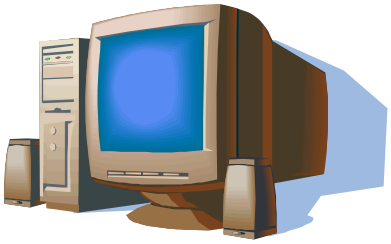
Use of computers in teaching and training



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The occupation that I will be discussing in relation to the relevance of computers is teaching. I will explore the use of computers in primary, secondary and tertiary levels of education. I have chosen the teaching profession due to the fact that I am hoping to persue a career in teaching and thought that the research would be interesting and relevant.

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Introduction

Computers have become a fundamental part of modern day life and are becoming increasingly important. Computers touch most areas of life, from entertainment to education; computers have changed people's lives. As technology is rapidly upgrading so too is the way in which students engage in there education. Computers in schools today are just another form of interactive teaching. Presently schools and educational organizations place a greater demand and almost expect the use of computers as form of learning and presenting there information and assignments. As there is a greater push for globalisation, the reality for the future of students is to be able to be in contact with educational institutions at anytime and any place in the world.

Computers certainly have earned there a place in the classroom and universities. During the last decade, through the use of computers the Internet and multimedia technology has become widespread; enthusiasm for the use of computers in schools also became more evident across the globe. Attendance at educational technology conferences rose sharply; hundreds of businesses started up to offer hardware, software and related services to education; and thousands of teachers took courses to help them utilize newer technology in their classrooms. Outside the school system enthusiasm grew as well despite the publication in newspapers and magazines of several articles critical of the growing reliance on computers in schools. An nationwide poll in 1998 found that nearly 60% of the public answered "a great amount" when asked "How much do you think computers have helped improve student learning?" (Trotter 1998). "Technology is about giving tools to teachers to teach better"(1991).

Computers in Schools

Over the past five years many teachers have learned to put to use information technology in the class room. Several types of software are used by computer–knowledgeable teachers including, presentation software such as power point, World Wide Web browsers, electronic mail, spreadsheets, and data base software.

Whilst I was a student at School, the internet and Intranet played a significant role in my education. It was helpful in getting assignments done, accessing study notes and timetables, checking up on the latest sports scores and having easy access to important calendar dates for the year. There was no shortage of computers as there were plenty of labs full of computers to work with. If there was ever a time where a computer was not working you were always able to move and use another computer nearby. The computer technicians were always on standby whenever there was a fault with a computer. Computer labs are not are not the only computers that students have access to. Laptops are also another way of accessing the intranet through connections in the regular class room. Researching on the World Wide Web increases information gathering enormously and teachers also have the opportunity of assisting students in learning the difference between worthwhile academic sites and rubbish sites.

Growth of computer use in the classroom is not a quick process. It depends on a balance between expanding and improving the necessary computational infrastructure, including hardware, software and support. Funding is also a

significant factor in deciding the roll technology with play and how it will impact on the teaching and the education of the students.

Access problems.

Despite this enthusiasm, the schools have had difficulty keeping up with the opportunities provided by new technologies. In a context of rapid technological and social change, the educational system has faced huge challenges in planning and implementing new policies and procedures that integrate computing technology into instruction. Many schools have not been able to afford the costs of installing the new technology that they would like to use. Others have weighed the advantages and disadvantages and found contradictory claims and little evidence on the extent to which learning is enhanced from different ways of applying information technology. It is therefore extremely difficult to predict how rapidly teachers and schools will appropriate into their routines, the newer technologies and methods for using them.

According to Professor Larry Cuban from Stanford University, "the availability of technology has not brought about fundamental changes in education" (1998;2). Cuban argues that computers are incompatible with the requirements of teaching, hard to master and use and often break down. (1998).

Internet and Intranet

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The internet or the World Wide Web is a collection of networks that links millions of educational institutions, government agencies and businesses. This easy to access internet provides us with goods, services and information that assist in education. The Internet is arguably the most rapidly spreading communication technology in history. What makes this diffusion so remarkable is that its adoption and use demands considerable expense and skill. While several decades old, in the early 1990's a large number of organizations and individuals became users. A TIME/CNN poll in April, 1999 surveyed USA teenagers (age 13 to 17) and found that 82% said they "use the Internet for things like e-mail, chat rooms or visiting websites" (TIME, May 10, 1999; p. 40).

Meanwhile schools have also been linking up to and using the Internet. From the technology coordinators or specialists in our survey conducted in the Spring of 1998, we found that 90% of all schools have some kind of access to the Internet. What is so remarkable about this statistic is that most schools, which historically change so slowly, have made this connection within just 5 years.

Whilst at school the internet was a big help towards assignments, e-mailing teachers and general browsing. All assignments in my last year of school had to be handed in as a computer printout produced on software such as Microsoft word.

An intranet is an internal network that uses internet technologies as it can be run off the internet and is also an internal network. For the school situation, this gives group work another dimension. LAN (local area network) is inexpensive; simple to run networking system normally connects no more than 10 computers together. If you add a Bus network to this, it is then possible to attach and detach computers and other devices without disturbing the system. The Bus network consists of a central cable or backbone, which connects the computers and other

Devices and allows a single data path. On a peer to peer network each computer can share hardware, such as a printer or a scanner, information located on any other computer on the network and several bits of data. The limited geographical area such as a school is ideal for the LAN. Other systems that could be implemented in a school situation include, the Ring Network which can span a larger network than the Bus, but is harder to install, and the Star Network where all the devices on the network connect to a central computer.

Impact on teaching staff

Teachers' access to personal computers at school and at home has increased to the point where, by 1998, 93% of teachers in grades 4-12 were using computers as a part of their professional lives.

A majority of teachers now have a computer in their classroom and nearly 80% have one at home. Most teachers find computers useful for preparing handouts for lessons, recording student grades, and doing other work of knowledge professionals. However, what is most significant about teachers' involvement with computers is not their own professional use, but the role teachers play in directing students' use of this still-maturing and rapidly changing technology. All teachers in my years at school had and online web page which all students must access in order to revive handout and assignments out lines.

Conclusion

The fact that billions of dollars have been spent over the past 20 years to provide technology and wiring in our schools, suggests that Cubans argument as outline earlier is out of date. “Robot teachers” are not inevitable. In fact the opposite it true. Research has shown that, provided teachers are effectively trained and the student: computer ratio is not less than 4:1, Information technology Learning has the ability to increase conversation, sharing and learning among students and between students and teachers. According to the 2003 Centre for Education Policy of the University of Southern Maine, students who used laptops reported an increase in interest and positive impact on their education. Growth of computer use in the classroom is not a quick process. It depends on a balance between expanding and improving the necessary

Computational infrastructure, including hardware, software and support.

Funding is also a significant factor in deciding the amount and quality of e-learning technology. IT Learning is here to stay and the sooner teachers, lecturers and students become competent with the systems, the sooner they will recognise the benefits.

Bibliography

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