



Teacher Learning That Supports Student Learning

by Linda Darling-Hammond

Today's schools face enormous challenges. In response to an increasingly complex society and a rapidly changing technology-based economy, schools are being asked to educate the most diverse student body in our history to higher academic standards than ever before. This task is one that cannot be "teacher-proofed" through management systems, testing mandates, or curriculum packages.

What do teachers need to know to teach all students according to today's standards?

What Teachers Need to Know

First, teachers need to understand subject matter deeply and flexibly so that they can help students create useful cognitive maps, relate ideas to one another, and address misconceptions. Teachers need to see how ideas connect across fields and to everyday life. (Shulman, 1987.)

Interpreting learners' statements and actions and shaping productive experiences for them require an understanding of child and adolescent development and of how to support growth in various domain — cognitive, social, physical, and emotional. Teaching in ways that connect with students also requires an understanding of differences that may arise from culture, family experiences, developed intelligences, and approaches to learning. Teachers need to be able to inquire sensitively, listen carefully, and look thoughtfully at student work.

Teachers need to know about curriculum resources and technologies to connect their students with sources of information and knowledge that allow them to explore ideas, acquire and synthesize information, and frame and solve problems. And teachers need to know about collaboration: how to structure interactions among students, how to collaborate with other teachers, and how to work with parents to shape supportive experiences at school and home.

New Strategies for Teacher Learning

Acquiring this sophisticated knowledge and developing a practice that is different from what teachers themselves experienced as students requires learning opportunities for teachers that are more powerful than simply reading and talking about new pedagogical ideas. (Ball and Cohen, in press.) Teachers learn best by studying, doing, and reflecting; by collaborating with other teachers; by looking closely at students and their work; and by sharing what they see. This kind of learning cannot occur in college classrooms divorced from practice or in school classrooms divorced from knowledge about how to interpret practice.

Better settings for such learning are appearing. More than 300 schools of education in the United States have created programs that extend beyond the traditional four-year bachelor's degree program. Some are one- or two-year graduate programs for recent graduates or mid-career recruits. Others are five-year models for prospective teachers who enter teacher education as undergraduates. In either case, the fifth year allows students to focus exclusively on the task of preparing to teach, with year-long, school-based internships linked to coursework on learning and teaching.

Studies have found that graduates of these extended programs are more satisfied with their preparation, and their colleagues, principals, and cooperating teachers view them as better-prepared. Extended program graduates are as effective with students as are much more experienced teachers and are much more likely to enter and stay in teaching than their peers prepared in traditional four-year programs. (Andrew and Schwab, 1995; Denton and Peters, 1988; Shin, 1994.)

Many of these programs have joined with local school districts to create Professional Development Schools. Like teaching hospitals, these schools aim to provide sites for state-of-the-art practice and for teacher learning. Both university and school faculty plan and teach in these programs. Beginning teachers get a more coherent learning experience when they teach and learn in teams with these veteran faculty and with one another. Senior teachers deepen their knowledge by serving as mentors, adjunct faculty, co-researchers, and teacher leaders. (Darling-Hammond, 1994.)

These new programs envision the professional teacher as one who learns from teaching rather than as one who has finished learning how to teach.

Professional Learning in Practice

Countries like Germany, France, and Luxembourg have long required two to three years of graduate-level study for prospective teachers on top of an undergraduate degree in the subject(s) to be taught. Education courses include the study of child development and learning, pedagogy, and teaching methods, plus an intensively supervised internship in a school affiliated with the university.

In France, all candidates now complete a graduate program in newly created University Institutes for the Preparation of Teachers that are connected to nearby schools. In Japan and Taiwan, new teachers complete a year-long supervised internship with a reduced teaching load that allows for mentoring and additional study. By Japanese law, first-year teachers receive at least 20 days of inservice training and 60 days of professional development. Master teachers are released from their classrooms to advise and counsel them. (National Commission on Teaching and America's Future, 1996.)

In their study of mathematics teaching in Japan, Taiwan, and the United States, Stigler and Stevenson note: "One of the reasons Asian class lessons are so well-crafted is that there is a very systematic effort to pass on the accumulated wisdom of teaching practice to each new generation of teachers and to keep perfecting that practice by providing teachers the opportunities to continually learn from each other." (1991, p. 46.)

Without these supports, learning to teach well is extremely difficult. Most U.S. teachers start their careers in disadvantaged schools where turnover is highest, are assigned the most educationally needy students whom no one else wants to teach, are given the most demanding teaching loads with the greatest number of extra duties, and receive few curriculum materials and no mentoring or support.

After entry, teachers are expected to know everything they will need for a career, or to learn through occasional workshops mostly on their own, with few structured opportunities to observe and analyze teaching with others. As one high school teacher who had spent 25 years in the classroom once told me: "I have taught 20,000 classes; I have been 'evaluated' 30 times; but I have never seen another teacher teach."

