Emergence of Online Learning

When most people hear the word “learning” or “education,” their minds immediately imagine a school where students are sitting at desks listening intently to a teacher. Most people experienced this model throughout their lifetime. Public education in the United States, Canada, and Australia has been defined as “federally funded school, administered to some extent by the government, and charged with educating all citizens.”¹ The public education definition included the following schools:

- Primary and secondary schools
- Public universities

Public education is free. To appreciate how far public education has progressed, it is always good to review its history.

History of Public Education

National Geographic reports that on April 23, 1635, the Boston Latin School became the first public school formed in Boston, Massachusetts.² It still exists today. According to EducationBug.org, in 1647, the General Court of

¹www.educationbug.org/a/history-of-public-schools.html
²www.nationalgeographic.org/thisday/apr23/first-public-school-america/

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L. Sims, Effective Digital Learning, https://doi.org/10.1007/978-1-4842-6864-3_1
Massachusetts Bay Colony responded to a decree for the need for elementary and Latin schools and created schools that were a mixture of public and private schools that were available to everyone but taught Puritan values and Bible reading. Although most learning took place at home, only the privileged social economic class sent their sons to physical in-person Latin schools. Fast forward almost a decade later, Massachusetts created a law requiring townships with 50 or more people to hire a teacher to teach the town’s children basic academics. Towns with 100 or more people were required to have an elementary school to teach reading, writing, and religion. For many years, it was the primary way to learn and acquire new knowledge, while others learned skills through apprenticeships. In the mid-1800s, people in Massachusetts demanded free, compulsory education for all children. It took until 1851 for this to happen.

Although compulsory education was available in Massachusetts, other educational battles were being fought in the South. During the Reconstruction Era, African Americans fought for public education. Other states also fought their battles. As a result of the US Supreme Court Case *Plessy v. Ferguson* decision, public education was required to be legally segregated. According to EducationBug.org, the US Supreme Court decision in *Brown v. Board of Education of Topeka* in 1954 ruled that segregated schools were unequal and must be abolished. It took a Federal court ruling in 1957 requiring public schools in Little Rock, Arkansas, to be integrated.

## Evolution of Education

Distance learning first occurred in the 1800s. Initially, distance learning resembled correspondence courses where students worked on preassigned lessons that were received and returned to professors via US Postal Service mail. With correspondence courses, the interaction between students and teachers was limited and feedback was delayed. With materials being sent via US Postal Service mail, they could have easily been incomplete or lost. Over the years, distance learning has transformed into these forms:

- Telecourses
- CD-ROM courses
- Online learning
- Mobile learning

As time progressed and technological advances such as computers and the Internet became available, another learning option emerged: online learning. Online learning, also called eLearning or virtual learning, uses the Internet to

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3[www.educationbug.org/a/history-of-public-schools.html](http://www.educationbug.org/a/history-of-public-schools.html)
create an online classroom. The classroom is typically through a cloud-based learning management system (LMS), where teachers and students engage with the class materials. It transitioned the traditional physical classroom to an online environment using technology to simulate in-person interaction. Online learning is a type of distance learning.

Today, online learning via computer or mobile device is the most popular form of distance learning. Compared to traditional distance learning, online learning significantly increased student and teacher interaction. In addition, course materials are immediately available to students rather than waiting to receive them via US Postal Service mail. Students also receive feedback quicker and in various forms such as email, video, audio, or text.

The first online learning occurred in 1989, when the University of Phoenix used CompuServe, one of the first consumer online services, to offer its educational programs. In 1990, Tim Berners-Lee created the first web browser called WorldWideWeb. Three years later, the web browser Mosaic was created. Until this point, most web browsers were text-based. Mosaic was the first web browser that allowed images to be embedded in HTML pages and displayed to users. As the capabilities of web browsers advanced, online learning began to grow. According to EducationData.org, in 2017, a total of 19.7 million students enrolled in courses at degree-granting postsecondary institutions, of which 6.6 million enrolled in some form of distance education/online learning courses. As these numbers indicate, online learning is not a new trend. It continues to increase as technology advances.

