Overview of Evolution of E-Learning Platforms for Universal Learning

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Abstract

With the development of information technology a new technological learning platform has been created for the education system. The web-based learning platform enables teachers to plan lessons and develop easy-to-use digital resources for assessing and assigning tasks, and automatically monitoring the progress of each student or the entire class. Web-based training platforms are integrated software solutions for e-learning. They provide a range of tools for transmitting and receiving new knowledge, skills and attitudes, intended to stimulate and guide the learning process through the use of computers and internet connections. There are many e-learning platforms. Some of these virtual learning environment platforms let you host and sell online courses. Students decide which platform is best for training courses. This paper reflects on past practice and calls for a greater focus on learners and learning and the technologies and emerging pedagogies that offer deep and exciting learning opportunities for the future. This article presents a historical overview of e-learning and its web platform. After summarizing various studies related to the genesis of e-learning, it describes how e-learning has been shaped over the years. It appropriately summarizes, organizes, and explains the historical progress of e-learning and its platform. In addition, this study presents a systematic literature review about the history of e-learning, web platforms, tools of e-learning and its development from early times to recent times.

Keywords: *Information Communication technologies , E-learning, E-learning platform, learning management system.*

1. Introduction

The e-learning sector has gained increasing popularity for the right reasons. Over the years, online learning platforms have made leaps in providing a complete learning experience that is fun, interactive and ultimately engaging. E-learning platform is the future of education. Even after the global health crisis is over, the number of students looking to improve their knowledge and career through self-paced online learning is likely to increase.

The purpose of this research paper is to discuss the importance of web based learning web platform for student teachers based on universal education, implementation of web platform in e-learning and challenges of e-learning.

2. Web-based Learning

Web based learning is often called online learning or e-learning because it includes online course content. Discussion forums via email, videoconferencing, and live lectures (video streaming) are all possible through the web. Web based courses may also provide static pages such as printed course materials.

Web based Learning is the universal learning facilitated and supported by Information Communication technologies (ICT) to enable people to learn anytime and anywhere. It is nothing but the use of technology to connect teachers and students who are physically miles apart. This learning involves the use of multi-media to enhance learning and can include training, the delivery of just in time information and guidance from experts. We based learning can also be termed as a network enabled transfer of skills and knowledge through which the delivery of education is made to a large number of recipients at the same or different times.

In the current era, where technology is rapidly evolving, education has also taken the support of ICT and now offers convenient ways to help increase the knowledge, education and literacy status of people. Web Based Learning platform provides anywhere, anytime easy access for upgradation of knowledge and skills. It provides a platform wherein the individual gets a customized package related to key thematic areas through a self-guided process.

Different writers above the matter have given numerous descriptions on online learning. Under are little remarkable are as follows:
1. The Web learning is education is conveyed by electronic means, in piece or entirely through internet browser, either the web net or hypermedia podiums like

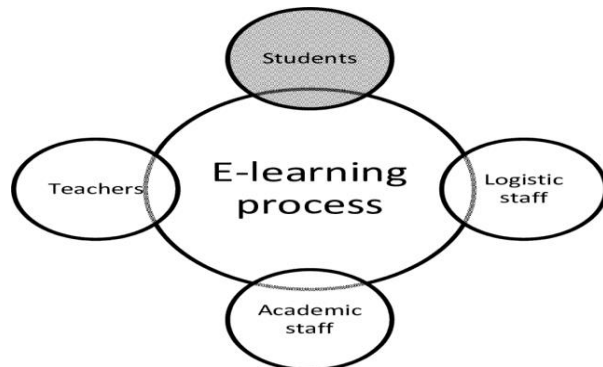as Compact Disc Read Only Memory or Digital Video Disc.

Fig 1 : Web based Learning Process

2. The Web learning concealments an inclusive collection of uses also methods, like as internet Web placed education, PC placed education, computer-generated tutorial room, and digital alliance. It contains transporting contented through the web, audial and video, satellite broadcasting, smart television, and Digital Video Disc / Compact Disc Read Only Memory.

3. The online web learning is an organized, determined usage of electrical process or PC in base of the education practice.

4. The online web learning is teaching distributed over a PC (cover Digital Video Disc/Compact Disc-Read Only Memory, either web net or intranet) that is considered the sustenance separate education over structural enactment objectives.

3. E-learning platform

An electronic learning (e-Learning) platform is a Combination of interactive online services that provide information, tools, and resources to Teacher, instructors, learners, and others involved in education in order to support and enhance education delivery and management. One type of e-learning platform is a learning management system (LMS). The objective of a successful e-learning platform is that it creates a robust learning experience that feels more like a classroom experience, without traditional classroom features (such as instructor-student interaction, Q&A, discussions, games, collaborative projects, quizzes, etc.).) offers, but either online or through a computing device (such as a laptop, desktop, tablet or mobile.) these critical learning environments are achieved through the features and tools of learning platforms that enable the interaction and engagement required of students make level. There are several e-learning companies that provide online learning platforms. Some of these virtual learning environment platforms allow you to host and sell courses online, allowing you to run your own business. Other platforms simply provide an interface in which users can interact with your content.

