Embedded Professional Development

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Nearly every major study about how to improve the K-12 education system calls for more professional development. This is particularly true in the area of education technology. The latest report, released just before the start of the 1999-2000 school year, found that nearly two-thirds of the nation's teachers felt either "not at all prepared" or "only somewhat prepared" to integrate technology into classroom instruction. But among those who had received at least 11 hours of technology-related training over the previous year the proportion that felt "well prepared" grew to 54%.

We tend to think of professional development as the summer institutes we attend while school is out, or the workshops we go to after school, or the training sessions that happen during our "professional days." Of course, it is wonderful to get away from the pressures of dealing with 20 to 35 demanding youngsters in order to clear the mind and learn new things. However, providing the needed amount of formal training can be expensive. A rule of thumb is that between 25% and 35% of a school's technology budget should be reserved for professional development; most schools spend about 3%.

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In addition, we all know – from our work with our students – that effective learning also requires taking advantage of the "teachable moments" that pop up during the course of the day, being repeatedly exposed to good modeling of key skills, along with on-going encouragement and support when things don't go well. While we know this about our students, we seldom apply the same insights to our own learning processes.

In other words, the traditional forms of professional development should only be one part of a larger process of on-going professional enrichment. Unfortunately, it tends to stand alone.

Project MEET, a state-wide technology-related professional development program funded by a five-year federal Technology Innovation Challenge Grant, is exploring a broader vision of educator learning that we are beginning to call "embedded" professional development. Embedded professional development is learning that is woven into daily on-the-job interaction among teachers. It is based on the nurturing of a collegial culture in which the role of teacher expands to include extensive peer interaction around professional issues. It starts from the premise that teachers already have enormous expertise and that those skills and insights are a school's major instructional resource. It knows that the most useful professional development is focused peer discussion around the challenge of implementing school goals, the difficulty of dealing with various learning styles, and the need to integrate new instructional approaches. It also acknowledges that it is up to school and district leadership to create the policies and mobilize the energy to help teachers shift into this new mode.

Embedded professional development occurs when someone works with a teacher to explore ways that technology might allow students to get actively involved in the study of a particular topic, and then spends some time in the classroom modeling or co-teaching the lesson. Embedded professional development occurs when a group of teachers have time to share ideas and cooperatively plan joint activities so that they stand on each other's shoulders instead of alone. Embedded professional development occurs when faculty meetings are reserved for discussion of how to implement the district's educational vision – and all the bureaucratic announcements and paperwork are relegated to email.

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Collegial sharing that is the core of embedded professional development can take many forms. It can be modeled on what happens in the social work profession, when a group of practitioners gather under the supervision of an experienced professional and take turns presenting and discussing their effort to deal with particular clients. It can be modeled on what happens in some workplaces, when groups of employees are brought together to discuss how they can best play a role in achieving the organization's goals. It can be modeled on what happens in the medical field, in which experts are observed at work and then discuss their actions in a follow up meeting. Or it can be modeled after education practice in other countries. In Japan, for example, teachers are asked to teach a model lesson plan to students while some of their colleagues observe; afterwards, the group has an intensive discussion of the presenter's goals, pedagogy, and results in the context of observed student accomplishment. In this country, it would be hard to schedule time for all the observers to be out of their own classrooms at the same time; but perhaps the demonstrator's work could be video-taped and then made available for after-hours viewing – a good use of technology!

Successful implementation of embedded professional development is a significant challenge. A key resource is a person that Project MEET is calling the Technology Professional Development specialist, or TPD. In most districts, this is a teacher-leader, not an administrator, who has been assigned the half-time task to be a resource, support, and catalyst providing "just in time" curriculum support for classroom teachers, so that their real instructional needs are met when they arise. The TPD sometimes does formal workshops. But the majority of her time is devoted to more informal but on-going forms of assistance. TPDs give presentations at faculty meetings, work with curriculum development teams, suggest software for classroom use, respond to teacher's questions, and contribute their two-cents worth to conversations in the teacher's room.

Embedded professional development can help move schools towards the goal of becoming "learning organizations" in which everyone accepts the need for life-long learning and continuous improvement, in which teachers teach (and learn from) each other as well as the students, in which the power of modern information and communication technologies are fully utilized for the benefit of everyone. Embedded professional development is

sustainable over the long-term because it is part of the normal way of doing things, an assumed but highly valued activity that is everyone's responsibility and to everyone's benefit.

Of course, the principal is still the educational leader of the school. But the growing challenges facing our education system often leave principals with less time than they would prefer for focusing on technology integration. The technology professional development specialist can help the principal with the day-to-day actions that are required for a school to move closer to its goals. The principal's leadership and enthusiasm are crucial for the success of the effort. The principal needs to promote the vision of teachers-leaders and peer interaction, be willing to empower classroom teachers to be innovative and take initiative while also insisting that everyone in the school embrace the need for greater public accountability for student learning outcomes.

Similarly, embedded professional development requires support at the district level, from the superintendent and other central office staff. Project MEET stresses the vital role that district policies and procedures play in making embedded professional development possible. Without the active support of top leadership, these kinds of rejuvenating programs are forced to swim against a powerful current of "the way things have always been."

From a leadership perspective, embedded professional development is also a powerful tool for systemic change. As pointed out in a report by Hank Becker and Margaret Riel, based on the findings of the landmark "Teaching, Learning and Computing" study (1999, Becker & Anderson, University of California/Irvine: http://www.crito.uci.edu/TLC): "Teachers who learn from their peers, lead their peers, and present their ideas and opinions to their peers are more likely to have their students do the same in the classroom. They conduct their classes in a manner similar to the way they conduct their professional activities." (http://www.crito.uci.edu/tlc/findings/snapshot3).

Although Project MEET starts from a focus on technology, the concept of embedded professional development is appropriate for all kinds of school activity. In fact, the development of a culture and practice that empowers teacher-leaders and cooperative staff innovation is vital for the success of education reform. As the U.S. Department of Education noted in its 1994 Prisoners of Time report, "New teaching strategies can require as much as 50 hours of instruction, practice, and coaching before teachers become comfortable with them." Embedded professional development can help schools provide a significant proportion of the necessary time.

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