

Teachers as Curriculum Developers



By Anita McAnear

In many ways, it is an exciting time to be a teacher. Electronic resources abound, from powerful general-purpose and discipline-specific software tools to all the free resources of the Web—primary source documents, downloadable data sets, simulations, up-to-date information, and so on. Researchers are making interesting discoveries about the brain and how we learn. Interesting problems exist that can be tackled by students and teachers. Online communities of learners provide support and ideas.

In short, teachers potentially have access to all the tools and knowledge they need to design powerful learning environments for their students. And, if you are to prepare students for their future, then being on page 254 of the textbook on Monday, February 24, 2005, is probably not going to cut it.

It is a daunting task when you need to consider the individual background and needs of learners; the knowledge, skills, and processes of the subject matter and standards; and the need to develop lifelong learners with problem-solving and

critical-thinking skills as well as communication skills.

And there is the task of matching the appropriate pedagogical approach to the desired learning goal and assessing student progress. But technology can help by providing valuable tools, and through technology, learning communities can provide collaborative opportunities for sharing the work and getting feedback.

We have access to a growing body of literature backed by research on how students learn including constructivist learning theory and teaching for understanding. Barbara Kurshan and Tom Sherman discuss how technology can support these findings (p. 6):

1. Preconceptions influence all learning.
2. Understanding comes from knowing facts and principles.
3. Metacognition is essential for understanding.

Pearl Chen and Diane McGrath take project-based learning one step further into cognitive project-based learning and provide a pedagogical approach supported by technology that fits with the above findings on how people learn (p. 54).

Now that you are grounded in methodology about how students learn and in pedagogy that supports the learning model allied with the powerful tool technology provides, how do you think about your curriculum and standards?

Pamela Morehead and Barbara LaBeau discuss curriculum mapping as a way to uncover the big questions across subject areas and organize them into themes/units aligned with standards. Curriculum mapping also looks at process skills students need and, in this case, what technology supports the learning (p. 12). The process also maps to appropriate types of activities such as individual, small group, and whole class.

What can be more empowering than designing your own curricula? You can start small by improving student learning for a particular topic by incorporating technology, revamp learning with a PBL project, or take a global look across all grades or subject areas to align with standards and appropriate technology. The results will be an exciting learning adventure for you and your students. We hope this issue will give you lots of ideas for improving learning for students.

Anita