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Technology Usage from 1950-1959

Instructional Design has come along way since its early documented days in the World War II era. The necessity for creating fast, yet effective instruction came at a time where proven methods of training were still being researched and acknowledged. It took the likes of many educational psychologists such as Bloom, Skinner, and Gagne to develop certain techniques to help further standardize the understanding of learning. Military and business were more favorable in using instructional improvement to help increase efficiency, but the initial attempts in higher education were halted due to lack of funding in the 1980s (Reiser, 2007). On the contrary, with the advancement of technology to aid with instruction, the need for proper instructional design is in higher demand and continues to grow in all industries. But, no matter how advanced the world may get with computers and other cutting edge learning tools, the development of instruction will still fall under the same documented principles that were developed prior to the new technology.

During the 1950s, technology did not lend itself towards effective use in an educational setting. Technology at this time was relatively huge and was mostly accessible only in a research setting or businesses that had whole rooms to spare. The first computer monitor was not invented until 1950, but the computers of this time all used vacuum tubes. These vacuum tubes required space to accommodate and also produced vast amounts of heat. It wasn't until 1955 when the first transistor computer was made to allow smaller technology. In 1957, IBM stopped producing vacuum tube based computers, but their first hard drive also weighed about 1 ton due to the current limits of magnetic storage. The invention of the Integrated-Circuit chip in 1958 further

accelerated the ability to produce more space saving computers that were more accessible to a

wider variety of uses.

Over the last 60 years, computer technology has increasingly become part of our society,

particularly in the field of education. The use of computers in classrooms began almost

immediately after the invention of computers. In 1954, B.F. Skinner first demonstrated an

instructional program for arithmetic, thus beginning the programmed instruction movement. As a

result, computers were beginning to be introduced to classrooms during the late 1950s. The

programmed instruction movement continued during the 1960s, as computer-assisted instruction,

or CAI, became popular. PLATO was the first program to use this type of instruction. During

this decade, computers became more popular in classrooms through the use of simulations, and

educational games. The 1970s saw an increase in computers within the classrooms. Although

more classrooms included computers than during the previous decade, these computers were

rarely being used to support instruction. During the next decade, computer technology

specifically designed for students began to emerge. In 1980, Radio Shack began to sell the TRS-

90, and in 1981, drill-and-practice programs became more popular. A major addition to computer

technology during the 1990s was the Internet. Although private Internet service providers existed

during the previous decade, the use of the Internet increased rapidly during the 1990s. The use of

the Internet in classrooms had, and continues to have, a tremendous impact on education. By the

turn of the new millennium, computers were becoming "the norm" for classroom settings.

Technology, such as the e-trapper and electronic textbooks, became increasingly popular as

students and teachers alike began to rely more on computer technology than ever before.

Research in educational technology was more emphasized during this time due to the

pace of technological implementation and integration of emerging new technologies into an

educational organization. The basic understanding of educational research developed in the

1960's. It allowed educators and policy makers to be prepared to use technology in an

administrative role and to guide members of an organization in the adoption of technology

through systematic planning, processes, and training. The first attempt was an effectiveness of a

series of college courses taught via closed circuit television in Pennsylvania State University by

Ford Foundation funds. New advances in technology are being introduced daily. Administrators

and organizational leaders are being asked to make judgments on buying and utilizing computer

hardware and software, which will best suit the need of administrative staff, instructional staff,

and students. Through educational technology research, educators will learn figure these

questions out. ERIC (http://www.eric.ed.gov/) is the major web site that contains a lot of

research works.

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