculation of a meaningful gain in student learning. Many state tests currently do not meet the criteria, even though the obstacles to do so are not insurmountable. Here we sketch the minimum conditions that would need to be present in order to make these inclusions feasible and, therefore, acceptable.

Curriculum-related scale with equivalent unit of measure along a considerable continuum of achievement. To claim that a teacher influenced student learning, assessment measures must be closely aligned with standards and must measure student performance at the level where a student actually achieves. Vertical scaling is desired, although not necessarily required, to accurately measure gains in student learning.¹

Information on validity of tests for assessing special populations. A National Board Certification candidate may be teaching a large proportion of English-language learners but may teach in a state whose assessment is not validated for this population; information on validation for different groups of students needs to be available to find such mismatches.

Data system that tracks students and links to teachers. Assessments of a teacher's ability to procure learning in his or her students require longitudinal data. As we have said, learning is about the growth in student understanding over time, and if we are to attempt to attribute that learning to a teacher's instruction, we must have data at multiple points in time as the teacher engages with those students.

.....

1 Although vertical scaling is desirable for value-added modeling, it has its drawbacks. For example, it does not measure grade level or content standards as well, because testmakers cannot include as much in these measures. On the other hand, tests of grade-level content standards often fail to measure growth for those who are achieving below or above grade level. So there are trade-offs that require consideration.

Alignment. Several states use both state-developed, criterion-referenced tests to monitor student achievement and commercially available, norm-referenced tests to compare the performance of their students with that of other states' students and the nation as a whole. Only a handful of states use only commercially available tests. Typically such tests are augmented or otherwise altered to align them better with these states' curricula. For states that use only commercially available tests, it is advisable to have adequate documentation that the tests are aligned with the state's curriculum. The commercially available tests in use by the various states include the Iowa Test of Basic Skills (ITBS), the Stanford Series, The Otis Lennon School Ability Test, Comprehensive Test of Basic Skills (CTBS), and TerraNova. See *Appendix A* for a list of tests used in each state.

Since the passage of the No Child Left Behind Act, all 50 states and territories (including states such as Vermont that have concentrated on portfolio assessment) have developed assessments that include some multiple-choice questions. Although the law requires the reporting of Adequate Yearly Progress (AYP), which in turn implies annual testing, it is not clear that all states currently test all eligible students annually. In addition to multiple-choice tests, many states' assessments include short-answer and extended-response exercises, including responses to writing prompts, which allows them to assess a wider range of standards and curriculum expectations. Assessments should satisfy some minimal standard of reliability.

Even with the use of standardized tests that meet these criteria, however, teacher evaluation systems will need to incorporate additional evidence of teacher practice in order to correlate any student learning gains with specific classroom activities. This need is all the more critical because gains in student learning are not just the function of the classroom teacher but of many other factors as well, including teaching conditions and supports, past learning experiences, tutors, parents, student attendance and participation, and other external student and family factors. Having better tests will solve some—but not all—of the dilemmas associated with drawing inferences about the effects of individual teachers on student learning. As stated previously, the task force views these challenges as substantial, but not insurmountable, particularly if policymakers carefully evaluate the strengths and weaknesses of varying approaches to assessing student and teacher performance.

Recommendations for Student Assessments

To build on the promising elements identified in the previous sections of this white paper, the task force has drawn out a series of principles for selecting or developing student assessments that are used to evaluate teacher practice should:

- 1 Be aligned with the curriculum and student learning goals a specific teacher is expected to teach.** Measures of student learning must reflect the specific content of what is expected to be taught and must be explicitly aligned with the curriculum elements for which individual teachers are responsible. This principle also recognizes the importance of identifying the specific teacher or teachers responsible for gains in student learning, particularly because learning is a cumulative process, with previous teachers and learning experiences playing significant roles.
- 2 Be constructed to evaluate student learning**—that is, performance at two or more points in time, rather than a snapshot of student achievement, so that changes in students' understanding and performance can be substantially attributed to instruction. This principle applies with equal force to standardized quantitative measures and more qualitative measures of student learning, such as portfolios of student work—both of which must focus on the gains in learning students have realized over the period during which a teacher provided instruction.
- 3 Be sensitive to the diversity of students**, including those with special needs or limited English proficiency, as well as gifted or high-achieving students. Assessments used to evaluate teachers must be valid for the student populations they teach.
- 4 Capture learning validly and reliably at the students' actual achievement level.** Measures should be evaluated continuously to determine the extent to which they address the principles of alignment with the range of knowledge and skills to be measured and the ability to capture student learning across the diverse learning needs and backgrounds outlined in this paper.

5 Provide evidence about student performance and teacher practice that reflects the full breadth of subject-matter knowledge and skills that are valued. This recommendation addresses the need to identify the extent to which a teacher’s practices are connected to and influence student learning. Linking these measures enables a rich and nuanced assessment of on-the-ground practice in context and can capture the complexities of the effects of teaching on student learning over time.

