Technology & Education

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An interactive CD-ROM
Produced by the Research Center for Educational Technology at Kent State University, the CD-ROM, TECHNOLOGY & EDUCATION: THE RESEARCH ON WHERE WE HAVE BEEN • A VISION OF WHERE WE ARE GOING, is designed for staff developers in a K-12 environment, university faculty working with preservice educators, and practicing teachers. The purpose of this session is to demonstrate the use of an interactive CD-ROM that was developed to actively engage teachers in reflective dialogue regarding best practice research, their teaching philosophies, and instructional practices.

The Research on Where We Have Been

If we want teachers to create exciting and engaging learning contexts which respects all students’ right to learn, the best way to do this might just be to create exciting and engaging learning contexts for teachers that respects their ability to shape education. (Riel, 2001, [1])

One major finding of the 1998 Teaching, Learning, and Computing Study (Becker & Riel, 2000, [2]) was that the role of the student as a learner in the classroom mirrored the role of the teacher in the larger educational community. Students in classes taught by teachers who were engaged in a range of professional development endeavors are asked to think deeply about issues, generate their own ideas, work collaboratively on projects, share and evaluate their own work in a public forum, and use technology to support these types of activities. This finding points to the need to create learning experiences for educators that reflect the learning environment we want for our children.

The CD takes an in-depth look at current research findings on the impact of technology on teaching and learning. Dr. Henry J. Becker & Dr. Margaret Riel (University of California at Irvine), who conducted the research on the Teaching, Learning, and Computing study, talk about the significant findings of this work. Dr. Rob Tierney (University of British Columbia), one of the researchers in the Apple Classroom of Tomorrow (ACOT) project, shares results from his ACOT research. Dr. Nancy Padak (Kent State University) describes her research in the SBC Ameritech Classroom and cites major studies that recognize the increase in motivation by students who are immersed in a technology-rich learning environment.

Vignettes of real teachers, students, and classrooms that exemplify what the research describes follow each research retrospective. The CD-ROM offers suggestions for professional development activities based on the information presented. The Teaching, Learning, and Computing study overview leads into an I-Search activity. The ACOT piece offers a dynamic simulation activity. The motivation studies lead into discussion opportunities about instructional frameworks. Content of the CD crosses all disciplines.

A Vision of Where We Are Going

The CD-ROM also illustrates how technology is changing our lives and our schools. A video message by Dr. Thomas Carroll, former director of the Preparing Tomorrow’s Teachers for Technology program, addresses the issue of teachers and their changing role in the classroom. Dr. Linda Roberts, former Director of the Office of Educational Technology for the United States Department of Education, speaks to the importance of research in educational technology.

The CD-ROM takes the viewer inside the SBC Ameritech Classroom on the campus of Kent State University. Teachers and their students come to the classroom for a half-day every day for six weeks while researchers use the attached observation room to conduct studies in the technology rich environment.

The Research Center for Educational Technology (RCET), housed at Kent State University in Kent, Ohio, was founded in 1999 to provide a collegial network for university researchers and preK-16 educators committed to studying the impact of technology on teaching and learning.

1. Riel, M. (2001). Research, stories, and ideas: Section 1(a) - Teaching, learning, and computing study. Technology and education: The research on where we have been - A vision of where we are going [CD-ROM]. Research Center for Educational Technology, Kent State University, Kent, OH.