One important advantage of learning online is that you can learn whatever you want! You can pursue your academic career or choose to study something else altogether. You can polish your soft skills or take those art or music production lessons you've always wanted to take part in.

4. Evolution of Web Based Learning

The first online learning systems were really only set up to deliver information to students but as we entered the 70s online learning started to become more interactive. In Britain, the Open University was keen to take advantage of Web based learning. Their system of education has always been primarily focused on learning at a distance. In the past, course materials were delivered by post and correspondence with tutors was via mail. With the internet, the Open University began to offer a wider range of interactive educational experiences as well as faster correspondence with students via email etc. With the introduction of the computer and internet in the late 20th century, Web Based Learning tools and delivery methods expanded. The first MAC in the 1980′s enabled individuals to have computers in their homes, making it easier for them to learn about particular subjects and develop certain skill sets. Then, in the following decade, virtual learning environments began to truly thrive, with people gaining access to a wealth of online information and Web Based Learning opportunities. By the early 90s, several schools had been set up that delivered courses online only, making the most of the internet and bringing education to people who wouldn't previously have been able to attend a college due to geographical or time constraints. Technological advancements also helped educational establishments reduce the costs of distance learning, a saving that would also be passed on to the students – helping bring education to a wider audience.

In the 2000′s, businesses began using Web Based Learning to train their employees. New and experienced workers alike now had the opportunity to improve upon their industry knowledge base and expand their skill sets. At home, individuals were granted access to programs that offered them the ability to earn online degrees and enrich their lives through expanded knowledge.

5. Review of Study of E-learning and its platform

E-learning can be a potential platform in providing a number of delivery methods for different types of learners, when compared to conventional classrooms. Furthermore, e-learning is an influential tool as it can provide unique learning styles and improve academic performances of students. Students can actively participate in e-learning environment where they can increase their thinking ability and learn independently **(Dumford and Miller, 2018).** Students can have

systematic lessons as it provides content and exercises portrayed in animations, sounds, and videos.

Over the last decade, the deployment of online education has grown exponentially. Online learning in academia has gone from an experimental novelty to a nearly ubiquitous teaching tool. Today, over three-quarters of college presidents (77%) report that their institution now offers online courses **(Taylor, Parker, Lenhart & Moore, 2011),** online learning enrollments are growing ten times faster than traditional enrollments, and thirty-one percent of all higher education students now take at least one course **(Allen & Seaman, 2010).** Given the growth of online learning, it is likely that both current and future faculty will be engaged in some form of online learning at some point in their career. In 2009, one third of the faculty surveyed by Sloan- C had taught at least one online course, and one in four was teaching online at the time of the survey **(Seaman, 2009).**

Several studies have shown the positive effects of e-learning from the insights of learners or students **(Gautam and Tiwari, 2016; Martínez-Caro, Cegarra-Navarro and Cepeda-Carrión, 2015; Chang, 2016).** For instance; elearning allows to observe much flexible learning ways to go for classes with much reduced need for travel.

It is important for instructors to embrace the advanced technology throughout the process of teaching and; therefore, learning has a range of skills in information and communication technology (ICT) **(Aithal and Aithal, 2016).**

Other important benefits as highlighted by **Al-Handhali, Al-Rasbi, & Sherimon (2020)** indicated several benefits of LMS, making it user friendly, effective in managing time, provide ease in the management of courses, teachers, facilities, generate reports. It further provides timely reminder to users which include; date of deliveries, answering questions, test dates etc. **Aydin & Tirkes (2010)** in their study analyzed the usefulness of LMS and Moodle. In the e-learning context in academic perspective, **Holsapple & Lee post (2006)** measures the positive benefits of e-learning in terms of learning enhancement, empowerment and time savings. In the case of organizational training in an e-learning platform, **Wang et al. (2007)** uses improvement in job performance, creation of strategic advantages, adoption to change, producing new and better products, Cost and time savings, ROI and achievement of organizational goal as the items to measure Net benefits. An e-learning system equipped with applications that echoes the users opinion and mechanisms that resolve accessibility concerns is advocated by e-learners **(Mohammadi 2015)**.

6. E-Learning Success Factor

We have moved from live stage performance (classroom training) to motion pictures (e-learning). The industry is moving fast in this direction, while e-learning has not yet entered this phase. In the early days it was not called e-

learning, but CBT or Computer Based Learning, reflecting its primary focus at the time.