Recommendations for Teacher Assessment Systems

The same principles that guide assessments of student learning should apply to evaluations of teacher practice. As a response to the evolving conditions in assessment and policy, we have translated these broadly accepted principles to specific recommendations to guide practice. The task force recommends that assessments or evaluations of teaching practice:

1 Be grounded in student learning, not student achievement. This recommendation applies with equal force to standardized quantitative measures as well as more qualitative measures. A single achievement measure, by contrast, reveals only a snapshot of student understanding at one point in time—and very little about the teacher’s influence. The only defensible way to determine teacher effectiveness is to focus on the gains that students have realized over the period during which the teacher provided instruction. For example, an analysis of student work before and after a teacher’s instructional intervention provides the conceptual basis for inferring that the teacher had a positive influence on individual student learning.

2 Employ measures of student learning explicitly aligned with the elements of curriculum for which the teachers are responsible. This recommendation emphasizes the importance of ensuring that teachers are evaluated for what they are teaching. For example, the selection of the assessment must reflect the specific content being taught, including higher-order thinking and concepts. Tests may need to be differentiated to address the needs of the groups of students being taught, including students with disabilities or language-acquisition needs.

3 Strive to attribute student growth to the teachers responsible. This recommendation underscores the importance of unambiguously attributing gains in student learning to a teacher’s contribution to students’ learning—and to the specific teacher responsible for the gains. For instance, value-added systems today face considerable challenges in distinguishing between instruction a classroom teacher provides and instruction provided by a resource specialist. In evaluating or recognizing teacher performance, identifying the correct teacher matters. This issue will become increasingly pronounced as districts and schools employ innovative staffing configurations such as team teaching, flexible grouping, and virtual delivery. The process by which teachers associate learning gains over time with their instructional plans and strategies also allows them to adapt their teaching practices to address specific student needs.

4 Establish the link between student learning and teacher practice. This recommendation addresses the need to identify the extent to which a teacher’s practices are connected to and influence student learning. Well-configured systems ought to consider teacher practice to ensure that it is consistent with measures of student learning. Linking these measures enables a rich and nuanced assessment of on-the-ground practice in context and can capture the complexities of the effects of teaching on student learning over time. We define accomplished teaching as being a function of both teaching practice and student learning. Evaluation of teacher effectiveness, then, needs to include measures of both. The teacher work sample initiatives highlighted in *Appendix D* offer one illustration of how multiple measures can be considered in enabling in-depth assessments of a range of competencies of accomplished teachers—for example, the quality of the teachers’ assignments and the way they assess, plan, adapt, and provide feedback in relation to individual student work over the course of a lesson or unit. These measures can also be flexible, in that a teacher could choose a range of outcomes related to learning (for example, assessment information about student mastery in core subject areas or homework completion) as well as a range of assessment tools, including teacher-developed measures.

5 Use measures that, to the greatest extent possible, reflect the full curriculum, the full scope of a teacher’s responsibilities, and the full domain of skills and competencies students are expected to develop. Measures should be evaluated continuously to determine the extent to which they address the principles of alignment with the range of knowledge and skills to be measured and the ability to capture student learning across the diverse learning needs and backgrounds outlined in this paper.

Recommendations for NBPTS

While no approach is perfect, these recommendations are intended to serve as guidelines in designing teacher assessment systems that reflect student learning and improve teaching practice. To that end, the task force believes that National Board Certification should ultimately be a measure of how accomplished teachers are contributing to student learning. While the National Board Certification process already requires teachers to demonstrate multiple examples of student learning, we recommend that NBPTS:

1 Explore strengthening the extent to which student learning is systematically evaluated in each of the 25 certificate areas. The task force recommends that the National Board be more precise about the nature of student work submitted in the portfolio process so that the work measures student learning more accurately in relation to teaching practice. This recommendation includes urging the National Board to strengthen evidence of student learning in each certification area, including systematic representations of learning and high-quality assessments wherever they are available.

One vision of an authentic student learning portfolio task—which takes its cue from the promising practices outlined in the previous section—would require candidates to think about student learning in everything they do and show that they produced learning over time by assembling a collection of evidence that demonstrates student learning. Teachers should be able to demonstrate mastery of student learning performance tasks, including, but not limited to:

- Assessing and analyzing student work before instruction. Accomplished teachers need to know how to gauge where students are before developing and teaching a lesson or unit. They should be able to clearly articulate the criteria used to select the assessment tool and how that tool was used to evaluate student work. Accomplished teachers then craft lessons or units that build on, and address deficiencies in, student understanding. They develop instructional plans that begin where students are and move toward where they need to be.
- Providing instruction based on student work. Accomplished teachers deliver lessons as planned, although they make adaptations along the way based on an ongoing assessment of student learning during the course of instruction.
- Assessing and analyzing student work after instruction to reflect on instruction. Accomplished teachers gauge where students are after each lesson or unit to determine whether and how learning has occurred, and then evaluate their own success in delivering excellent instruction in light of that evidence. This evaluation should drive subsequent planning that supports the next steps in student learning.
- Providing feedback to students based on their progress to guide student reflection and revision. Accomplished teachers show that they engage students in ways that reflect students' growth in understanding.

