

STATE *of the* PROFESSION

STUDY MEASURES STATUS OF PROFESSIONAL DEVELOPMENT

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Ensuring student success requires a new kind of teaching, conducted by teachers who understand learning and pedagogy, who can respond to the needs of their students and the demands of their disciplines, and who can develop strong connections between students' experiences and the goals of the curriculum. By examining information about the nature of professional development currently available to teachers across the United States and in a variety of contexts, education leaders and policy makers can begin both to evaluate the needs of the systems in which teachers learn and do their work and to consider how teachers' learning can be further supported.

NSDC has sponsored this initial report to synthesize what we know as a baseline to inform decisions and improvements in professional learning. We hope that each report in the series will answer key questions about professional learning that will contribute to improved outcomes in teaching and learning in the United States.

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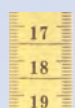
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What we know

The full report highlights key findings and also provides extensive detail and citations from the research project. Here, several key findings are highlighted with selected detail and citations.

WHAT IS EFFECTIVE PROFESSIONAL LEARNING?



Sustained and intensive professional development for teachers is related to student achievement gains.

An analysis of well-designed experimental studies found that a set of programs that offered substantial contact hours of professional development (ranging from 30 to 100 hours in total) spread over six to 12 months showed a positive and significant effect on student achievement gains. According to the research, intensive professional development that offered an average of 49 hours in a year boosted student achievement by approximately 21%. Other efforts that involved a limited amount of professional development (ranging from five to 14 hours in total) showed no statistically significant effect on student learning (Yoon, Duncan, Lee,

Scarloss, & Shapley, 2007).

While these findings are striking, they come from a limited pool of rigorous quantitative studies. For example, the studies described above came from a meta-analysis of 1,300 research studies and evaluation reports, from which researchers identified just nine experimental or quasi-experimental studies using control groups with pre- and post-test designs that could evaluate impacts of professional development on student achievement (Yoon et al., 2007). Other reviews of research on professional development in literacy (Garet et al., 2008) and mathematics (National Mathematics Advisory Panel, 2008) also found few studies designed to support causal inferences.

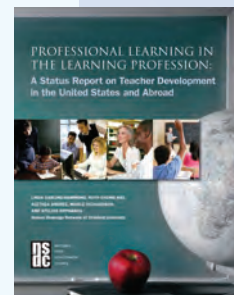
Nonetheless, the methodologically strong studies that we do have suggest that well-designed professional development can influence teacher practice and student performance. The research base also provides a forceful indictment of the occasional, one-shot workshops that most school systems tend to provide, and which generations of teachers have derided (Stein, Smith, & Silver, 1999). More importantly, this research suggests some general guidelines for the design of effective professional development programs.

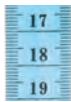
About the study

This article is excerpted from *Professional Learning in the Learning Profession: A Status Report on Teacher Development in the United States and Abroad*, part of a multiyear research initiative, *The Status of Professional Development in the United States*.

Data and findings drawn from this study will be used to establish benchmarks for assessing progress in professional development over time. Taken as a whole, this work will provide the most comprehensive picture and far-reaching analysis of professional learning that has ever been conducted in the United States. The overall research effort has been supported by the Bill & Melinda Gates Foundation, MetLife Foundation, NSDC, and The Wallace Foundation.

The complete version of this report is online at www.nsd.org/stateproflearning.cfm





Collaborative approaches to professional learning can promote school change that extends

beyond individual classrooms.

When all teachers in a school learn together, all students in the school benefit. Research shows that when schools are strategic in creating time and productive working relationships within academic departments or grade levels, across them, or among teachers schoolwide, the benefits can include greater consistency in instruction, more willingness to share practices and try new ways of teaching, and more success in solving problems of practice (Hord, 1997; Joyce & Calhoun, 1996; Louis, Marks, & Kruse, 1996; McLaughlin & Talbert, 2001; Newman & Wehlage, 1997; Perez et al., 2007).

While efforts to strengthen teachers' professional relationships can take many forms, a number of researchers have identified specific conditions necessary for their success. For example, in a study of 900 teachers in 24 elementary and secondary schools across the country, researchers found that teachers formed more stable and productive professional communities in smaller schools, schools with little staffing complexity (i.e. where more staff members are classroom teachers and fewer are assigned to specialist and administrative jobs), schools where teachers were relatively more involved in educational decision making, and, especially, schools that scheduled regular blocks of time for teachers to meet and plan courses and assignments together (Louis, Marks, & Kruse, 1996).



Effective professional development is intensive, ongoing, and connected to practice; focuses on the

teaching and learning of specific academic content; is connected to other school initiatives; and builds

strong working relationships among teachers.

Today, as in previous decades, most professional development for teachers comes in the form of occasional workshops, typically lasting less than a day, each one focusing on discrete topics with their connection to the classroom left to teachers' imaginations.