Some school districts have begun to create new approaches to professional development that feature mentoring for beginners and veterans; peer observation and coaching; local study groups and networks for specific subject matter areas; teacher academies that provide ongoing seminars and courses of study tied to practice; and school-university partnerships that sponsor collaborative research, inter-school visitations, and learning opportunities developed in response to teachers' and principals' felt needs.

For example, at Wells Junior High, a Professional Development School working with the University of Southern Maine, the whole notion of staff development was turned on its head. The emphasis shifted from outside consultants to in-house experts. Collaborative learning groups replaced the traditional lecture/demonstration format. Problem-posing and problem-solving supplanted the recipes and prescriptions for effective schools that teachers had heard for years and never managed to implement. (Miller and Silvernail, 1994, pp. 30, 31.)

Similarly, at Fairdale High School in Louisville, Kentucky, teachers' research coupled with shared decision making produced major changes.

As part of a self-study, 10 teachers followed 10 children through a school day. When it was over, teachers said things like, "It was boring," or, "You know, this isn't a very humane place to be." Teachers read and began to trade articles from the *Kappan*,

Educational Leadership, and *Education Week*. Even before participative management was initiated at Fairdale, the teachers started changing things. "Make no mistake about it," [the principal] said, "We are building a professional culture." (Kerchner, 1993, p. 9.)

Professional development strategies that succeed in improving teaching share several features. (Darling–Hammond and McLaughlin, 1995.) They tend to be:

- Experiential, engaging teachers in concrete tasks of teaching, assessment, and observation that illuminate the processes of learning and development;
- Grounded in participants' questions, inquiry, and experimentation as well as professionwide research;
- Collaborative, involving a sharing of knowledge among educators;
- Connected to and derived from teachers' work with their students, as well as to examinations of subject matter and teaching methods;
- Sustained and intensive, supported by modeling, coaching, and problem solving around specific problems of practice; and
- Connected to other aspects of school change.

The Benefit for Students

Growing evidence suggests that this kind of professional development not only makes teachers feel better about their practice, but it also reaps learning gains for students, especially in the kinds of more challenging learning that new standards demand. (Darling–Hammond, 1997; NFIE, 1996.) Creating a profession of teaching in which teachers have the opportunity for continual learning is the likeliest way to inspire greater achievement for children, especially those for whom education is the only pathway to survival and success.

This article is adapted from *Educational Leadership* Vol. 55, No. 5, February 1998, and is excerpted with permission. That article draws in substantial part on the author's book, *The Right to Learn* (San Francisco: Jossey–Bass, 1997).

References:

- Andrew, M. D., and R. L. Schwab. (Fall 1995). "Has Reform in Teacher Education Influenced Teacher Performance? An Outcome Assessment of Graduates of Eleven Teacher Education Programs." *Action in Teacher Education* 17, 3: 43–53. Darling–Hammond, L. (1997). *Doing What Matters Most: Investing in Quality Teaching*. New York: The National Commission on Teaching and America's Future. Darling–Hammond, L., and M. W. McLaughlin. (1995). "Policies That Support Professional Development in an Era of Reform." *Phi Delta Kappan* 76, 8: 597–604. Darling–Hammond, L., ed. (1994). *Professional Development Schools: Schools for Developing a Profession*. New York: Teachers College Press. Denton, J. J., and W. H. Peters. (1988). "Program Assessment Report: Curriculum Evaluation of a Non–Traditional Program for Certifying Teachers." Unpublished report. College Station: Texas A&M University. Dewey, J. (1929). *The Sources of a Science of Education*. New York: Horace Liveright. Kerchner, C. T. (1993). "Building the Airplane as It Rolls Down the Runway." *School Administrator*. 50, 10: 8–15. Miller, L., and D. L. Silvernail. (1994). "Wells Junior High School: Evolution of a Professional Development School." In *Professional Development Schools: Schools for Developing a Profession*, edited by L. Darling–Hammond. New York: Teachers College Press. National Commission on Teaching and America's Future. (1996). *What Matters Most: Teaching for America's Future*. New York: National Commission on Teaching and America's Future. National Foundation for the Improvement of Education. (1996). *Teachers Take Charge of Their Learning: Transforming Professional Development for Student Success*. Washington, D.C.: Author. Shin, H. (1994). "Estimating Future Teacher Supply: An Application of Survival Analysis." Paper presented at the annual meeting of the American Educational Research Association, New Orleans. Shulman, L. (1987). "Knowledge and Teaching: Foundations of the New Reform." *Harvard Educational Review* 57, 1: 1–22. Stigler, J. W., and H.

W. Stevenson. (Spring 1991).

"How Asian Teachers Polish Each Lesson to Perfection." *American Educator* 15, 1: 12–21, 43–47.

Published: 5/1/1999