

## *What Can Policymakers Do to Support Teaching to High Standards?*

by Linda Darling-Hammond and Deborah Loewenberg Ball

**R**eforms, we have learned over and over again, are rendered effective or ineffective by the knowledge, skills, and commitment of those working in the schools. Without know-how and buy-in, innovations do not succeed. Nor can they succeed without appropriate support, including time, materials, and learning opportunities.

Furthermore, studies continually show that teacher expertise is one of the most important factors in determining student achievement, followed by the smaller but generally positive influences of small schools and small class sizes, evidenced especially in the early grades. In other words, teachers who know a lot about teaching and learning, and who work in settings that allow them to know their students well, are the critical element of successful learning.

### **Support for Teacher Development**

Teacher education has a great deal of influence on teacher effectiveness. Teachers who are fully prepared and certified in both their discipline and in pedagogy are more highly rated and are more successful with students than are teachers without preparation. Those with greater training are found to be more effective than those with less.

The United States, however, offers fewer supports for teacher learning than do industrialized countries ranking higher on educational outcome measures. In addition, large numbers of U.S. teachers are not adequately prepared for the classroom. The United States invests far less money in the preservice and inservice preparation of teachers and allows much greater variability in teachers' access to knowledge.

The United States lacks a true professional development system for teachers. Its fragmentation and variability account for many problems and are largely attributable to three major factors:

- 1. Variability in standards for candidates.** There is wide variation in the standards required for entering teaching: licensing standards and their enforcement vary radically from state to state. Some high-standards states require a bachelor's degree in the subject to be taught plus intensive preparation for teaching, including at least 15 weeks of student teaching and preparation for working with special needs students. Some low-standards states require only a handful of education courses, a few weeks of student teaching, little or no preparation in child development or learning theory, and not even an academic minor in the field to be taught. Forty states allow teachers without any preparation, who have not met any standards, to be hired on temporary or emergency licenses. Some states require performance examinations of teaching knowledge and skills, while others require only tests of basic skills.
- 2. Variability in standards for programs.** Unlike other professions, most states do not require colleges of education to be professionally accredited, and many state procedures for approving programs are inadequate to ensure quality. The quality of programs in the more than 1,300 institutions preparing teachers ranges from excellent to very poor; fewer than half of these colleges meet national professional standards. A growing number of teachers are being prepared in rigorous five- or six-year programs that include intensive internships. Others, however, are prepared in traditional undergraduate programs, many of which serve as "cash cows" on their college campuses, providing more revenue to improve the education of future doctors, lawyers, and accountants than for prospective teachers.
- 3. Variability in teacher education curriculum and faculty.** Candidates take courses in the arts and sciences and in schools of education, and they spend time in schools. Unlike the curriculum of other professions, which has some coherence of substance and pedagogy, the teacher education curriculum is widely distributed but rarely co-

ordinated. The quality of recently developed alternative certification programs is equally variable. Some are year-long postbaccalaureate models that integrate theory and skill development more productively than some traditional programs, while other programs offer only a few weeks of training that ignores fundamental learning theory, child development, and content pedagogy. Also, it places new recruits in classrooms without supervised practice. Few states require or fund the kinds of internships that are provided to new entrants in other professions.

## Professional Development That Makes a Difference

Five premises are especially pertinent to improving teachers' learning opportunities:

- Teachers' prior beliefs and experiences affect what they learn.
- Learning to teach to the new standards for students takes time and is not easy.
- Content knowledge is key to learning how to teach subject matter so that students understand it.
- Knowledge of children, their ideas, and their ways of thinking is crucial to teaching for understanding.
- Opportunities for analysis and reflection are central to learning to teach.

Despite the seemingly obvious nature of these five premises, they are not the foundation for most professional development. A great deal of what teachers encounter as professional development does not consider them as learners, is not designed to help them develop their abilities over time, does not focus on the content or students whom they teach, and does not offer opportunity for focused analysis and reflection. Moreover, most professional development is conducted in isolation from the materials and problems of teachers' work.

The best way to improve both teaching practice and teacher learning is to create the capacity for better learning about teaching *as a part of teaching*. Professional development would be substantially improved if we developed ways to learn and teach about practice *in practice*.

Four current lines of work reflect these ideas and hold promise for professional development that can make a difference.

**Integrating theory and practice.** Over the past decade, more than 300 colleges of education have created programs that extend beyond the traditional four-year bachelor's degree program, thus allowing more extensive study of the disciplines to be taught in addition to education coursework that is integrated with more clinical training in schools. The fifth year allows students to devote their energies exclusively to the task of preparing to teach. This enables these programs to provide year-long school-based internships that are woven together with coursework on learning and teaching. Graduates of these five-year programs are more satisfied with their preparation. Furthermore, their colleagues, principals, and cooperating teachers perceive them as better prepared. These graduates have been found to be as effective with students as more experienced teachers, and they are more likely to enter and stay in the teaching profession than their peers who are prepared in traditional four-year programs.

**Developing professional discourse around problems of practice.** An inquiry orientation to knowledge provides an avenue for improving the quality and impact of professional development. But this is still a discourse of answers, the potential of which is restricted by a lack of critical discussion. Forums are needed in which teaching and learning can be discussed and analyzed and where serious examination of practice, its outcomes, and its alternatives is possible.

