

Loving, C.C. & Stuessy, C. (2002). SITE: Our “scholarly adventure” as new editors of the *CITE* Journal Science Section. *Contemporary Issues in Technology and Teacher Education*, 2(3), 263-266.

Our “Scholarly Adventure” as New Editors of the *CITE* Journal Science Section

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We begin our editorship of the science section of the *CITE* journal with enthusiasm. The journal’s editors have described its style and purpose as an unusual “scholarly adventure”—and we agree. From the first time we logged on we realized the unique opportunity for collaborative interactions and discussions about the role of technology in science teacher education. The single biggest draw for us was the emphasis on technology in context, technology in content, and technology as a tool for improving learning in science. In the following paragraphs we describe some recent experiences over the last two years that have influenced how we see ourselves as both science and technology educators. Those experiences convinced us that the *CITE* journal deserves to thrive.

In the spring of 2000, 25 scientists from many disciplines, mathematicians, and educators sat around a large oval table at Texas A&M. They were lured by an e-mail from our grant writing expert describing a request for proposals from the National Science Foundation for the establishment of a Center for Teaching and Learning in science. The purpose of this funding was to revitalize the pool of “expert” science teachers to lead reform in science teaching, as set forth in the *National Science Education Standards* (National Research Council, 1996) and the *Benchmarks for Science Literacy* (American Association for the Advancement of Science, 1993) and to help pave the way for replacements at the university level for the “graying” professoriate in science education.

All who came to the meeting that day had some interest in science teacher education, but the diversity of experience, opinions and expertise was striking. A natural hierarchy that tends to occur at such meetings resulted in certain active voices and attentive listeners. The meeting was rather

memorable because what emerged after a few key comments was a strong sense of agreement that the one thing everyone at the table had in common in the work they did was the embedded use of information technology. Our subsequent meetings made clear to those of us who were science educators that the ways scientists viewed technology and the ways they used it were profoundly different from the ways science teachers typically viewed or used it. A chasm had been created largely by the technological revolution in the science laboratory rarely touching science teachers or their classrooms. Trying to bridge that chasm became a major goal of our five-year funded project.

Fast-forward to summer 2002 and look in on the second year of the project when we have five scientific teams, (biology, physics/math, chemistry, geosciences, and environmental risk assessment). Members of each team are scientists, science educators, secondary science teachers, and graduate students in science and science education. The common goal of each team is to help its participants learn how to use information technology (e.g., modeling, visualizing, and working with large scale datasets) to do science, to teach science, and to assess learning. The first year included summer foundational course work and laboratory work with follow-up implementation of professional development plans for other teachers. The second summer of course work took them back to their team's technology-rich science environment, as well as prepared them to launch action research, inquiry projects in classrooms across Texas—all involving use of information technology. While it is too early to claim that we are, in fact, increasing the expertise of science educators in significant ways in relation to use of technology in classrooms, our early data are encouraging.

We are Association for the Education of Science Teachers (AETS) members pleased to edit *CITE Journal-Science Education* and eager to learn from those who submit articles and commentaries on how they use technology in science teacher education. Kudos to those who have published in the first two volumes of the journal. We have a set of guidelines for using technology in science teacher education ([Flick & Bell, 2000](#)), which continue to raise commentary and examples. [Lederman \(2000\)](#) reminded us that the most important of these guidelines is embedding technology in the pursuit of scientific inquiry, as we are trying so hard to do in our project. And our outgoing editor, [Alan Colburn \(2000\)](#) reminded those of us in charge of teacher preparation and development that we should be able to model the kind of embedded use of technology that the Flick-Bell guidelines call for.

What are our goals? We hope to increase the number of submissions that add to the scholarly dialogue in *CITE Journal-Science Education*. We especially encourage the use of links and appendices that streamline articles and enrich with video, animation, and audio, as well as links to external resources. We are particularly interested in the deep, ongoing commentary that results from initial submissions. As peer-reviewed publications, these commentaries, as well as initial submissions, are worthy of your time and energy. Along with Lynn Bell, managing editor, and Randy Bell, our SITE science content council representative, we will publicize the Science Education Section of the *CITE* journal. We hope to offer a session at the 2003 AETS meeting in St. Louis, promoting the journal and encouraging submissions. We also hope to offer a pre-session providing examples (and a CD) of embedded use of technology in teacher preparation courses.

The rest is up to our contributors. If you have questions please contact us (see [Contact Information](#)).

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