E-learning has come a long way as earlier it was not accepted whole heartedly as the system lacked the human element required for learning. In contrast, advances in learning systems and rapid advances in technology are now being adopted by the public globally. There are several factors behind this success of e-learning which has earned it recognition globally. A summary of the critical success factors for e-learning, according to the literature review:

Table 1: Indicators of e-learning success Factor

Factor	Dimension	Indicators	References
Content quality	Course and Information Quality	Comprehensive, Relevance, Organized, updated, Accuracy, Understandability,	Wang et al. (2007)
System Quality	Infrastructure and system quality	Easy to use, Availability, Reliability, Personalisation, Aesthetics, Responsiveness (high speed information access), security	Wang et al. (2007)
Learning transfer	Instructor's Characteristics	Knowledge sharing, Application, Job performance	Mbarek (2011)
Learning Achievement	Learner's Characteristics	New knowledge, Personal growth, Involvement	Mbarek (2011)
Perceived usefulness	Learner's Characteristics	Efficiency, Improvement, Self – confidence	Mohammadi (2015)
Organisational benefits	Institution and Service Quality	Better products, ROI, Goal achievement, Retain Knowledge	Wang et al. (2007)
Service Quality		Instructor availability, IS staff support, Online assistance, Instructor knowledge, Participation, Accessibility, Evaluation	Wang et al. (2007)
Students' performance	Learner's Characteristics	Evaluating the students' performance, student-student interaction, effective support, learning materials,	Benigno and Trentin (2000)

7. Conclusion

Adopting an e-learning system is a complex process of setting up and developing an integrated information technology system. Several studies by researchers have shown that effective use of e-learning can help increase student motivation, engagement, and attendance. It should also enhance student class participation and better behavior and performance in core subjects.

This study, in line with the literature, identifies and measures the success factors that help universities and instructors adopt e-learning systems. This research papers a review paper, which review different e-learning and its platform related article.

References

[1] Adams, A. E. M., Randall, S. and Traustadóttir, T., 2015. A Tale of Two Sections: An Experiment to Compare the Effectiveness of a Hybrid versus a Traditional Lecture Format in Introductory Microbiology. CBE - Life Sciences Education, 14, pp. 1-8

[2] Aithal, P. S., and Aithal, S., 2016. Impact of on-line education on higher education system. International Journal of Engineering Research and Modern Education (IJERME), 1(1), pp. 225-235.

[3] Albirini, A. (2006).Teachers' Attitudes toward Information and Communication Technologies. Journal of Computer & Education, 47, 373-398.

[4] Allen, E. I., & Seaman, J. (2009). Learning on Demand - Online Education in the United States. Needham, MA: Sloan Center for Online Education.

[5] Allen, E. I., & Seaman, J. (2010). Class Differences - Online Education in the United States. Needham, MA: Sloan Center for Online Education.

[6] Al-Handhali B. A., Al-Rasbi A. T., and Sherimon P. C., 2020. Advantages and disadvantages of earning Management System (LMS) at AOU Oman. International Journal of Technology, 1(2), 222-228.

[7] Aydin, C. C., & Tirkes, G., 2010. Open source learning management systems in e-learning and Moodle. In IEEE EDUCON 2010 Conference (pp. 593-600). IEEE.

[8] Chang, V., 2016. Review and discussion: e-learning for academia and industry. International Journal of Information Management, 36(3), pp. 476-485.

[9] Dumford, A. D., and Miller, A. L., 2018. Online learning in higher education: exploring advantages and disadvantages for engagement. Journal of Computing in Higher Education, 30(3), pp. 452-465.

[10] Gautam, S. S., and Tiwari, M. K., 2016. Components and benefits of e-learning system. International Research Journal of Computer Science (IRJCS), 3(1), pp. 14-17.

[11] Mbarek, R & Zaddem, F 2013, 'Determinants of E-Learning Effectiveness: A Tunisian Study,' IBIMA Business Review, 2013, 1.

[12] Mohammadi, H 2015, 'Factors affecting the e-learning outcomes: An integration of TAM and IS success model', Telematics and Informatics, vol. 32, no. 4, pp.701-719.

[13] Taylor, P., Parker, K., Lenhart, A., & Patten, E. (2011). The digital revolution and higher education: College presidents, public differ on value of online learning. Pew Research Center. Retrieved from http://www.pewsocialtrends.org/2011/08/28/the-digitalrevolution-and-higher education/.

[14] Wang, YS, Wang, HY & Shee, DY 2007, 'Measuring e-learning systems success in an organizational context: Scale development and validation', Computers in Human Behavior, vol. 23, no. 4, pp.1792-1808.