Read the text.

The history of *e-learning*

by Roberta Gogos

While the term *e-learning* was first used in October 1999 at a CBT Systems Seminar in Los Angeles, the idea behind the words dates back to a much earlier time in history. For e-learning to emerge as a new and exciting form of training, its core elements had to be found and established as an integral part of our lives. This has happened with the invention of reading and writing, the establishment of the profession of the teacher, the invention of the printing technology, and of course, the development of electronic technology. Basically, we can see that behind this relatively new notion, there are decades of revolutions and inventions in learning and teaching that paved the way to e-learning. So, let's have a look at the most significant moments of e-learning development.

Early Ages

If we perceive e-learning as a form of assisted learning or teaching with the help of learning aids or machines we can go as far back as 200 A.C. and the Roman Empire. A Roman piece found near Trier depicts a teacher surrounded by two students reading a parchment roll and a third one arriving with a writing slate in his hand. In his book *"De onstuitbare opkomst van de leermachine"* (The Unstoppable Rise of the Learning Machine, unfortunately only available in Dutch), Dr. Marcel Mirande cites this as the oldest example of "integration of technology" into learning and compares the functions and importance of the writing slate to the modern laptop. The technique of using writing slate was used in European schools until about 1950s.

The Rise of the Machines

While the writing slate is pointed out as the first learning aid to be used, it is far cry from the technology used for e-learning today, e.g. laptops, tablets, smartphones, etc.

The machine-assisted learning, however, is much more similar to the idea. The first step towards that was the invention of the teaching machine by Sidney Pressey. He was an educational psychology professor at Ohio University in the early 1920s. He invented a machine that looked like a typewriter and was used for answering multiple-choice questions. The machine had a window with a question and four answers. The students had to press one of the four keys to give the right answer. The machine was designed so that it wouldn't move on to the next question until the right answer was provided. So, it was able to tell the learner if they were right or wrong and was considered to be the first demonstration of how a machine can teach. Unfortunately, the Pressey machine was not successful at the time it was introduced. The educational world was not ready for this evolution and

teachers were afraid that they might lose their job if the machine was widely introduced. Sounds familiar, right?

Despite the failure of the teaching machine to dominate teaching institutions, its functionality is now incorporated in the Question mark Perception assessment management system. It is widely used by teachers and learners to author, schedule, deliver, and report on surveys, quizzes, test, and exams.

A few decades later in 1954, B. F. Skinner, a professor of psychology at Harvard University, invented another teaching machine that allowed schools to administer programmed instruction to their students. It was a mechanical device that looked like a box that contained a list of questions. Each question could be viewed through a small window and the student could respond to it through a special mechanism. The answers were not to be selected from a multiple choice but written down on a roll of paper. Once the learner gives a right answer, they were able to move forward and were rewarded. According to Skinner the machine was suitable for teaching students of any age – from preschool to adults, and any subject – from reading to music.

Skinner's idea inspired developers Daniel Alpert and Don Bitzer to create the very first computer based training program, PLATO in 1959. It was initially used at the University of Illinois and was later introduced to other schools in the area. Initially, learners had access to more than 15,000 hours of lessons from a centralized, one-room hub. With the development of technology, however, there was a demand for online learning possibilities that were not restricted only to those who had access to the university laboratory. Therefore, prior to the Internet development, PLATO was accessible through bulletin boards and chats.

In the 1950s and 60s and even during World War II, radio and television were also a very popular device for teaching and learning. It was in the late 20th century, when e-learning actually started to thrive with the introduction of the computer and the Internet. In the 1980s people were able to have a computer at home and use it to develop their skills and broaden their knowledge. In the 1990s the virtual learning environment was already well-established and offered numerous e-learning opportunities. In the following decade, businesses also started utilizing e-learning for company training and realized the numerous benefits its tools, such as e-learning localization add to the process.

Development of Distance Teaching

Distance learning is also, quite old. You might be surprised that it was used back in the 1840s when Isaac Pitman taught shorthand (abbreviated symbolic writing method, stenography) in Great Britain via correspondence. He was a teacher at a school in Wotton-under-Edge and sent assignments to his students via mail. Once they were ready with the homework, they mailed it back to him for assessment.

In the USA, the first rudimentary online courses were offered by the University of Alberta's Department of Medicine. From 1968 until 1980, when it was dismantled, the university used the IBM 1500 network to teach 17 classes to nearly 20,000 individuals. The system allowed teachers to supply course materials, organize documents and grade assignments.

In the 1976 the Open University launched its first online classes through the CICERO program. The institution is one of the pioneers to offer internet-based courses for credit and even considered to be the first college or university to do so. The Open University also developed the Cyclops whiteboard system, not in use any more, that allowed teleconferencing before the invention of Skype or Google Talk.

The world's first fully remote community college – Coastline Community College, was also established in 1976. It possessed a few scattered "mini-campuses" but its focus was on self-directed learning. This is the first school to offer a fully online degree.

At the end of the 1990s the learning management systems (LMS) were broadly used. One of the key players on the educational market was the American company Blackboard that provides education, mobile, communication, commerce software, and related services to clients such as education providers, corporations, and government organization. As of 2014, its software and services are used by nearly 17,000 schools and organizations in 100 countries. In the USA alone, 75% of the colleges and universities use Blackboard LMS.

The 2000s saw e-learning entering the business world and becoming a popular form for training new employees or rising their qualification. As of 2010, e-learning has been inspired by social media such as YouTube, Twitter, iTunes, Skype, etc. The last decade was quite prolific for the development of online learning and added many interesting and useful aspects to it. A great variety of new terms also emerged in order to represent the fast evolving online educational world – mobile learning, gamification, localization, and social e-learning are just a few.

As you can see, the term e-learning might be a teenager but the ideas and concepts behind it, have deep roots. Perhaps this is one of the reasons it is so widely accepted by the entire learning community.

Sources: E-learning Fundamentals