

E-Learning Approaches

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E-LEARNING APPROACHES

Education plays a vital role for people living in developing and developed world. Knowledge and learning are critical factors that link to the perception of people on social development and economics. Educated people have better opportunities in the job markets, which translates to better living standards (Elfaki et al., 2019). Countries globally must maintain an adequate level of skilled individuals to drive development. Recently, the world has seen significant leaps forward in technological advancement. Society has transitioned from an era of industrialization to a period of knowledge building where ingenuity and creativity stimulate and develop the community. In early societies, education systems were exclusively traditional, where students and teachers interacted physically in classrooms. Significant technological advancements characterizing society, particularly in the past twenty years and mainly due to the rise of the World Wide Web and the Internet, have led to a paradigm shift in how people see education. Today, educators are talking about concepts such as flipped classrooms and e-learning, which emerged about twenty-five years ago and have become dominant in today's education system (Al Rawashdeh et al., 2021). COVID-19 increased the adoption of e-learning methods in many educational and business institutions. This paper provides a detailed discussion of e-learning, including its different methods and styles.

E-LEARNING

Today, researchers have conducted many studies on e-learning. With e-learning, the teacher and the student must be in multiple locations for learning. There is no need for face-to-face interactions (Elfaki et al., 2019). The E-learning concept has different forms, implying several definitions, terms, and descriptions of this approach. What ties them all together is that all forms of e-learning use information communication technologies. E-learning refers to instructions teachers deliver on digital devices like mobile and computers to support learning. Various terminologies describe online learning, including electronic learning and distance learning. Online learning has the following characteristics regardless of which terminology one uses. One is that learners are physically far from their instructors or tutors, if any. Second, the learners must use technology, for instance, a computer, to access educational materials. Third, learners use technology when communicating and interacting with their tutors or peers. Lastly, learners receive some form of help from their tutors (Al Rawashdeh et al., 2021). However, in individual e-learning, learners are practically on their own.

E-learning has significantly impacted learning in businesses and schools, making it easy for employees and students to learn anything at their pace in environments that suit their learning styles and interests (Al Rawashdeh et al., 2021). Experts anticipate that in the future, e-learning will play an essential role in learning materials' delivery. About seventy-eight percent of individuals in the formal education sector believe that e-learning will provide better access to high-quality education. Regarding the business sector, companies believe that e-learning will comprise at least forty percent of their learning structure in the future, while some say it could reach ninety percent (Elfaki et al., 2019). It is more than clear that e-learning is on the rise as an educational tool across all types of organizations and institutions.

Online learning permeates colleges, schools, and businesses to offer education flexibly. A close examination of the current education sector shows that e-learning is becoming a dominant method of providing education (Al Rawashdeh et al., 2021). For instance, in the United States, fifty-three percent of universities have online programs where students use their electronic to access learning materials and interact with tutors. Such students do not have to visit the physical locations of the university as all the communication between them and the school can happen online. More universities continue to adopt online learning as the primary method of their education systems (Elfaki et al., 2019). It is no wonder eighty-eight percent of individuals believe that e-learning will become a significant part of university and school education moving forward.

The business sector is also experiencing a similar shift. Fifty-seven percent of the development of professionals and learning is happening online. Business organizations spend resources and time implementing e-learning in their organizational structure and processes (Khamparia & Pandey, 2020). About thirty-three percent of development and learning professionals are directing less and less time on instructor-led learning methods than three years ago. During the height of the pandemic, ninety-nine percent of business organizations used online learning (Al Rawashdeh et al., 2021). The shift to online learning was particularly apparent when looking at budgets for employee training.

A good example is Kellogg. The company invested heavily in offering online learning through LinkedIn for its pool of more than ten thousand workers (Al Rawashdeh et al., 2021). This learning method ensured that education could occur while employees still fulfilled their duties. As Kellogg's learning director explained, the company is creating a learning culture and intends to transition to a learning organization. The company's

employees are increasingly not waiting for physical training (Al Rawashdeh et al., 2021). They employ LinkedIn and other learning platforms to increase their skills and improve their business and themselves.

