

## **SITE Position Paper**

### **Statement of Basic Principles and Suggested Actions ('Ames White Paper')**

The Society for Information Technology and Teacher Education (SITE) is an international association of individual teacher educators, and affiliated organizations of teacher educators in all disciplines, who are interested in the creation and dissemination of knowledge about the use of information technology in teacher education.

The Society seeks to promote research, scholarship, collaboration, exchange, and support among its membership, and to advance the professional and scholarly field of technology and teacher education. It does this through a number of initiatives including the Society publication, the Journal of Technology and Teacher Education, the annual Technology and Teacher Education conference, and by supporting a number of committees on specific aspects of technology and teacher education. The Society would like to submit a brief statement of basic principles that we believe are part of the framework for discussing actions to improve the preparation of American teachers to use technology in the classroom. This statement also includes a set of proposed actions that would directly address some of the more crucial needs in the field today.

### **Basic Principles**

1. **Technology should be infused into the entire teacher education program.** Throughout their teacher education experience, students should learn about, learn with, and learn to incorporate technology into their own teaching. Restricting technology experiences to a single course, or to a single area of teacher education, such as the methods courses, will not prepare students to be technology-using teachers. Preservice teacher education students should learn about a wide range of educational technology across their professional preparation -- from introductory and foundations courses to their student teaching or professional development experiences.
2. **Technology should be introduced in context.** Teaching preservice students basic computer literacy -- the traditional operating system, word processor, spreadsheet, database, and telecommunications topics -- is not enough. As with any profession, there is a level of literacy beyond general computer literacy. This more specific or professional literacy involves learning to use technology to foster the educational growth of students. Professional literacy is best learned in context. That is, preservice students should learn many uses of technology because they are integrated into their coursework and field experiences. They should see their professors and mentor teachers modeling innovative uses of technology; they should be expected to use it in their own learning, and they should have ample opportunities to explore creative uses of technology in their own teaching. Preservice teachers should be exposed to regular and pervasive modeling of technology by preservice teacher educators, content specialist, and mentor teachers. In addition, provision of opportunities for preservice students to teach with technology in K-12 classrooms is critical.
3. **Students should experience innovative technology-supported learning environments in their teacher education program.** Technology can be used to support traditional forms of learning as well as to transform learning. A Power Point presentation, for example, can enhance a traditional lecture, but it does not necessarily transform the learning experience. On the other

hand, using multimedia-cases to deal with topics that have previously been addressed through lectures may well be an example of a transformed learning experience that is supported by technology. Students should experience both types of uses of technology in their program. However, the brightest promise of technology in education is as a support for new, innovative, and creative forms of teaching and learning.

## Proposed Actions

1. **Identify and make public positive models of technology-infused teacher education programs.** Most teacher education faculty members are interested in including technology in their teaching, but they are unfamiliar with the ways this can be accomplished. There are "islands of excellence" in teacher education but the approaches and innovations developed in cutting-edge programs are not widely known. Another way of facilitating dissemination of this expertise is to encourage the development of coalitions of teacher education programs that share expertise and resources.
2. **Encourage and support collaboration of teacher education programs with model technology-rich K-12 schools that can serve as authentic environments for teacher education.** Colleges of education have not always been the leaders in technology integration. In many areas some K-12 schools are the leaders and this rich resource of expertise should be tapped in a variety of ways.
3. **Establish two to three national centers for technology and teacher education that disseminate current knowledge, develop new knowledge, and coordinate the creation of electronic tools and materials for teacher education.** One center should also be a Clearinghouse for Teacher Education Tools that serves as a means of disseminating software and other materials developed specifically for teacher education. When it comes to publishing technology-based materials, the teacher education market is too small to attract commercial publishers because the risk is high and the potential profits are small.
4. **Support innovative models of faculty development that emphasize technology-facilitated teaching and learning strategies (as opposed to general computer literacy skills).** For example, collaborations in which colleges of teacher education support the mutual development of technology-using K-12 teachers and teacher educators via mentoring by experienced K-12 teachers should be encouraged. Teacher educators are generally computer literate. They know how to word process, for example. Far fewer teacher educators, however, have a solid understanding of how to use technology in the classes they teach or how to prepare preservice teachers to integrate technology during field experiences. The centers mentioned in Action #3 above might also host visiting faculty who want to spend a sabbatical semester or two learning about new technology approaches and preparing new applications in their own courses.
5. **Support models of technology infusion that involve preservice teachers in extended, field-based activities as both learners and facilitators of technology innovation.** Preservice students need authentic experiences with technology. They need to see mentor teachers using technology in interesting and varied ways. However, there is a shortage of technology-using mentor teachers in many areas of the country. One solution is to prepare preservice students to support mentor teachers as they explore technology use. With appropriate support from teacher education programs, preservice students can learn about

technology integration while assisting practicing teachers who are themselves exploring new ways to use technology.

6. **Fund the development of promising teacher education materials.** There are very few resources related to technology integration in teacher education. Funds for development of promising materials for teacher education (both content specific and related to other areas of teacher education such as foundations and curriculum) should be provided.

## **Ames White Paper**

This position paper known as the "Ames White Paper" was developed at Iowa State University in response to a request from Linda Roberts, and presented at the "White House Conference on Technology Training for Teachers" in Washington, D.C. on April 24, 1998. The recommendations flowing from this conference provided the impetus for the subsequent "Preparing Tomorrow's Teachers to Use Technology" initiative.

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