A Nine-Step Program

A Successful, Replicable Model for Professional Development

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Subject: Teacher technology use

Standards: *NETS•T* II, III; *NETS•A* II (http://www.iste.org/nets/)

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Using Standards in the Classroom

To be selected for Phase 9 training, teachers must have completed the EdVenture Group's Utilizing Standards in the Classroom course. So step one is actually a prerequisite. The course addresses ISTE's NETS for Students and Teachers and offers practical hands-on computer training for professional teachers. The completion of this course ensures that teachers enter Phase 9 training with the skills needed to begin complete classroom integration.

2

Team Application, Commitment, and Preliminary Research

Teachers who wish to participate in the training must complete an application/commitment form. Three teachers and an administrator from a school submit their application as a team. The school administrator must agree to participate in a separate one-day training.

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Integration Workshop

Participants attend a five-day integration workshop that gives them the time, tools, and strategies to develop integrated, cross-disciplinary technology units. The five-day workshop consists of hands-on training to help teachers compile the technology-integrated units and post them to the interactive Web site. Throughout each day, teachers have opportunities to discuss how they envision a connection between applications and curriculum standards, constructivist forms of learning, and alternative forms of student evaluation.

Phase 9, a teacher-designed, classroom centered model, takes teachers through a nine-step process that results in the development of integrated instructional units. As president of the EdVenture Group (the nonprofit organization offering the Phase 9 Professional Development Program) and an educational researcher, we will use our background knowledge to describe the program and how you can use it in your school or district. Teams of teachers come to an intensive five-day training with lessons they know work well with students. In interdisciplinary teams, they fold technology, state and national standards, multiple subject areas, and constructivist pedagogy into their multi-lesson units. At week's end, they post them on the Solution Site (http://www.thesolutionsite.com). From its inception, the project has focused on time,

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Validation and Posting of Material

To ensure the quality or validity of the instructional materials being posted to the Web site, each unit goes through an independent validation by the EdVenture Group before moving on to the peer teacher evaluation process. Each team member must allow adequate time to thoroughly evaluate units of instruction. An external panel, made up of experts from the classroom and higher education, then reviews all units before final approval.

5

Administrator Workshop

A principal from each participating school attends a one-day workshop that focuses on an overview of the teacher-created Web site. Administrators play an integral role in the implementation of the model, as well as in the integration of technology into the curriculum and the transformation of learning in the classroom. Their evaluation of how teachers use technology in the classroom is an important component of the workshop.

6

Classroom Use of Technology Units

After the units have been posted online, by subject and grade level educators can begin using them in the classroom. Follow-up evaluations, conducted by research firm Rockman Et Al in cooperation with West Virginia University Research, have indicated that the units have value for teachers and their students. The researchers conducted surveys and pre- and posttraining evaluations to measure technology use and integration. They also studied the project's effects on student achievement.

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Sharing of Technology Integration Ideas

Teams that participate in the training subsequently provide inservice training to teachers in their school and/or county. They become in-school mentors to their fellow teachers. One county superintendent commented on this aspect of the program: "Our county now has a cadre of technology leaders in our schools. Phase 9 has made an important difference for our students, teachers, and administrators."

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Evaluation of Technology Use in the Classroom

As more emphasis is placed on technology, evaluation of technology standards becomes a stronger focus. ISTE's NETS are used in classrooms across the United States, and the effective use of technology in the classroom can assist in increasing student achievement. The effects of No Child Left Behind are also evident in every classroom, and technology use is one way to accomplish many of the mandates. Because Phase 9 training focuses on state and national standards, participants return to the classroom armed with a wealth of information on techniques for meeting the standards on which they are now evaluated. Teachers have a better understanding of the standards and how to meet them through technology integration.

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Full Integration and Recognition

The final phase of the training unifies all of the phases. The Phase 9 teachers and the teachers they have mentored have become more astute in their considerations and use of technologies to facilitate student learning. Teachers from across the United States now have access to more than 1,000 units (5,000 lesson plans) on the Web site, all of which have been carefully constructed and rigorously reviewed, first by peers then by an expert panelist, making the integration of technologies efficient and effective.

tools, and strategies. Teachers need time to mold their everyday lessons into technology-rich integrated units of instruction. They need the tools necessary to use these units in the classroom. And they need strategies, offered throughout the week of professional development, to help them to put all of this together.