However, such episodic workshops disconnected from practice do not allow teachers the time for serious, cumulative study of the given subject matter or for trying out ideas in the classroom and reflecting on the results. Research that finds changes in teacher practice and, in some cases, student learning, supports the conclusion that *intensive and sustained professional development activities, especially when they include applications of knowledge to teachers' planning and instruction, have a greater chance of influencing teaching practices and, in turn, leading to gains in student learning* (Knapp, 2003; Cohen & Hill, 2001; Desimone, Porter, Garet, Yoon, & Birman, 2002; Garet, Porter, Desimone, Birman, & Yoon, 2001; McGill-Franzen, Allington, Yokio, & Brooks, 1999; Supovitz, Mayer, & Kahle, 2000; Weiss & Pasley, 2006).

These findings match up well with teachers' self-reported beliefs about the value of intensive and ongoing professional development. According to results from a national survey, teachers view inservice activities as most effective when they are sustained over time (Garet et al., 2001).

Going further, research suggests that professional development is most effective when it addresses the concrete, everyday challenges involved in teaching and learning specific academic subject matter, rather than focusing on abstract educational principles or teaching methods taken out of context.

Equally important, professional

development that leads teachers to define precisely which concepts and skills they want students to learn — and to identify the content that is most likely to give students trouble — has been found to improve teacher practice and student outcomes (Blank, de las Alas, & Smith, 2007; Carpenter, Fennema, Peterson, Chiang, & Loef, 1989; Cohen & Hill, 2001; Lieberman & Wood, 2002; Merek & Methven, 1991; Saxe, Gearhart, & Nasir, 2001; Wenglinsky, 2000; McGill-Franzen et al., 1999). To this end, it is often useful for teachers to be put in the position of studying the very material that they intend to teach to their own students.

WHERE THE U.S. STANDS TODAY

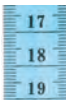
To what extent do America's public school teachers receive the kinds of professional learning that research recommends or that other nations embrace?

In order to assess the current status of professional learning in U.S. schools, as well as trends over time, we examined teacher and school questionnaire data from the federal Schools and Staffing Surveys of 1999-2000 and 2003-04 (National Center for Education Statistics, n.d.) the most recent nationally representative, large-scale survey on teachers' professional development available. We analyzed the data in terms of opportunities for professional learning reported by teachers at the national and state levels and by school types (e.g. grade level, type of community, and student population served).

On the positive side, we found signs that some education systems are developing more sophisticated understandings of what constitutes high-quality professional learning, and we found evidence that increasing numbers of schools and districts are providing high-quality supports for their teachers.

Unfortunately, we also found that such well-designed professional development is still relatively rare, and few of the nation's teachers have access to regular opportunities for intensive learning (Blank et al., 2007).

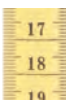
Specifically, the survey data reveal that:



Public schools in the United States have begun to recognize and respond to the need to provide support for new teachers.

Attention to the induction needs of beginning teachers is an area where the country has made considerable progress. However, the United States is still far from providing the universal access to intensive mentoring, coaching, and job supports common in other countries.


In 1996, the National Commission on Teaching and America's Future found that only eight states mandated and funded induction programs for beginning teachers. By 2008, according to *Education Week*, 22 states mandated that new teachers participate in a state-funded induction program, and 25 states required new teachers to participate in a state-funded mentoring program (*Education Week*, 2008).



More than nine out of 10 U.S. teachers have participated in professional learning consisting primarily of short-term conferences or workshops.

Fewer teachers participated in other forms of traditional professional development, including university courses related to teaching (36%) and observational visits to other schools (22%). The percentage of teachers who visited classrooms in other schools dropped from 34% to 22% from 2000 to 2004, the most recent year for which national data are available.

There appears to be wide variation in the types of professional learning that teachers experience across states. Aside from workshops and conferences, in which nearly all teachers participate, the percentage of teachers who took university courses related to teaching ranged from 15% in Texas to 79% in Idaho. The percentage of teachers who were presenters at workshops or training sessions ranged from 18% in Iowa to 37% in the District of Columbia. And the percentage of teachers who participated in observational visits to other schools ranged from 14% in West Virginia to 39% in Utah.




While teachers typically need substantial professional development in a given area (close to 50 hours) to improve their skills and their students' learning, most professional development opportunities in the U.S. are much shorter.

On the 2003-04 national Schools and Staffing Survey, a majority of teachers (57%) said they had received no more than 16 hours (two days or less) of professional development during the previous 12 months on the content of the subject(s) they taught. This was the most frequent area in which teachers identified having had professional development opportunities. Fewer than one-quarter of teachers (23%) reported that they had received at least 33 hours (more than four days) of professional development on the content of the subject(s) they taught.