IMPORTANCE OF E-LEARNING

For several reasons, e-learning is becoming a crucial aspect of education in schools and business organizations. Most companies work with virtual and remote teams (Al Rawashdeh et al., 2021). Such teams have members from different parts of the world, which makes in-person meetings and training a nightmare. Instead of forcing teams to travel considerable distances to receive training, e-learning makes it easy for teams to learn new knowledge and skills and access resources for learning from any part of the world. The same applies to students. With e-learning, several students would have access to courses they want to study (Elfaki et al., 2019). Virtual classes and e-learning have made it possible for learners across the globe to attend establishments and learn online in places that could otherwise be far from their reach.

Resilience is another critical reason e-learning is becoming vital. The pandemic demonstrated that educational institutions and businesses require online learning to shield themselves from a crisis. E-learning allows learners to teach their curriculum with little interruption (Al Rawashdeh et al., 2021). For companies, e-learning offers a perfect route of upskilling workers so they continue effectively carrying out their duties even when still working. Also, e-learning allows businesses and educational institutions to tailor their learning experiences to the needs and interests of individuals. According to research, eight percent of Human Resource professionals and managers acknowledge that overcoming skill gaps in their organizations is challenging. E-learning assists in closing such gaps by effectively identifying the specific requirements of every individual and customizing educational resources to meet these needs. For businesses mainly, this makes e-learning a crucial investment (Elfaki et al., 2019). By spending money on personalized employee education, businesses improve the performance of the entire workforce and achieve their strategic goals in a timely fashion.

Additionally, unlike traditional learning styles, where a student is likely to visit several places for different qualifications and certificates, e-learning provides the learner with a single place for every training need (Khamparia & Pandey, 2020). Online learning platforms have leadership and management courses, software programming, food hygiene, and philosophy courses. The wide variety allows students to track and complete their training simultaneously (Al Rawashdeh et al., 2021). Also, it means one can meet compliance requirements and provide personal advancement opportunities for their employees without leaving their premises.

Finally, e-learning tools make it easy to measure the effect of training and education. Learning platforms such as LinkedIn, Code Academy, and others collect quantitative information demonstrating every student or employee's learning process (Al Rawashdeh et al., 2021).

Online learning sites also help companies code qualitative feedback on the learning experience. It is also easy to administer tests online, where workers can answer and submit them in real-time (Elfaki et al., 2019). Online learning is convenient overall when measuring the impact of the education and training process.

E-LEARNING AFFORDANCES

As the author mentioned, e-learning involves using information communication technologies for learning. E-learning integrates a variety of strategies and technologies. The e-learning concepts arise due to technological advancements (Tawafak et al., 2019). Higher education institutions have used e-learning to enhance traditional teaching forms for years. Students in different courses in several colleges and universities must access lecture notes on the school's student portal. Most universities also have personalized internet environments where students can join discussion boards with their peers, which gives them more flexibility in their studies (Khamparia & Pandey, 2020). Also, part-time learners access most of their university learning resources online.

There are two forms of communication in e-learning, that is, synchronous and asynchronous communication. Asynchronous communication is online, where the learner interacts with peers over time using tools like e-mail, bulletin boards, and discussion forums (Amiti, 2020). This form of communication supports perceptive participation as it increases the capability to exchange detailed information and supports reflection. A recurring and familiar description of e-learning benefits is that it increases the number of learners a tutor can teach. There is no need for students to be physically present in one location, which enables many students to study irrespective of where they are geographically. Also, there is no need for a classroom that would limit the number of available student slots (Elfaki et al., 2019). The asynchronous communication method appeals to learners because it allows them to learn while handling other undertakings. It has enabled people across the world to access long-lasting learning.

