

Advantages of Educational Technology

Author: *Emilie Simmons and Richard Markwell*

University: California State University, Sacramento

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Instructor: Dr. Rosemary Papalewis

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Computers and related technology are essential to the learning process in several ways. Although some people feel that the use of technology can have a negative impact on the socialization and development of critical thinking skills of young children and adolescents, and may be misused by some instructors, they are fundamental and significant tools used in classrooms and the workforce, and foster greater understanding of diverse cultures. In his article, *The Computer Delusion* (1997), Oppenheimer reports that the number of jobs requiring computer skills increased by 12% from 1983 to 1993 and the pay for jobs involving computer skills showed an average increase of between 10 to 15 percent. He also notes that the Clinton administration pledged to move public education into the twenty-first century by ensuring that computers become as common in classroom as blackboards. With estimated costs to accomplish this improvement between 40 and 100 billion dollars, Oppenheimer further stated a state task force, which lobbied the California legislature to spend 11 billion dollars for computers in schools over the next few years.

There is evidence to support the effective use of computer-assisted instruction. Kosakowski (1998) wrote that using educational technology for drill and practice for basic skills can be highly effective according to a large body of data and a long history of use (Kulik, 1994). He summarized that students, particularly students in at-risk groups, such as in special education and from inner city or rural schools, felt more successful in school and more motivated to learn when using curriculum-assisted instruction.

Symonds (2000) stated that technology can be a crucial tool to improve student learning. He pointed out that the quality of public education could be improved by utilizing the Web to individualize instruction, creating learning opportunities for teachers to engage in collegial support via e-mail, and facilitating better home-school communication through e-mail and Website information. He further cites Jonathan Carson, CEO of the K-12 division of Learning Network, who states that the Internet will likely democratize education. Symonds predicts that students in poor communities will have access to the best libraries, to instructors from around the world, and to a far richer menu of courses, many of which will be delivered over the Web. In support of this view, Aprile and Vasquez (2001) stated that the Red Escolar Project in Mexico connects approximately 3,000 schools and 1,500,000 students in an online community of learners. Some U.S. schools are attracted to the availability of teaching materials in Spanish. They recognize that this is no substitute for face-to-face instruction but is a tool that enhances the sometimes-limited resources of schools.

We are still only at the threshold of what is possible. On March 16, 2001 these authors and the entire class of EDEA 282, Advanced Seminar on Education Policy, at California State University Sacramento, made history by participating in the first video-conference ever with a class of graduate students at Peking University in Beijing. During this conference students from both cultures were exposed to ideas, concepts and cultural differences while asking and answering questions in an open forum over the Internet. Students communicated directly with each other both verbally and non-verbally, and expressed a desire to continue learning from each other. These authors believe both groups learned far more than would have been possible merely reading about the two educational systems in a text, or listening to a lecture.

Clearly technology enhances education and is becoming increasingly essential to learning. Student development of basic academic skills improves with the use of technology, especially for at-risk students. Access to the Internet and distance learning opportunities promote relevant learning experiences irrespective of geographic restrictions and improve student and teacher access to information. Finally, technology, especially through video-conferencing, promotes greater understanding of other cultures.

References

Aprile W. & Vasquez, M. (2001). The Red Escolar Project Considered As an Online Community. *Online Communities*, 241-256.

Kosakowski, J. (1998). The Benefits of Information Technology, ERIC Digest, EDO-IR-98-04.

Oppenheimer, T. (July 1997). The Computer Delusion, The Atlantic Monthly

Papalewis, R. (March 2001). EDEA 282: California State University Sacramento, California School Administrative Students meet Beijing University Students, Sacramento, California: California State University Sacramento, Center for Teaching and Learning.

Symonds, W. (September 23, 2000). Wired Schools, Businessweek.