The intensity and duration of professional development offered to U.S. teachers is not at the level that research suggests is necessary to have noticeable impacts on instruction and student learning. As this report notes earlier, research suggests that professional development of 14 hours or less has no effect on student learning,

while longer duration programs show positive and significant effects on student achievement.



Significant variation in both support and opportunity for professional learning exists among schools and states.

A lower percentage of secondary school teachers reported participating in district-planned professional development than did elementary school teachers. Among states, Arkansas, Connecticut, New Hampshire, and Vermont had significantly higher proportions of teachers participating in professional learning than the national average.



U.S. teachers report little professional collaboration in designing curriculum and sharing practices, and the collaboration that occurs tends to be weak and not focused on strengthening teaching and learning.

While fine-grained national data on teacher collaboration are not available, the Schools and Staffing Survey Teacher Questionnaires asked teachers whether in the last 12 months they had engaged in individual or collaborative research on a topic of professional interest, participated in regularly scheduled collaboration with other teachers on issues of instruction (excluding administrative meetings), participated in peer observations, or participated in a mentor/coaching program either as a mentor/coach or as a recipient of mentoring/coaching.

In 2003-04, about 70% of teachers reported participating in "regularly scheduled collaboration with other teachers on issues of instruction," a slight decline from 74% in 1999-2000. Unfortunately, the survey does not specify what "regularly scheduled" means in terms of frequency or duration, so it is unclear whether teachers

were meeting for a couple of hours a month or as much as 10 hours a week. Other responses suggest a low intensity of teacher collaboration in most schools.

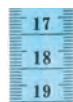
Nationally, only 17% of teachers reported a great deal of cooperative effort among staff members, and only 14% agreed that they had made conscious efforts to coordinate the content of courses. Evidently, whatever the collaboration among teachers, it is not spent in common curriculum planning or in building the kinds of strong professional relationships described earlier.

The survey data also show a drop in the proportion of teachers engaged in individual or collaborative research, from 47% in 2000 to about 40% in 2004. More, however, were involved in mentoring and coaching (46%) or peer observations (63%).

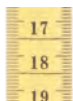
American teachers say that much of the professional development available to them is not useful.

Teachers give relatively high marks to content-related learning opportunities, with six of 10 teachers (59%)

saying this training was useful or very useful. But fewer than half found the professional development they received in other areas to be of much value.



Teachers say that their top priorities for further professional development are learning more about the content they teach (23%), classroom management (18%), teaching students with special needs (15%), and using technology in the classroom (14%).



Teachers are not getting adequate training in teaching special education or limited English proficiency students.

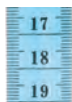
More than two-thirds of teachers nationally had not had even one day of training in supporting the learning of special education or limited English proficiency students during the previous three years, and only one-third agreed that they had been given the support they needed to teach students with special needs.

HOW THE U.S. COMPARES INTERNATIONALLY

Effective professional learning is commonly available in many other industrialized nations, including those that have been recognized as high-achieving on important international measures such as the Programme for International Student Assessment (PISA) and the Third International Mathematics and Science Study (TIMSS).

In comparison to the United States, industrial nations that are members of the Organisation for Economic Cooperation and Development (OECD) provide teachers significantly more professional learning. While the results of surveys using somewhat different methods and questions do not allow for direct comparisons, the evidence is clear that teachers in other nations are significantly more likely to visit classrooms of teachers in other schools, collaborate frequently on issues of instruction, and participate in collaborative research. Specifically, our review of the research literature and data on professional development in high-

achieving countries reveal that teachers in those nations tend to enjoy at least four advantages over their counterparts in the United States:



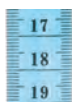
U.S. teachers, unlike many of their colleagues around the world, bear much of the cost of their professional development.

While most teachers were given some time off during the workday to pursue professional learning opportunities, fewer than half received reimbursement for travel, workshop fees, or college expenses.



U.S. teachers participate in workshops and short-term professional development events at similar levels as teachers in other nations. But the United States is far behind in providing public school teachers with opportunities to participate in extended learning opportunities and productive collaborative communities.

Those are the opportunities that allow teachers to work together on issues of instructional planning, learn from one another through mentoring or peer coaching, conduct research on the outcomes of classroom practices, and collectively guide curriculum, assessment, and professional learning decisions.



Nations that outperform the United States on international assessments invest heavily in professional learning and build time for ongoing, sustained teacher development and collaboration into teachers' work hours.

