A History of Instructional Media

Information provided by Robert A. Reiser's article titled: A History of Instructional Design and Technology: Part I: A History of Instructional Media. The article was published in the *Educational Technology Research and Development* journal in 2001.

Reiser and Gagne defined instructional media as the "physical means via which instruction is presented to learners." Instructional mediums are the different ways to present information to learners. To understand the history of instructional media, this powerpoint is going to focus on the evolution of learning while utilizing instructional mediums other than the actual teacher, such as chalkboards, textbooks, and computers.

In 1900's, teachers were the primary means in which instruction was presented to learners. But, in 1905, the first school museum was built in St. Louis. School museums housed supplemental instructional materials that could aid teachers when teaching different topics. Increased interest in visual media and instructional films led to the visual instruction movement. In 1910, the first catalog of instructional films was developed to be used in the classroom. Thomas Edison predicted in 1913 that "Books will soon be obsolete in schools. Scholars will soon be instructed through the eye. It is possible to teach every branch of knowledge with the motion picture. Our school system will be completely changed in the next 10 years." As a result, five national professional organizations were established for visual instruction, five journals began to publish information about visual instruction, and more than 20 teacher-training institutions began offering visual instruction courses.

During the 1920s-1930s technological advances increased interest in instructional media and as a result the audiovisual instruction movement began. In 1923, the Association for Educational Communications and Technology was founded. Also, by the early 1930s people believed, that due to the advances in radio broadcasting, that the radio would be a medium that would revolutionize education. Unfortunately, the radio did not have as big of an impact on instructional practices as audiovisual enthusiasts predicted.

In the 1940s, World War II led instructional designers to design and develop instructional films that would train military personnel for combat. Instructional films were also developed to aid US citizens that were entering the business and industry field. The films were successful because they could train individuals quicker without taking away training effectiveness. At the end of World War II the German Chief of General Staff stated, "We had everything calculated perfectly except the speed with which America was able to train its people. Our major miscalculation was in underestimating their quick and complete mastery of film education." Given the success of the military films, there was a renewed interest in instructional films for classroom use in schools. Media comparison research studies compared how much students learned after being presented with instruction via a specific instructional medium, such as film and radio, with how much students learned through teacher-led instruction on the same topic.

During the 1950s leaders in the audiovisual movement became interested in theories and models of communication. Authors of the models stated that when planning for communication it is important to think about each stage of the communication process. The process involved sending a message through a channel or instructional medium to reach the receiver of the information. In 1963, David Berlo emphasized that communication was primary and that media was secondary. Communicating is essential for learning to occur.

Instructional television made a huge growth during the 1950s as well. In 1952, the Federal Communications Commission set aside 242 channels for educational purposes. Unfortunately, some people believed that the instructional quality of some of the programs were mediocre. Along with teacher resistance, installation expenses, maintenance expenses, and the mediocrity of the instructional television programs instructional television was discarded by the mid 1960s. By the early 1970s, instructional media still had not made a big impact on educational practices.

In the 1950s computers were utilized by researchers at IBM. The researchers developed computer-assisted instruction (CAI) author language and developed the first CAI program to be used in public schools. In elementary schools computers were mostly used for drill and practice or they were utilized to teach computer-related skills such as typing. But, the wide-spread interest in computers as a medium of instruction did not occur until the 1980s.

Since then the instructional technology field has expanded and changed. The field is constantly evolving with the introduction of new technologies. Some technological advances have revolutionized how instructional technology is being utilized. These modern instructional developments are: utilization of the internet, distance education opportunities, learner centered learning environments, web 2.0 tools, virtual environments - such as Second Life, wikis and blogs.

Reference

Reiser, R.A. (2001). A history of instructional design and technology: Part I: A history of instructional media. *Educational Technology Research and Development*, 49(1), pp. 53-64.