On the other hand, synchronous communication is more like traditional teaching methods because information transmits in real-time (Amiti, 2020). It enables learners to watch their presentations and interact with them verbally during the lesson. Because it occurs in real-time, interactions are dynamic compared to asynchronous communication. The model is appropriate for large groups if the aim is broadcasting different forms of sessions. The ways educators teach language through Skype is an example of synchronous communication. The main advantage of using Skype is that large groups can learn together seamlessly. It is also easy to utilize compared to other types of synchronous communication and can serve as an alternative for educators who feel they have not mastered technology learning tools. Other programs include Zoom and Google Workshops (Amiti, 2020). Synchronous and asynchronous are helpful for teachers and students.

HOW E-LEARNING IS SHAPING EDUCATION

E-learning presents a range of formats to help students and employees learn in interactive ways. Below is a highlight of ways e-learning is changing education for the better.

Virtual Schooling

Advancement in technology, particularly the wide adoption of the Internet, has allowed trainers and educators to use online video conferencing software for learning purposes. Virtual lessons are now a reality thanks to advancements in this area (Khamparia & Pandey, 2020). Employees and students can create accounts on online platforms to attend online streams with their educators presenting lessons. According to surveys, this learning method is highly effective and can reach students in remote places. During the pandemic, twenty-three percent of learners attended online classes. Such learners ranged from elementary school children to higher education learners. Sixty-seven percent of parents reported high satisfaction with the outcomes of this learning style. Forty-seven percent of parents argue that learning prepares their children for the following grades (Elfaki et al., 2019). In the future, seventy-nine percent of individuals believe that college learners will attend virtual classes, while seventy percent believe that high school and elementary students will receive virtual lessons.

Self-Directed Learning

Historically, companies and schools have constantly set their educational timetables and schedules. They controlled when and what their learners learned. However, research shows that more than thirty-five percent of workers want independent, self-directed learning opportunities (Khamparia & Pandey, 2020). This approach works best for adult learners with enough motivation and knowledge to dictate what they learn and how they learn it. A large number of workers prefer to learn during vacations and free time. According to surveys, eighty-three percent of Americans think education will adopt self-service approaches, particularly for adult learners. In response, development and learning professionals are concentrating on establishing self-directed learning processes for workers using online education solutions. Educational establishments will likely follow this path, using LMS (Learning Management Systems) that allow learners to access educational resources virtually at their pace easily (Tawafak et al., 2019). This way, students and employees can learn when they want without interrupting their work schedules.

On-the-Go Learning

Traditional classroom-based learning requires students to be physically available in a class at specific timeframes for learning to occur. However, e-learning provides a flexible approach to learning where students can access educational materials whenever and wherever they are, making it easy to learn while traveling (Tawafak et al., 2019). Studies show this is why online learning platforms and websites focus on advertising and marketing online learning flexibility. Development and learning experts design their courses and learning content in ways that

learners can access even with smartphones. Fifty-seven percent of workers say they want modules they can access anytime, even when traveling (Khamparia & Pandey, 2020). With virtual learning experiences, students can learn from anywhere.

One on One Tutoring

Studies show that one-on-one tutoring effectively educates an individual, as most educators focus on one student. Parents and guardians whose children utilized one-on-one tutors during the pandemic reported high satisfaction levels with e-learning (Naim et al., 2019). Fourteen percent of these parents also intend to continue paying for one-on-one tutors to supplement their children's schooling. However, online tutoring goes beyond schooling. For example, in global businesses, companies are increasingly hiring English tutors online to teach workers to speak fluent English and facilitate global deals (Ouadoud et al., 2021).

