Though recognized as a legitimate and positive aspect of teaching and learning, simulations don’t seem to be widely used by authors for the 2000 SITE annual. Perhaps the wide variation in defining “simulation” in education has contributed to the dearth of studies. The range in availability of hardware, courseware, and software in international locations where many of these investigations were done certainly has contributed to the variation in sophistication of data treatment. Additionally, though the global economy and international testing have moved countries closer in terms of educational goals, differences in educational philosophies have certainly contributed to the issues addressed and undertaken by this year’s contributors.

Such is the strength of this section. The way educators have chosen to define and then implement technology in the classrooms of their districts and countries is as varied as the geographic locations of the schools. Regardless of the complexity or simplicity of the technology available or the cognitive entry level of the personnel proposed for using the innovation, readers can certainly find one or more situations which mirror their own. Reports of technology use for teacher-preparation as well as use with the P-12 students also increase variation.

The Papers

Bowers, Kenchan, Sale and Doerr report on the use of three multimedia case studies for preservice teachers. The goal of the study was to determine which of the three treatments was the most effective for helping preservice teachers observe the complexity of the teaching and learning process through the use of multimedia tools. The study compared the cases and then reported the most effective in supporting the teacher educators’ curricular goals.

Hoic-Bozic, Ledic, Mezak investigated through the use of a questionnaire the effectiveness of www hypermedia courseware in teacher preparation in Croatia. The purpose of the study was to determine how the use of this technology increased preservice teacher learning and comprehension as determined by the students themselves. Student acceptance of an alternate teaching method was also investigated.

Baker and Wedman studied the nature of the Risko and Kinzer constructs for case-based instruction (CBI) and their viability for preservice teacher preparation. After addressing the nature of the constructs, the investigators question the effectiveness of how much transfer can be expected when the case studies are investigated are not closely related to new scenarios.

Klopf and Colella wrote regarding the use of model-building in teaching high school mathematics. They contend that enable teachers to approach their curricula from a more holistic perspective and gain insights into the inquiry process and the concepts underlying their models. The also site evidence that teachers developing and using model building in high school classes strengthens the teacher understanding of the content and the students depth of understanding of the concepts taught.

Howard and Strang submitted two papers on the effectiveness of computer-based teaching for preservice teachers. Students completed a software-driven lesson planning activity followed by a debriefing session during which feedback was given and effective planning strategies were discussed. The second paper discussed the effectiveness of the Matrix Simulation developed during the first study in designing effective lessons for unmotivated students.

Khalili and Pete addressed the need for flexibility in fourth year information technology classes and how the virtual classroom has impacted that need. This action research project reveals how sensitivity to the needs of students has impacted the traditional curriculum and changed teaching and learning methodology.

Medina, Trentin, Gosta and Tarouco also discussed the benefits of the virtual classroom and its effectiveness in a high school physics classroom. They contend the simulated activities address all of the learning styles as measured by Felder and Silverman and increase interest and learning of secondary physics students.

Pow, So and Hung wrote two articles from their project where So, though a lecturer of Hong Kong Institute of Education, taught in a primary school using the technology which has been mandated by the government for use in all primary school three years hence. A documentary was
produced and will be shown which follows this process and comments on the impact on primary student achievement. Comment is also made on the need for staff training before the project should be fully implemented.

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