The opportunity to reflect on changes in professional development over the past decade comes at the perfect moment, for these very 10 years have separated my work on two books: *Continuing to Learning: A Guidebook to Teacher Development* (Northeast/Islands Regional Laboratory and NSDC, 1987) and *Designing Professional Development for Teachers of Science and Mathematics* (Corwin, 1998). Both books review research, literature, and best practice; both have examples of professional development strategies, programs, and initiatives. Yet they differ in several ways that reflect increased knowledge and important changes in practice over the past decade.

The first difference is the deepening knowledge base on learning, benefiting both teachers and students. Cognitive research has illuminated how learning occurs and has guided us—teachers and professional developers alike—to create rich, challenging, and productive learning activities and environments. This has confirmed earlier ideas about the importance of sustained learning linked closely to practice; of challenging people's ideas and beliefs; and of supportive, nurturing learning environments. It has emphasized the importance of teachers understanding deeply the content they teach: of knowing the "big ideas" of their disciplines, how their students understand those ideas, and what strategies, examples, and materials aid their learning. Pedagogical content knowledge— a term coined by Lee Shulman in 1987 for this specialized knowledge of excellent teachers—has moved from misunderstood "jargon" to play a central role in the technical language and practice of professional developers. The decade has made teacher content knowledge a priority for professional development.

Also over the past decade, student learning has taken its place at the core of professional development. The standards movement has aided this development: a clear and sound emphasis on outcomes for students has permeated all levels of education and, with it, the commitment to help all students attain high goals. Earlier, the emphasis was on crafting teacher learning experiences that were engaging and rich in teaching strategies that could be implemented in their classrooms. Now, there is more emphasis on identifying ambitious learning outcomes for students, observing and listening to students carefully to understand their thinking and grasp of important concepts, and developing a repertoire of strategies to help individual students learn. Professional development looks less like copying the moves of effective teachers and more like learning to make decisions tailored to student learning needs.

This focus on decision making is one that transformed our recent book from one about professional development models to one about design. Different teachers in different contexts need different professional learning opportunities. Professional developers who are called upon to design unique programs can draw on research-based principles of effective learning, teaching, professional development, and change. They also can combine different professional learning strategies. They are using the strategy of training more selectively, often to help beginning teachers or teachers inexperienced with particular content or students to master curriculum materials or techniques to "get them started." Professional development for experienced teachers is often action research, case discussions, or study groups around student work or assessments. A variety of professional development strategies have been carefully articulated and studied that promise to meet more needs of more teachers over time.

Finally, the movement towards systemic change has discouraged the piecemeal, fragmented professional development practices of the past and helped us understand the power of alignment, collaboration, and community. Increasingly, more professional development attends to teaching, curriculum, and assessment; builds learning communities in departments, schools, and districts; and creates mechanisms for ongoing feedback and system improvement.

Two books, a decade apart, reflect these important changes in professional development that increase the likelihood that learning—both for students and teachers—will occur and be sustained.

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