Learning Materials Sharing

One of the advantages of online learning is that students can easily share learning materials. During the pandemic, seventy-nine percent of learners accessed virtual learning materials from their schools' online library databases (Naim et al., 2019). Thanks to cutting-edge LMS solutions, it is easier for educators to share educational resources with their learners, who can receive them remotely. Experts in education technology have developed tools to facilitate the sharing of resources from student to student and teacher to student. A perfect example is StuDocu, which allows learners to share college and school lecture notes, coursework, and study resources with their peers. Another is CouseHero, which allows students to share resources and has twenty-four-seven tutors to help learners (Ouadoud et al., 2021). The two learning platforms make it easy for students to search materials by language, category, school, and subject to locate the materials that fit their learning needs.

Augmented and Virtual Reality

Thirty-nine percent of development and learning professionals argue that augmented and virtual reality will significantly impact e-learning. They state that this technology will make it more effective for training to occur through the stimulation of real-world scenarios (Lu et al., 2020). Through augmented and virtual reality technologies, learners can experience first-hand the situations or circumstances that impact businesses. The technology works just like plane simulators, where virtual and augmented reality tools enable students to experience various situations just like they are there instead of learning from lectures and books (Lu et al., 2020). However, this may seem far-fetched; sixty-nine percent of leaders in today's business already argue that they are shifting to interactive learning methods like simulations.

Personalized Experiences

Students' motivation and morale for learning reduce when they keep learning what they know. However, thanks to machine learning and artificial intelligence improvements, personalized experiences have become possible (Ouadoud et al., 2021). Training systems provide personalized recommendations based on a student's needs, interests,

and learning level by utilizing data from learning sites and platforms. This encouraging step inspires learning in workplaces and educational institutions. According to surveys, seventy-nine percent of students prefer personalized courses based on skills gaps and career goals, so forty-nine percent of development and learning professionals think that utilizing machine learning and artificial intelligence tools will drive accurate personalization and positively impact learning (Khamparia & Pandey, 2020).

DIFFERENT E-LEARNING METHODS

Technology continues to improve at a faster rate than anyone would anticipate. This improvement includes e-Learning evolution, constantly changing as consumer needs and interests change (Naim et al., 2019). Rigid training platforms are no longer the primary forms of learning. Those starting their e-learning journeys may face challenges navigating their preferred study methods. However, researchers have created guides to help learners navigate different types of e-learning in today's market (Lu et al., 2020). This section discusses different e-learning methods currently available for employees and students. It also presents some of their cons and pros.

Fixed E-Learning

Fixed e-learning refers to a learning process that uses traditional structures to pass information and learning content to students. It is one of the oldest online learning versions (Naim et al., 2019). Every learner receives the same information based on an instructor's determination. Since learning materials depend on instructors, this learning method is flexible, and most learners prefer something other than it since it does not consider the preferences and needs of the student. This type of e-learning works best in environments where students have the same skills and schedules (Ouadoud et al., 2021). Traditional grade classes that require e-learning solutions can significantly benefit from this type of e-learning.

Fixed e-learning works best when learning relies on time-sensitive completion schedules involving rigid curriculums (Naim et al., 2019). Its only deviation from traditional forms of learning is that it uses electronic tools to deliver content and information to learners. It also allows trainers and educators to adopt one-size-fits-all strategies with little variations. Some of its disadvantages include its rigidity. Implementing current diverse e-learning needs when using fixed e-learning approaches takes much work. Also, this traditional approach to education and training needs elements of the natural world (Alqahtani & Rajkhan, 2020). Lastly, it needs to be more generalized and acknowledge the abilities of individual students.

Adaptive E-Learning

This style is one of the modern forms of e-learning. Unlike fixed e-learning, adaptive e-learning considers the flexibility of the learner. All learning resources fit the learning preferences and needs of the student (Naim et al., 2019). It considers factors such as individual

performance, abilities, and skills. Paying attention to these factors means learners can change things whenever they need to include something or catch up. The students can also change it based on their course goals. This type of online learning works best where students prefer to learn at their pace. However, a learner requires high discipline to stick to this form of online learning. One of the advantages of this method is flexibility, as the author mentions above. It allows students to take programs based on their needs (Ouadoud et al., 2021). This pro also presents a disadvantage. Since the learner can tailor their learning content, instructors have to plan for every student, which means they can learn many e-learning schedules at a go.