At the heart of Phase 9 is a "for teachers, by teachers" philosophy with an emphasis on cross-curricular units of instruction. The model is a solution not only for teachers seeking creative instructional materials, but also for educators trying to balance statewide mandates for student achievement and technology literacy with individual classroom needs.

Phase 9 is one of the 1998 recipients of a U.S. Department of Education Technology Innovation Challenge Grant. The five-year partnership between the Marion County school

system, the EdVenture Group (of which co-author Lydotta Taylor is president), and the West Virginia Department of Education had a positive effect on classrooms in all 55 counties in West Virginia. Teachers gain new teaching strategies, curriculum development experiences that showcase their expertise, and co-ownership of a rich repository of integrated units. In addition to the curricular riches of the Solution Site, the project gains some assurance that teachers will use these units to enrich their teaching and that students will ultimately benefit. One elementary teacher said, "Phase 9 training helped me blow life into my curriculum." Another added, "It has helped me reach students that maybe I normally would not have been able to reach."

Replicability

The program is designed to make replication very simple. We see three options.

First, teachers from all over the world can use the Solution Site in their classrooms at no cost. They can search the site by grade, subject, topic, and standard and have lessons at their fingertips within minutes. Because Phase 9 has included teachers from all grade levels and several subject areas, users have a wide range to choose from. The site also includes a feedback section that offers users the opportunity to communicate with the developers of the units and with the EdVenture Group.

Second, those who want to patici-pate in the further development of the Solution Site can easily replicate the training model. Both public and private school systems outside West Virginia are currently doing so, very successfully. School systems, individual schools, or state departments of education can easily implement the model themselves, with or without training from the EdVenture Group. The most popular method is to adopt the train-the-trainer approach. Trainers spend two weeks training certified teachers to become Phase 9 trainers. The first week is spent in the standards course to reinforce basic skills needed for the Phase 9 development. The second week is the Phase 9 Workshop to develop units of instruction, which then become part of the Web site. After completing the two-week certification, trainers may train an unlimited number of teacher teams within their school systems.

A third option is available for systems that wish to establish lessons on the Solution Site without training additional teachers. The EdVenture Group will train teachers how to develop units and will host these units on the Solution Site. This option includes the same steps discussed above, however, the focus is on assisting individual teams of teachers to develop units as opposed to certifying them to carry out training.

Evaluation

In today's climate of rapidly changing technology, limited funds, and heightened accountability, the Phase 9 training model is gaining the attention of teachers and other educators concerned with standards-based instruction. Our evaluation found many significant improvements from teachers' and students' perspectives.

Teachers were found to be using more technology more frequently, to better understand content area standards and constructivist strategies for instruction, and to be willing and able to serve as in-house technology mentors for their peers. Students showed statistically significant gains on standardized tests and improved motivation. The Solution Site contains more information on the evaluation—click the Rockman Evaluation link.

Phase 9's for teachers, by teachers philosophy makes the classroom instructor the architect who crafts the learning process. The quality of such instructional design strategies is a direct result of the nine-step process. This is a process that assists teachers not only in developing but also in taking ownership of curriculum content. The by-product by default becomes enhanced student learning, rich in the content standards embedded throughout each lesson unit. Reflecting on the program, one participant who went from classroom teacher to county administrator, and served on the Expert Panel, said "The Phase 9 initiative has opened my eyes to the wealth of curriculum expertise possessed by teachers throughout the state. Technology is the catalyst that is helping education evolve to higher levels of learning."

Acknowledgements

The authors wish to thank the following for their contributions to the writing and editing of this article: Bill Burrall, coordinator for instructional technology for Marshall County (West Virginia) Schools; Donna Casto, Phase 9 lead at the EdVenture Group; and Kay Sloan, managing research director for the Bloomington, Indiana, office of Rockman Et Al.

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