One Size Doesn't Fit All

Customizing Educational Technology Professional Development

By Judi Harris

Part One: **Choosing ETPD Goals**

This article reviews the range of ETPD session and program goals. Next month, we will present and explain ETPD models. In future articles, we will address how to combine goals and models to fit particular teachers' characteristics, then assess the efficacy of those designs.

ow more than ever, education leaders must focus strategically on educational technology professional development (ETPD) for teachers. Consider some of the results of a recent national survey of U.S. K–12 teachers done by CDW-G:

- · More than half of the teachers surveyed reported that using digital technologies has strongly influenced the ways they teach.
- Approximately 80% see computer use as very or somewhat important to the success of their professional work—for administration, communication, planning, and instruction.
- Yet only 37% of the same sample reported using computers with their students daily.

Why was reported use so infrequent, when in-school access to digital tools and resources has improved so dramatically in recent years—with a national access average of one computer per 3.8 students (one per 4 students in high-need schools), according to Education Week? One answer may lie in another part of the survey's results—19% of the teacher-respondents received no ETPD during the calendar year prior to responding to the survey. Even in the best of situations, almost 90% of teachers participated in fewer than 2.5 days of ETPD in a year.

Research evidence indicates that 30 hours of focused professional development, on average, is required to change teachers' professional practice. So despite very positive opinions about the importance and efficacy of

educational technology use, most teachers probably have not had sufficient time or opportunity to engage in the kinds of professional learning necessary to help them to use educational technologies in new ways to assist their students' learning.

Given whatever amount of time is already allocated for ETPD, however, we can make better use of it. In short, as teachers who teach other teachers to use educational technologies in service of students' curriculumbased learning, we can "work smarter" in designing effective educational technology professional development within the confines of the time already allocated. This first in a series of four articles describes sys-

Working Smarter

ETPD can take many forms. It varies by:

• general purposes and goals;

tematically how to do that.

- specific learning objectives that ETPD sessions and programs
- curriculum content areas to which they are related;



- student grade levels for which the strategies and tools presented are appropriate;
- professional development models used to structure the ETPD sessions;
- the ways in which differing teacher characteristics are addressed; and
- the ways in which the professional development is evaluated and/or teacher learning is assessed.

Providers can ensure the effectiveness of technology-related professional development by considering these seven aspects during planning, so that ETPD sessions and programs align with participating teachers' professional learning needs, interests, and contextual realities.

This article series will help you to become familiar with the full range of possibilities for the four items in this

list with which most ETPD providers have worked the least:

- · ETPD goals
- ETPD models
- Choosing and combining ETPD goals, models, and methods according to teacher characteristics
- Assessing the efficacy of ETPD designs

Once providers know the full range of possibilities for each of these aspects of ETPD design, they can make optimal choices for each professional development session and program, so that participating teachers can learn as much as possible that they can apply directly to their professional practice.

Designing maximally effective and efficient ETPD involves more than choosing among possible goals, models, methods, and assessment strategies, however. Fortunately, members of the National Staff Development Council offer a meta-analysis of research on the characteristics of effective professional development (of all types) for teachers. The NSDC has concluded that it:

- is conducted in school settings
- is linked to schoolwide efforts
- is planned and offered by teachers
- · is differentiated according to teachers' differing needs and interests
- addresses goals and contains learning activities that are chosen by teachers
- emphasizes demonstrations, trials of new tools and techniques, and opportunities for participants to both receive and give feedback
- is ongoing over time
- · provides ongoing assistance and support on-call

Researchers and providers have noted, however, that the efficacy of professional development that is designed according to these nine characteristics can be increased or reduced according to levels of technology access, school and school district climate, participants' numbers of years of teaching experience, positive or negative reactions to past professional development experiences, and other similar contextually determined factors.

The key, then, is to differentiate the design and delivery of educational technology professional development Before most teachers are willing to integrate the use of new tools or resources into their teaching, they need to recognize the relative advantages of doing so.

according to teachers' individual learning needs and preferences, the specific professional development goals to be accomplished, the contextual realities of the school and district in which the teacher-learners are working, and how all of these conditions change over time. In other words,

- 1. Know your teacher-students' professional learning needs and preferences.
- 2. Know the contextual realities of the school/district in which you are working, and push assumed boundaries when possible.
- 3. Know the full range of ETPD goal possibilities.
- 4. Know the full range of ETPD
- 5. Select, combine, and sequence goals, models, and methods to fit the realities of the teachers' learning needs, preferences, and working contexts.
- 6. Continually reassess #1-5, redesigning successive ETPD as things change over time.

The Range of ETPD Goals

The goals for ETPD sessions and programs are probably more often assumed than made conscious and explicit. As ETPD providers, we usually want to encourage and support teachers in using a wider variety of digital tools and resources in ever more effective ways to assist students' learning. These are overall goals, however-end results that we strive to achieve continually, rather than goals for particular ETPD sessions, projects, or programs. To help us to better operationalize these end goals, consider the following six specific ETPD session or program goals.

Awareness and/or trial of specific tools or resources. Before most teachers are willing to integrate the use

of new tools or resources into their teaching, they need to recognize the relative advantages of doing so. Pique teachers' interests at faculty meetings by providing brief (10–15-minute) demonstrations of powerful, simpleto-use, readily available, but not yet well-known tools and techniquesfor example, collaborative writing with wikis. Follow up on these awareness sessions with informal hands-on work sessions, either individually or in small groups, to help teachers gain enough experience with particular tools and resources—and particular ways of using them instructionally to convince teachers to try using them in their teaching. Continued on-site support as they experiment with new tools and techniques in their classrooms is essential to ensuring continued and productive use of new tools and ideas.

