One of the most common barriers to successful change efforts in education is a lack of full-scale support. Many times leaders and staff within a school have adopted a new science or mathematics activity-based curriculum, but haven’t also incorporated the comprehensive, full course of related professional development for staff. Teachers may attend a summer workshop to learn about the new materials, but substantial professional learning and school-level support isn’t implemented. Administrators may not understand the new curriculum, or the new learning required by teachers to use it in their classrooms, thus long-term programming support may be weak. New teachers are sometimes left out of the loop for this training, and eventually the new initiative, no matter how promising, withers and dies.

That is one of the reasons why SCALE operates differently. SCALE uses an interactive process where developers, faculty, administrators, and teachers work together to adapt curricula to make it more useful for all educators and students alike.

Dan Lauffer, a University of Wisconsin outreach program manager and SCALE Immersion team partner, says his work boils down to building and sustaining a common vision. While working with an Immersion professional development institute in Los Angeles Unified School District in 2005, the first task was to make sure everyone simply understood inquiry, the main teaching technique used in SCALE Immersion.

“Because there wasn’t a common language about inquiry, we had a number of definitions all over the map at first,” he said. Instead of just defining inquiry for the teachers, the Institute leaders engaged them in an activity to explore what inquiry looks like, and then had teachers explain what inquiry would look like in their own classrooms. Through this process, everyone developed a common definition. At the same time, the defining process created a hard-to-shake loose sense of ownership.
among the teachers. “We don’t just tell teachers what to do, we provide instructional materials that explain what and how to do it, as well as why they are doing it and why it is important,” Lauffer said. Engaging the teachers in the learning process also contributed to this sense of commitment by allowing teachers to come to the point where they could say, “I see how this works and what you’re doing.”

A key concept in the SCALE strategy is that professional development and the capacity for change must be developed both vertically and horizontally. In other words, virtually everyone involved in the curriculum, from teachers to administrators and from local schools to universities, must learn new skills and adopt new practices in order for the program to work. With SCALE, change is systemic because of the way K-12 districts support reform-oriented teaching and the way post secondary institutions prepare new teachers and curricula. “We had educators from the universities tell us they’ve never really had a chance to grapple with their own vision for inquiry before this work, and that the partnerships formed through this work are remarkable,” Lauffer said.

Another key to SCALE’s successful professional development model is the emphasis on adult learning, says Lauffer. The teachers have two distinct roles while at the Institute: as classroom teachers with concerns about meeting their students’ needs, and as adult learners who are engaged in the units themselves so that they can actually learn key science concepts and see what it feels like to be taught with an inquiry approach. “We debrief professional development sessions in a way that explains why the lesson just experienced is important and what it took to teach it, which helps them release the notion that they should know this already,” he explains. “We plan strategically and intentionally to provide opportunities for teachers to learn what facilitators are thinking and doing as they teach so that participants feel confident to implement inquiry-based instruction.”

Having deeply committed system-wide educators participate in the Science Immersion work gives the partners a strong platform on which to draw to address future challenges. Change itself is not what is important in SCALE, it is the process of change and how it permanently transforms the partners that will determine its ultimate success. — August 2007

For more information about concepts and ideas discussed in this article, go to these links:

http://www.scalemsp.org/index.php?q=immersion_units

http://www.scalemsp.org/index.php?q=SCALE_QED_Series

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