**Content-based professional development.** CPRE Researchers David Cohen and Heather Hill (1997) have found that when teachers had extensive opportunities to learn in student curriculum workshops in elementary mathematics, their practice more closely resembled that envisioned by California's new curriculum framework, and their students' achievement on state mathematics assessments was significantly higher. These student curriculum workshops were learning opportunities in which teachers used new student curriculum units on specific concepts in the state's mathematics framework to investigate mathematics content, instruction, and learning. The effects of these student curriculum workshops were strikingly distinguishable from other workshops, which had no deep connection to the teaching of central topics in mathematics.

**Learning from the analysis of practice.** Samples of student work and teacher work are central to the professional development emerging from student and teaching standards. Teachers have reported learning a great deal from analyzing

their own and others' practice against standards that reflect accomplished teaching. Teachers also feel they learn a great deal from developing a portfolio based on teaching artifacts (videotapes, lesson plans, student work) and reflections on their work. The portfolio assessment processes used by the Interstate New Teacher Assessment and Support Consortium (INTASC) for licensing beginning teachers and by the National Board for Professional Teaching Standards for earning advanced certification can serve as a professional development curriculum for new and experienced teachers as well as teacher educators. These processes provide opportunities for focused and ongoing discussion of practice. Among the cornerstones of the National Board and INTASC portfolios are videotaped lessons that offer a concrete context for close study of students, pedagogy, content, and learning in preservice teacher education and ongoing professional development. These images of reform are more powerful than abstract discussions of new ideas.

## Lessons from Last Decade's Reforms

The states with top student test scores have long supported high-quality teaching and teacher learning. Minnesota, North Dakota, Iowa, Wisconsin, and Maine repeatedly rank at the top of the state distribution in student achievement. None of these states has had a history of statewide curriculum or high-stakes testing systems, but they have a long history of professional policy. Minnesota, North Dakota, and Wisconsin are among the 12 states with state professional standards boards, have enacted high standards for entering teaching, and are among the few states that refuse to hire unqualified teachers on substandard licenses. Districts in these states are more likely to require a college major or minor in the field to be taught as well as full state certification as a condition for hiring. These same states also have been leaders in redefining teacher education and licensing.

Reform strategies that did not make substantial efforts to improve teaching have been much less successful. States that instituted new standards and tests in the 1980s without investing in teaching did not experience improved achievement. Georgia and South Carolina mandated tests for students and for teachers, but did not link these tests to emerging knowledge about teaching or to new learning standards, nor did they invest in improving schools of education or ongoing professional development.

## Promising Strategies for Improving Teaching

Since the release of *What Matters Most: Teaching for America's Future*, the 1996 report of the National Commission on Teaching and America's Future, twelve states—Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Missouri, Montana, North Carolina, Ohio, and Oklahoma—have entered partnerships with the Commission and have undertaken systemwide efforts to improve teaching.

**Standards-based reforms of teaching.** Almost all of the Commission's 12 partner states are establishing a continuum of standards for teacher development that are aligned with the student standards and with one another. They include the standards set for professional accreditation of education schools through the National Council for Accreditation of Teacher Education, for beginning teacher licensing through assessments based on INTASC standards, and for advanced certification of accomplished practice through the National Board for Professional Teaching Standards. States that build this continuum of standards into their policies for approving programs, licensing teachers, and rewarding expert veteran teachers will have the foundation of a true professional development system that ensures teachers have the knowledge and skills needed to teach diverse learners so they meet high academic standards.

**Redesign of teacher education and induction.** Maryland, North Carolina, and Ohio have been redesigning schools of education to include professional development schools, similar to teaching hospitals, where teachers-in-training learn state-of-the-art practice under the guidance of master teachers and teacher educators. Some states are encouraging schools of education to move toward five-year preparation programs that include a year-long internship at a professional development school. North Carolina, Indiana, and Ohio are implementing new induction programs that provide beginning teachers with more intensive supervision and that include assessments tied to the new teaching standards as the basis for a continuing professional license.

**Restructured professional development.** Missouri has enacted a 2 percent set-aside of state and local education funds to be dedicated to professional development to support regional professional development centers, teacher networks, and study groups. Ohio has created regional teacher academies to provide sustained professional development that is supported by new technologies and shaped and managed by

district teachers in collaboration with nearby universities. Ohio also operates a successful venture capital fund that underwrites research, inquiry, and professional development by school staff members. It is directly linked to their school needs and immediate problems of practice. Maine supports two school-university partnerships and regional school improvement centers that are focused on teacher inquiry, school-based research, teacher study groups, and professional development schools. Content-based professional development networks in California and Vermont have received state support to work with teachers on new curriculum frameworks and assessments.

These efforts hold promise. Professional development that links theory and practice, that creates discourse around problems of practice, that is content-based and student-centered, and that engages teachers in analysis of teaching can support the serious teacher-learning needed to engender powerful student achievement.

## More on the Subject

This **CPRE Policy Bulletin** is based on the 33-page **CPRE/NCTAF Joint Report**, *Teaching for High Standards: What Policymakers Need to Know and Be Able to Do* by Linda Darling-Hammond and Deborah Loewenberg Ball. Copies of the report are available at \$10.00 each. Write to: CPRE Publications, Graduate School of Education, University of Pennsylvania, 3440 Market Street, Suite 560, Philadelphia, PA 19104-3325. Make checks payable to Trustees of the University of Pennsylvania. Prices include book-rate postage and handling. Sorry, we cannot accept returns, credit card orders, or purchase orders. Sales tax is not applicable.

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