Why Should You Care?

Today, almost any corporation that sells a product or service offers some type of online learning training to its employees, customers, or potential customers as opposed to only primary, secondary, postsecondary, and training institutions. If you conduct a Google search on the term “online learning,” as in Figure 1-1, you will receive over 2 billion results for all types of online learning organizations.

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https://educationdata.org/online-education-statistics/
Regardless of your age, ability, or skill set, online learning provides many benefits to today's learners and instructors.
Online Learning Benefits

For those who are new to online learning, the adjustment can be difficult. It is a different way of learning compared to what many have experienced. Change is never easy but sometimes necessary. Let us look at some of the benefits of online learning.

Flexibility

Unlike traditional learning that occurs on designated days and times, most online learning is asynchronous. Asynchronous means there is not a dedicated time that teachers and learners must attend classes. However, there might be a certain number of required days to meet attendance and participation requirements. Most people are looking for ways to find work/life balance in their lives, and with online learning’s flexibility, learners and teachers can set their schedules.

Time-Saver

Time is one of the most valuable assets that we have. Everyone has 24 hours in a day and makes the most of them. Once they are gone, they are gone forever. With busy schedules, everyone is looking for ways to save more time to do more things. Online learning allows learners and teachers to save by using the Internet rather than sitting in traffic.

Money Saver

In addition to being a time-saver, online learning can also be a money saver for online learners and teachers. For online learners, some online learning and course costs can be less expensive than traditional in-person courses. Other than public primary and secondary education, which have their inherent fees, many postsecondary institutions and other on-site training can be expensive. Eliminating travel to a brick-and-mortar building can help learners and teachers save money on gas, parking, lodging, food, and other costs.

Classroom Anywhere

Online learning allows learners and teachers to create a virtual classroom anytime and anywhere an Internet connection and a computer or mobile device are available. Traditional education required learners to rearrange their lives around attending a physical school. Online learning requires and creates a paradigm shifting in thinking and allows learners to arrange their education in conjunction with their lives. An excellent example of this is the Covid-19 pandemic. When schools and other learning institutions were forced to close
their doors due to the pandemic, learning shifted online. By moving learning online, learners, teachers, and other school administrators were still able to learn while being protected from the potential coronavirus spread.

Another example is the active duty military. Military personnel are often deployed all over the world. Still, they continue to use online learning to complete their educational goals. Otherwise, they could not resume their education until their deployments are completed.

Mobile Learning

Advances in mobile device technology and their increasing screen sizes along with less expensive options such as Chromebooks and Android tablets have made it easier for online learners to connect than in previous years. According to Pew Internet Research, the percentage of people who owned smartphones increased from 35% in 2011 to 81% in 2019. It went on to state that in 2019, 96% of people owned smartphones.

Online Learning Considerations

With all of its benefits, online learning might appear to be the solution for all situations. However, that is not always the case. There are some online learning considerations that must be considered.

Digital Divide

Although we are living in the 21st century, not all people have access to high-speed Internet access. For example, some rural areas still struggle to obtain reliable, high-speed Internet access. Their current Internet service is either too slow or nonexistent. As a result, it is difficult for them to further their learning.

Quality

Is online learning comparable to in-person learning? Are learners learning? Can technology be used as an effective medium to replicate pedagogy in the education model? These questions and others will be asked as more and more primary, secondary, and postsecondary schools and learning organizations implement online learning. Online learning might never completely replace the traditional learning model. As technology advances, tools such as web conferencing and virtual reality provide a viable alternative.

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5www.pewresearch.org/internet/fact-sheet/mobile/
Special Needs Learners

Some special needs learners are not able to do online learning. Based on their disability and its severity, it might not be as beneficial as in-person learning. For example, teletherapy services such as occupational and speech therapy are conducted online. For learners that require more hands-on instruction, online learning might not be the right fit, but it is still accessible to those who can use it.

Summary

Online learning will continue to evolve along with technology. As the workforce continues to need more knowledge workers, it will become easier for learners to gain the skills they need at their convenience. It will also be affordable. For educators, the opportunities to share and present their expertise will be limitless.