Keep an eye on the finish line

Staff development that

students uses learning

intended goal.

improves the learning of all

strategies appropriate to the

rofessional learning has as its major focus improving teaching and student learning. To ensure that learning for adults translates into learning for stu-

dents, learning facilitators think about how the learning processes teachers experience mirror the learning processes these same teachers want for students. Researchers have noted that teachers tend to teach as they were taught, and recognizing this, those responsible for professional learning think not only about what they want teachers to know, but also about what they want teachers to do with what they learn. Simply put, modeling strong learning processes in professional devel-

opment increases the likelihood that teachers will use what they learn in their own classrooms.

Employing the best design strategy for professional development means that learning facilitators think about the outcomes of the learning experience and match the strategy to the outcome. The outcomes of learning fall into five categories (KASAB). See box at right.

Each type of outcome requires a different way of learning. Learning about something doesn't automatically translate into knowing how to use the knowledge. It is possible to know about something, believe in its value, know how to use it, and not have the desire to use it, and consequently choose not to use it. Depending on the type of outcome, the learning facilitator selects the best strategy for achieving that outcome. Unfortunately, many learning experiences for adults are designed for knowledge and skill when the intended outcome is really behavior.

This mismatch often means that learners will not use what they learned, and professional development will be unsuccessful.

The last two decades of federally funded

math and science initiatives have modeled the design standard. To deepen teacher content knowledge in math and science and expand their pedagogical skills, universities and school systems have partnered, supported by federal grants, to provide professional development for teachers. In these learning experiences, teachers first are students of mathematics or science, experiencing carefully planned and executed professional learning experiences that not only help teachers learn

what they don't know about math and science, but also modeling the same kind of instructional strategies that the professional development

providers hope teachers will use once they return to their classrooms. These learning experiences are built on the premise that once they experience it, teachers are more likely to understand the learning process, feel comfortable with it, and be ready to implement it in their own classrooms.

The design standard, too, serves as the foundation for this prac-



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Learning outcomes	Description
KNOWLEDGE	Factual information, principles, concepts
ATTITUDE	Belief in the value of something
SKILL	Ability to do something; know how to do it
ASPIRATION	Desire or willingness; motivation
BEHAVIOR	Using the learning regularly in practice
, ,	2). Assessing Impact: Evaluating Staff Oxford, OH: National Staff





SCENARIO A

Teachers arrive at a designated location where all teachers from one grade level are scheduled to meet for the day. They have been promised continental breakfast and box lunches and six hours of professional development credit for the day. The outcome of the day is to familiarize teachers with the curriculum, help them know how to use it, and to teach the new inquiry-based instructional methodology the curriculum is based on. The science coordinators spend most of the six hours lecturing about how the curriculum was developed and explaining that it is based on both state and national science standards, show scope and sequence charts of the key strands in the curriculum, explain the pacing guides, and share common benchmark assessments that teachers will use to assess students in science. They learn how the benchmark assessment will be given on a set schedule, how the score will be turned into the principal at each school, and how those scores will be sent to the district office for analysis of how well each school is implementing the curriculum. The coordinators talk about the difference between inquiry and direct instruction and cite the benefits and challenges of both approaches. They show a videotape of an inquiry-based science lesson based on the curriculum and ask teachers if they have questions. Teachers make several comments about the added work and the challenge of each approach. At the end of the day, teachers receive their curriculum guides and are told to call the science coordinators assigned to their school if they have additional questions.

tice. Essentially it says that how professional learning occurs impacts both the perceived value and implementation of the learning. Two examples (see boxes on this page) will help clarify this point. In each scenario, the district is implementing a new science curriculum. In the fall orientation period before school starts, all teachers attend

SCENARIO B

Teachers meet regionally in classrooms. As they arrive, they receive their curriculum guides, learn where and what typical science classroom equipment is in their learning room, and are grouped into grade-level teams of four. Each team is instructed to learn how the curriculum guide is organized using a set of questions appropriate to each team. After 20 minutes of exploration, the science coordinator highlights a few key points about the guide and answers questions. In their grade-level teams of four, teachers' next task is to prepare a 25-minute lesson using the curriculum guide. They are asked to make sure their lesson incorporates a few key principles — high student engagement, hands-on, and discovery vs. telling. Teams are encouraged to spend a few minutes clarifying what these terms mean to them and are pointed to several resources in the curriculum guide that might be helpful. They learn that they will present their lesson to another team. The teams have 75 minutes for preparation. After a short break, each team is paired with another team to observe each other's lesson. As one team becomes the students, and a member of the other team teaches the lesson, the three remaining members take notes on how students respond in the lesson. The process is repeated when the other team steps into the teacher and observer role. Teams share feedback with each other using the rubric for an age-appropriate inquiry lesson included in the curriculum guide. Next, teachers in their teams map out the first month of science lessons, what resources and questions they have, how to use the curriculum guide, and what equipment, materials, or other resources they are likely to need. They wrap up the day talking about how this approach to teaching science is both the same and different than what they did before, what they anticipate the benefits will be for students, and what they want students to gain from their learning.

For more information about NSDC's Standards for Staff Development, see www.nsdc.org/ standards/ index.cfm



a one-day workshop provided by the district's science curriculum team. The outcome of the day is to familiarize teachers with the curriculum, help them know how to use it, and to foster teachers' use of the new inquiry-based instructional methodology on which the curriculum is based.

The approaches to professional learning differ. How the learning is structured and what learning strategies for adults are integrated into their learning experiences is likely to impact both teachers' depth of understanding of the new science curriculum, how to use it, and their willingness to use it. However, the learning does not stop after this day. Savvy learning facilitators meet frequently with teachers in teams to talk about challenges, problems, successes, and to look at student work resulting from the lessons. Facilitators may offer to co-teach or conduct demonstration lessons for teachers. They may help teachers find the equipment they need for a

particular inquiry lesson. They are likely to help teachers analyze the results of common assessments to determine how to address those students who missed key concepts or skills.

Lois Easton, editor of Powerful Designs for Professional Learning (NSDC, 2004) recognizes that aligning the appropriate learning strategy for adults with the intended outcomes is essential to maximize the potential of professional learning. She provides a rich resource for learning facilitators in Powerful Designs. In it, she describes how to choose learning designs and gathers together chapters from experts in the field who share detailed information on how to use 21 different learning designs. This is an essential resource for those who facilitate learning for adults in schools or districts. When learning facilitators know clearly their intended goals and use learning strategies that align with those goals, both adults and students benefit.

See pp. 11-17 to learn more about the designs featured in Powerful Designs for Professional Learning.

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