

## Implementing NETS•S



# ISSUE ORIENTED

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As I work with ISTE staff and volunteers on ways to support the implementation of NETS•S, it has been interesting to look back at the work we did in 1999–2000 to support the 1998 NETS•S ([www.iste.org/nets](http://www.iste.org/nets)). I was really struck by the lesson plan template we had in the *Connecting Curriculum and Technology* book. It was about as bare bones as you can get. Beyond the basics of Title, Curriculum, and Grade Level, the sections were Purpose, Description, Activities, Standards (NETS and Curriculum), Tools and Resources, and Assessment. There was no discussion of essential questions and why students should care; differentiating of content, process, and product; instructional strategies; prior knowledge of students; prerequisite skills; or closure and reflection. I realized that some of these ideas were being incorporated into the lessons and were being written about at about the same time. The National Research Council published *How People Learn* in 2000, and ASCD published the first edition of *Understanding by Design* in 1998. Books on differentiating instruction came later.

These developments were not part of teacher prep for a lot of teachers. Since we know that teaching technology skills to teachers does not by itself help teachers integrate technology into their teaching, it does make sense to think about curriculum design with technology, using all we know about how the brain works, how people learn, and good curriculum design.

So, what would a lesson/unit plan template look like to meet the new NETS•S? What would the NETS•S look like in action? To see our cur-

rent lesson plan template, submitted lessons and lesson ideas, and videos of the NETS•S in Action from the NECC 2008 Leadership Symposium, please visit the NETS•S Implementation wiki at [nets-implementation.iste.wikispaces.net/](http://nets-implementation.iste.wikispaces.net/). As you might expect, the new template is quite a bit longer and has guiding questions with some links to resources. A template for more open-ended activities with appropriate guiding questions is also included.

Designing good lessons that incorporate all that we know about teaching and learning supported by technology is not easy. The educators who submitted the first lesson plans seemed to understand essential questions, but it was hard to see their questions connected to the learning activities and assessments. Authentic assessments requiring students to generate new knowledge also seemed to be missing. A team approach with good support and scaffolding of the key elements might be one solution.

Educators planning school and district staff development around implementing the NETS might want to consider supporting groups of teachers working together on lesson development. Identifying essential questions and doing curriculum mapping would be a great starting place, and then, on to lesson/unit development. Using Web 2.0 tools, teachers can work together on curriculum development and even divide and conquer the finding of tools and resources and the mastery of new strategies and tools.

Please contribute your results via the wiki and by writing curriculum articles for *L&L*. ■