Curriculum integration in specific content areas. Once teachers feel that they have incorporated the use of some particular tools and resources in their teaching successfully—based on their students' reactions and learning successes—the specific goals for their ETPD can be shifted to focus on a broader collection of tools, resources, and instructional techniques. At this point, more pervasive curriculum integration becomes the primary ETPD goal, but to make the professional learning process feasible (and maximally motivating), it can focus on a particular content-related topic that an individual teacher-learner chooses. Often, the inspiration for the topics teachers choose comes from a combination of the content that they most enjoy (or are most challenged by) teaching—for example, statistical analysis or spelling. Tools or resources that the ETPD provider has been demonstrating during awareness sesEducational technology professional development is *not* just about new tools and resources.

sions can also spark interest—in this case, for example, InspireData or using CD-based educational dictionaries that suggest multiple, related spellings from which students must choose. In the case of this particular ETPD goal, instructional tools and resources are what change, rather than existing instructional practices.

Change in instructional practice, focusing on specific techniques. Sometimes, the availability of instructionally rich resources and tools—such as primary source historical documents available on the Web or a set of graphing calculators purchased for a classroom—can support and inspire change in instructional practice through the introduction of specific, content-keyed, technology-supported pedagogical techniques. For this more pervasive change to occur and be sustained, however, most teachers must recognize clear advantages of and connections to students' standards-based learning in using these instructionally less familiar tools and resources. Because teachers are asked to change their instructional methods more with this ETPD goal than with the previously described goal, the motivation here to continue to use these new tools and techniques must be stronger.

Curriculum and/or instructional reform. Reform goals are broader and more pervasive than the three ETPD goals described above, and are therefore also much more challenging to meet. Sometimes particular technologies are used as the agents of these reform efforts, such as shifting the venue for particular high school courses to

online course management systems, or eliminating paper-based science textbooks and using multimedia resources instead. Typically, however, true curriculum or instructional reform is only assisted, rather than driven, by educational technologies. Decisions to undertake ETPD with reform-oriented goals must be made collaboratively by groups of teachers, administrators, and community members.

School organizational or cultural *change.* When reform goals extend beyond (and include) particular curriculum areas or instructional approaches, almost everything within the school or district is targeted for change, including the tools and resources that can support this dramatic shift. The forward-thinking use of digital tools and resources has assisted considerably several pervasive change efforts. An example is the reform efforts in Union City, New Jersey, in the

Look for this Seal—Your Stamp of Assurance

ISTE's Seal of Alignment ensures that a product or service has demonstrated alignment with ISTE's **National Educational Technology Standards** (NETS).

So look for this Seal before making your Ed Tech purchases.

visit: www.iste.org/NETS/Seal to see who has made the grade



Priority Code: SA120701

early 1990s. The planning of particular ETPD sessions with goals to assist in such transformation is done as an integral part of this systemic school- or district-wide change.

Social change beyond the school.

District reform efforts in high-need communities are often realized with the assistance of significant community partnerships. In community-based efforts such as these, the use of digital tools and resources is just one of many aspects of pervasive social change. The Children's Aid Society, for example, is partnering long-term—for more than 10 years—with 10 New York City schools, effecting change in almost every aspect of community life that affects and is affected by schooling. Efforts such as these require significant resources and much collaboration among multiple professional, social, and community organizations and personnel including ETPD providers—over time.

Selecting ETPD Goals

The range of ETPD goals described above makes clear how very differently ETPD sessions need to be designed, according to the session and program goals that providers intend them to meet. Descriptions of professional development programs that were planned according to each of these six goals are available online for your perusal at the ETPD Goals Resources Web site.

Selecting ETPD goals should precede—and help to determine—specific ETPD objectives and models, which will be the focus of the next article in this four-part series. In the meantime, we hope one point has been made clear with this first article: Educational technology professional development is not just about new tools and resources.

Resources

CDW-G's "Teachers Talk Tech 2006" survey: http://newsroom.cdwg.com/features/ feature-06-26-06.html

Children's Aid Society's Community Schools in New York City: http://www.edutopia. org/jane-quinn-community-schools Education Week's Technology Counts 2007: A Digital Decade: http://www.edweek.org/ ew/toc/2007/03/29/index.html ETPD Goals Resources: http://etpd.wm.edu National Staff Development Council: http:// www.nsdc.org

Sparks, D. & Loucks-Horsley, S. (1989). Five models of staff development. Journal of Staff Development, 10 (4): http://www.nsdc.org/ library/publications/jsd/sparks104.cfm The story of Union City Schools' "Remarkable Transformation": http://www.edutopia. org/remarkable-transformation



Judi Harris is a professor and the Pavey Family Chair in Educational Technology in the School of Education at the College of William & Mary in Williamsburg, Virginia. Her work focuses on professional

development for teachers in curriculum-based technology integration and via online mentoring.

> Participate in our monthly reader poll at http://www.iste.org/LL.



March 2-8, 2008

Teen Tech Week

is a national initiative sponsored by the Young Adult Library Services Association to ensure that teens are competent, ethical and safe users of technologies, especially those offered through libraries.

Teen Tech Week encourages teens to use libraries' nonprint resources for education and recreation, and to recognize that librarians are qualified, trusted professionals in the field of information technology.

Join the celebration!

Visit www.ala.org/teentechweek. and you can:



Get great ideas for activities and events



Download free tech guides and social networking resources to share with your teens



Buy cool Teen Tech Week merchandise for your library or classroom

... and much more!