Candidates should also be required to continue to provide evidence of the following:

- Growth in student learning over time for a handful of students (at least two, and preferably as many as five) by showing student work samples prior to instruction and again after instruction, demonstrating teacher influence on particulars of individual student mastery and growth.
- Growth in student learning over time for the whole class by showing an aggregate measure of student understanding prior to instruction and demonstrating teacher influence on the growth of the class as a group.
- Teacher assignments requiring students to engage in complex higher-order problem-solving skills, which ensure that teachers are engaging their students in ambitious work and not sacrificing the quality of student assignments in order to obtain a favorable student learning assessment.

2 Explore adding additional evidence of student learning, created by teachers and derived from broader assessment measures, to the basket of evidence currently used in the National Board Certification process. Following models such as those explored in this paper, NBPTS could, for example, develop criteria for using standardized assessment results from the school, district, or state level in programs that tie teacher evaluation to student learning. It could also require teachers to submit, on a pilot basis, existing state or district assessment data, where aligned, valid, and available, as well as alternative measures of student learning in school districts and subject areas to augment standardized data or where such standardized data are not available. Where these measures are used, they should be evaluated in conjunction with other data about the characteristics of students, the context of instruction, and the teachers' practices, so that inferences can take into account the factors that would influence score gains and attributions about their sources.

Many technical problems must be resolved before such measures can be used validly and fairly in National Board Certification, including matching student records to candidates, addressing inclusion and accommodation issues, curricular alignment, the appropriateness of the test for measuring gains, and defining how student learning indices will actually contribute to candidate scores. However, NBPTS could advance the field and improve the national discourse around teacher evaluation-related policy proposals by developing a list of essential criteria for using state and district test results in programs that tie teacher evaluation to student learning. This published list eventually could serve as a set of standards that candidates must meet in order to include such measures in their portfolios. We have outlined an initial set of criteria on pages 32 and 33.

3 Continuously monitor research on the impact of teachers on student learning. As the body of research continues to emerge, NBPTS should continually study the evidence and test the validity of its own standards and instruments.

4 Through the National Board's research, promote systematic use of methods for evaluating teachers' effectiveness and impact on student learning. The National Board should

conduct research and share the results with other stakeholders to help inform the use of information and assessments of both student learning and teacher effectiveness.

The possibilities include expanding the nascent research base on the predictive validity of NBPTS portfolio entries to measures of student learning. Such studies could intentionally vary the set of performance tasks candidates are asked to complete in order to assess the degree to which different portfolio assessments and their features—number, type, relative weight—predict teacher effectiveness scores. Another possibility could be funding exploratory research on different ways the National Board might incorporate the value-added notion into its certification processes. We have suggested the possibility of revising one portfolio task per certificate area to include at least one task tied to student growth; a study could help identify others.

5 Promote the development of teacher skills in designing classroom assessments and interpreting external assessment results, providing appropriate feedback to students, and using measures of student learning as a central indication of accomplished teaching.

These are important aspects of teacher practice that bear directly on how much teachers contribute to student learning. Teachers need to understand how a system of assessments helps to define the framework for their teaching and contribute to a complete portrait of the student as a learner in the classroom. The more sophisticated teacher-created classroom assessments that would result from the development of such skills could become a strong component of the National Board Certification process. These assessments provide a personal, classroom-level connection between student learning data and an individual teacher's practice.

A range of skills is involved in designing classroom assessments and interpreting external assessment results. State, district, and formative classroom-level assessments (for example, end-of-book/course, chapter, teacher-constructed quizzes, portfolios, and diagnostic assessments) are designed to make unique contributions to a teacher's broader understanding of students' strengths and needs, while informing the central element of accomplished teaching. Accomplished teachers need to be informed consumers of each

test available in a system of assessments. This means they need to know and appreciate key design principles affecting the integrity and utility of such assessments, including industry standards for acceptable levels of measurement reliability and validity and the validity of such assessments for student groups with diverse learning abilities, styles, and developmental status.

It is equally important that teachers know how to move from data to data-driven instruction. Accomplished teachers must be able to manage, interpret, and use data to adapt instruction to meet student needs, and then follow up to assess the impact of their instruction. They must demonstrate their understanding of assessment systems as engines that drive improved student learning in the direction schools, districts, and states have specified in their learning standards, objectives, and achievement levels.

To prepare teachers to effectively use a system of assessments at the state, district, and classroom levels, most pre-service teaching programs will need to be augmented to include multiple supervised opportunities. Pre-service teachers will learn about formative and summative assessments. They should apply and discuss what they are learning in supervised classroom situations so they are prepared to work collaboratively with complex, standards-based assessment systems. Comparable improvement of the current teaching force should take place within ongoing, job-embedded professional development allowing teachers to apply their new knowledge to their current work and to learn from the experiences of their colleagues. NBPTS can exercise its considerable voice and vision to bring about such changes. ★