Asynchronous E-Learning

In this form of online learning, learners study independently. They can be in different locations. Learners study alone, depending on the schedules they prefer. It can also include student-generated content (Amiti, 2020). For instance, rather than multiple choice questions, students could submit videos of themselves demonstrating their newly-acquired knowledge or skills. Some advantages include that it considers the student's needs and is flexible. It has user-generated content that allows individualized and personalized learning schedules. Students at different locations can also benefit from one learning tool their peers will use. The main disadvantage is that it can result in isolation, establishing a ripple impact in complacency when learning (Amiti, 2020). Some students require consistent interaction with peers and evaluation to keep pace, which asynchronous e-learning needs to be improved.

Interactive E-Learning

In this type of e-learning, students and teachers communicate freely, enabling them to change learning resources and materials whenever they like (Naim et al., 2019). An open communication line allows the student and teacher to interact better, leading to a better learning process and prompt answering of queries whenever they arise. Interactive e-learning functions better in close-knit and limited group environments that enable flexibility. One of the advantages of this style of e-learning is open communication which allows for a seamless learning process for teachers and learners. Also, open communication strengthens independence in education for learners since they have control of their learning process (Ouadoud et al., 2021). The main disadvantage is that it only works for a group of students.

Individual E-Learning

As the name suggests, this form of e-learning involves learning alone without peer communication. The Internet contains relevant information students can use to learn and develop new skills and knowledge (Alqahtani & Rajkhan, 2020). Many accessible online library databases, such as Google Scholar, contain books, articles, and journals that students can use to teach themselves. A primary benefit of individual e-learning is that it helps

learners study based on personal attributes like goals achievement instead of depending on their peers' and teachers' standards. Despite its strength, it also has a severe disadvantage. This form of e-learning limits any form of communication leading to isolation. The student must learn solo and complete goals independently (Naim et al., 2019). There needs to be follow-up, which means it only works in specialized circumstances where students have high motivation and skills.

Collaborative E-Learning

This type of e-learning concentrates on teamwork, enabling learners to work with their peers. Learning goals and materials depend on the combined efforts of every student for course completion. Those who prefer collaborative e-learning must consider their weaknesses and strengths and those of their peers (Naim et al., 2019). Some of the benefits of collaborative e-learning include the promotion of teamwork and communication among learners, which often needs to improve in other online learning approaches. This type of learning develops innovativeness and critical thinking. As a result of the collaborative nature of this method, it works well with students from different cultures and backgrounds. It is effective in building harmony and awareness among individuals from diverse communities. Despite its advantages, it also has a disadvantage as it can result in over-dependence by learners (Ouadoud et al., 2021). Some students can decide to relax and let their peers work on their behalf due to dependence on combined efforts. An example is when some students do not contribute to group work but get grades from group assignments which is unfair for some students. As this discussion demonstrates, different e-learning methods work for different types of students. Therefore, students must examine their strengths and weaknesses before settling on any online learning method.

E-LEARNING CHALLENGES

A major problem with implementing e-learning in schools and businesses for learning and development is that most educators need more skills and knowledge to use the technological tools necessary to deliver services in e-learning (Al Rawashdeh et al., 2021). Although most educators in higher education institutions, colleges, high schools, and elementary schools in the United States can easily use such technologies, a few still need to gain such skills. If the nation is to adopt e-learning fully, researchers believe there is a need to train educators to use these technological tools (Alqahtani & Rajkhan, 2020). Although it may take time to teach educators, this measure is crucial to the wide adoption of e-learning in the education system and business organizations.

