



TEACHING, TECHNOLOGY, AND THE NEW PROFESSIONAL WORLD

According to the **National Science Teacher's Association's** position statement on the *The Use of Computers in Science Education*, "... computers should have a major role in teaching and learning science. **Computers have become an essential classroom tool** for the acquisition, analysis, presentation, and communication of data in ways which allow students to become more active participants in research and learning." (emphasis added)

Technological advances in the last 20 years produced an unprecedented number of educational computer programs for use in science classrooms. The US Department of Education is committed to establishing computers as a presence in classrooms, along with Internet access and computer software. (Remarks by the Secretary of Education Richard Riley at the Conference on Educational Technology) These recently released statistics demonstrate the emerging importance of the computer in teaching:

National Center for Education Statistics' (NCES) report on "Teacher Use of Computers and the Internet in Public Schools for 1999"

- 53% teachers use the Internet for classroom instruction
- 27% teachers assign students moderate to large extent of research using CD-ROMs
- 53% teachers assign projects inside the classroom using computers
- 48% teachers assign projects outside the classroom using computers

Market Data Retrieval's report on "Technology in Education 1998"

- 97% schools provide CD-ROM technology
- 85% schools provide Internet access
- 75% classrooms have access to computers

NCES' "Survey on Internet Access in US Public Schools for 1999"

- **99% teachers report the use of computers in school**

Computer skills are increasingly more relevant to job acquisition and career success.

The US Census Bureau's Current Population Survey from October 1997

Percentages of Employed Adults Reporting Computer Use at Work:

- College teachers 80%
- Lawyers/judges 78%
- Secondary teachers 69%
- Elementary teachers 67%
- Physicians 62%
- Clergy 62%

"Let me state this as plainly as I can: All of our students deserve well-trained teachers, Internet access, and appropriate educational technology in order to help them learn, to help them get to college, and to help them succeed in 21st-century jobs." – Secretary of Education, Richard Riley

September 2000