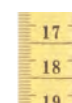
One of the key structural supports for teachers engaging in professional learning is the allocation of time in the workday and week to participate in such activities. In most European

and Asian countries, instruction takes up less than half of a teacher's working time (National Commission on Teaching and America's Future, 1996; Organisation for Economic Cooperation and Development, 2007). The rest — generally about 15 to 20 hours per week — is spent on tasks related to teaching, such as preparing lessons, marking papers, meeting with students and parents, and working with colleagues. Most planning is done in collegial settings (such as large faculty rooms where teachers' desks are located to facilitate collective work) (Kang & Hong, 2008) and during meetings of subject-matter departments and grade-level teams.

Schools in European nations — including Denmark, Finland, Hungary, Italy, Norway, and Switzerland — dedicate time for regular collaboration among teachers on issues of instruction (OECD, 2004). A majority of schools in high-achieving nations provide time for teachers' professional development by building it into teachers' workday and/or by providing class coverage by other teachers. Among OECD nations, more than 85% of schools in Belgium, Denmark, Finland, Hungary, Ireland, Norway, Sweden, and Switzerland provide time for professional development as part of teachers' average workday or week (OECD, 2004). When time for professional development is built into teachers' schedules, their learning activities can be ongoing and sustained and can focus on a particular issue or problem over time. Similar practices are common in Japan, Singapore, and other Asian nations, as well.

By contrast, U.S. teachers generally have from three to five hours a week for lesson planning, usually scheduled independently rather than jointly with colleagues (NCTAF, 1996). U.S. teachers also average far more net teaching time in direct contact with students (1,080 hours per

year) than any other OECD nation. By comparison, the OECD average is only 803 hours per year for primary schools and 664 hours per year for upper secondary schools (OECD, 2007). U.S. teachers spend about 80% of their total working time engaged in classroom instruction, as compared to about 60% for these other nations' teachers, who thus have much more time to plan and learn together, and to develop high-quality curriculum and instruction.



U.S. teachers have limited influence in crucial areas of school decision making.

In many high-achieving nations where teacher collaboration is the norm, teachers have substantial influence on school-based decisions, especially in the development of curriculum and assessment, and in the design of their own professional learning.

In most of the countries studied, teachers are actively involved in curriculum and assessment development, often in response to national or state standards, and they guide much of the professional development they experience. In Western Europe, nations such as Finland, Sweden, and Switzerland have decentralized most classroom decision making to professionally well-informed schools and teachers. Highly detailed curriculum documents and external tests were replaced in the 1970s and '80s by much leaner standards outlining broad goal statements designed to guide teachers' development of curriculum and instruction. Teachers in these and many other nations are responsible for developing syllabi, selecting textbooks, developing curriculum and assessments, deciding on course offerings and budget issues, planning and scheduling professional development, and more (Hargreaves, Halász, & Pont, 2007; Välijärvi et al., 2007). They typically design key school-based assessments to evaluate

student learning as part of the overall assessment system. In place of professional development dictated by national boards of education, the content of professional learning is determined according to local needs and is often embedded in the work of “teacher teams” or “teacher units” at particular schools, which are empowered to make decisions around curriculum and evaluation (Ahlstrand, 1994).

In Sweden, the decentralization of curriculum planning and inservice training led to a shift in the focus of the development work at each school — from prescribed teacher-training models defined by the central education ministry to teacher-designed projects focused on solving problems in teachers’ own classrooms (Ronnerman, 1996). Teachers are now required to participate in teacher teams, which meet during regular working hours to discuss and make decisions on common matters in their work, including lesson planning, the welfare of pupils, and curriculum development and evaluation (Ahlstrand, 1994). Such action research to solve pedagogical problems and guide curriculum decisions is also encouraged in Australia, Hong Kong, New Zealand, and Singapore.

In the United States, however, fewer than one-fourth of teachers feel they have great influence over school decisions and policies in seven different areas noted in the Schools and Staffing Surveys.

While a scant majority of teachers across the nation feel that they have some influence over curriculum and setting performance standards for students, fewer than half perceived that they had some influence over the content of their inservice professional development. And very few felt they had influence over school policies and decisions affecting either teacher hiring and evaluation or the allocation of the school budget.

The initiative will include two additional studies:

- **A survey to measure effectiveness of professional learning at the state level.**
- **States’ professional development practices and policy plus case studies.**

MOVING FORWARD

These findings lead to two major questions: How can states, districts, and schools build their capacity to provide high-quality professional learning that is effective in building teacher knowledge, improving their instruction, and supporting student learning? And how can they assess the impact of their efforts over time?

Future studies contributing to NSDC’s *The Status of Professional Development in the United States* research initiative will help educators and policy makers answer these questions. The next study will use a national survey to measure the effectiveness of professional learning at the state level. The third study will look at states’ professional development practices and policy and develop case studies that will deepen understanding among educators and policy makers of what it takes at the state and district levels to enact and implement policies that result in improved systems for teachers’ professional learning.

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See Q&A with Linda Darling-Hammond on p. 52.

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