Another challenge is the need for adequate technological tools to support e-learning. Some schools, particularly in rural areas, need better technology infrastructure to enable the adoption of e-learning (Qurotul Aini et al., 2020). Some schools, particularly elementary schools, choose to refrain from investing in infrastructure that would enable the adoption of e-learning due to cost limitations. Public

schools suffer the most from budgetary limitations. Therefore, to increase the use of e-learning, public and private schools must invest in computers, cameras, broadband, and other such infrastructures to enable e-learning adoption (Alqahtani & Rajkhan, 2020).

Some researchers believe that some educators can see online learning as an alternative to traditional teaching methods (Al Rawashdeh et al., 2021). When such substitution occurs, it could result in disruptions. Therefore, a challenge many schools that use traditional forms of teaching must deal with is conforming to and taking up advanced technologies continually emerging in the education sector. Schools adopting new technologies can stay caught up in technological development. There are also other barriers to adopting e-learning in many educational institutions. In most schools, learning occurs in physical classrooms, based on learning approaches like "same place and same time." In such situations, educator-focused approaches are typical because educators work hard toward assessment needs (Alqahtani & Rajkhan, 2020). They have a rigid curriculum that requires strict adherence. Consequently, educators need more time to build and develop information technology skills to adopt new teaching approaches.

Other e-learning challenges revolve around the learners themselves. Some learners may experience technical issues when interacting with digital e-learning tools (Abdur Rehman et al., 2021). They may need help accessing the required resources to sign up or log in to complete virtual learning. If they are working at home, they may experience connection problems due to low-bandwidth Internet. Schools should build their e-learning infrastructure with technical abilities in mind (Abdur Rehman et al., 2021). They should refrain from using large media files that users would struggle to download.

Another problem is poor interaction. Learning through online platforms is convenient for many people, but as argued earlier, it is isolating. Students and remote workers report feeling lonely as they spend most of their time in front of screens alone (Qurotul Aini et al., 2020). Isolation can affect morale for learning. Businesses or educational institutions should provide learners with a learning environment that allows peers to interact—for instance, peer reviews or assignments. Educators should set up projects where students work with their colleagues to apply what they have learned from the course (Al Rawashdeh et al., 2021). Incorporating discussion forums can also help learners interact with one another and reduce the possibility of isolation.

Most users' experience with e-learning involves sitting passively and reading texts on computer or phone screens. Students or workers may gain interest when they interact with content sparingly (Qurotul Aini et al., 2020). Things like online chats can sidetrack them, leading to losing focus. Educators can prevent this problem by designing content that learners have to interact with, such as providing opportunities to play with the computer screen or including quizzes or tests that need responses. When a teacher gets learners mentally and physically connected with content, learning becomes more accessible. Lastly,

some learners may have problems using online learning due to learning difficulties or disabilities. For instance, those with sight impairment or hearing problems will require help to navigate self-paced learning. Therefore, educators should closely examine their content to ensure learners can easily access them. Alternative options, such as keyboard shortcuts, can help with specific exercises (Al Rawashdeh et al., 2021). Adding captions to videos and other audio resources can also be beneficial.

CONCLUSION

Overall, e-learning provides a flexible experience for learning that employees and students can easily access globally. Moving from rigid digital learning resources to personalized interactive learning experiences is changing daily. Today, online learning provides a three-dimensional opportunity for students and employees. Different e-learning methods include collaborative e-learning, individual e-learning, fixed e-learning, and asynchronous e-learning. Students must understand their needs, weaknesses, and strengths when choosing their e-learning method. However, despite the increasing adoption of e-learning by schools and business organizations, e-learning has several challenges. For instance, some schools may need more infrastructure to provide e-learning, and students may also need gadgets to access e-learning content. Some students may need to learn to use technological tools to access learning materials and resources online. However, despite its challenges, the benefits of e-learning are immense as it supplements traditional teaching methods. There are debates on whether it could completely replace traditional classroom-based learning.

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