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### Research Article

## ONLINE LEARNING: A THEORETICAL ANALYSIS

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## **ABSTRACT**

The paper provides an overview of some of the reason why online learning is important in 21st century and challenges face by online learning and its advantage and disadvantage. E-learning is a way to learn new skills by use of electronic technology in education outside of the traditional classroom, and it has grown in popularity in recent years, especially among the younger generation. We human being are very creative and always curious to know and innovate something. Now we are at this era where all has been revolutionized by technology and education is no exception of it. The world of education has changed rapidly as a result of E-learning. Both students and teachers have benefited from the implementation of eLearning. As we all know that the world is facing a very crucial time because of this corona pandemic. So in this situation online or E-learning is the only solution for the students to continue their academic study. It is an excellent method of learning that can help develop student's performance.

**Key words:** E-learning, Technology, Revolutionized, Crucial time.

### 1.0 INTRODUCTION

Learning is a process of change in our behavior resulting from experience and it's a process of modification of behavior and E-Learning is a way to learn new skills by use of electronic technology in education outside of the traditional classroom, and it has grown in popularity in recent years, especially among the younger generation. E-learning isn't going anywhere anytime soon. E-learning becomes more feasible and available. Internet facilities are improving, which opens the door to more multimedia training methods. There are now a variety of resources

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available to assist in the development of interactive training courses and the standardization of the learning process. Several e-learning patterns can provide us with a good picture of the future of e-learning and the shape of learning tools. With the vast improvement in technology in recent years and the rise of telecommuting, bringing all of the great features of e-learning on the go is now possible with Smartphone's and other portable devices. Development of technology, rise of social media, is rapidly changing education.

E-learning is a modern method of education that uses electronic technology to facilitate learning. Distance education, distance learning, online learning, internet learning, and other terms can be used, but they all refer to the same thing. Everything we need is a computer, Smartphone, laptop etc. and access to the internet.

E-Learning is a form of learning that makes use of electronic tools to create a more interactive and instructive learning environment. Students and young professionals can develop a variety of skills by using online learning. Any professional can quickly learn about any topic they want. Individuals have now been able to easily seek, obtain, and impart information at a low cost as a result of this. Almost all online courses are self-paced, allowing students to incorporate schooling into their daily lives rather than scheduling their activities around school hours. As a result of the recent pandemic, billions of students have been forced to leave their classrooms. As a result, people are now more interested in eLearning than they were before. To keep up with the times, schools have introduced new methods.

### 2.0 REVIEW OF RELATED LITERATURE

Literature review is a handy guide to particular topic and it helps us to have a comprehensive knowledge of the literature available in the field which study is being taken up. From the related literature it is observed that Rapid developments in technology have made distance education(Mcbrien et al., 2009); the importance of online education is something that cannot be left out in the current time period and it should not be found to academic classes only(Brain,Daniel,2020); Everything is unpredictable and we need to be ready to face challenges, disasters and pandemic such as Covid19 can create a lot of chaos and tensions, therefore there is an important need to study the technology deeply and with due diligence to balance these fears and tensions amidst such crisis(Dhawan, 2020); Covid19 pandemic made us realize the importance of online training and the impact of online learning on the morale of our students by creating a diversion from the ongoing pandemic situation(Agarwal & Kaushik, 2020); In the wake of the COvid19 the adoption of online learning has increases dramatically and considering the added advantages such as flexibility of learning, online will define the future of education for the times to come(June2021.BW online Bureau).

## 3.0 TECHNOLOGY AND LEARNING

We human being are very creative and always curious to know and innovate something. Now we are at this era where all has been revolutionized by technology and education is no exception of it. The world of education has changed rapidly as a result of eLearning. Both students and teachers have benefited from the implementation of eLearning. In reality, online education has gotten a lot of positive feedback. In most cases, this is not the case for new things. So, in terms of the future, it's fair to assume that e-learning is here to stay. It is likely to evolve and become more convenient for learners with future updates and upgrades. Instructors' new approaches would make online courses more interesting and engaging for students.

Distance learning, as a comparatively newer mode of schooling, has its own collection of benefits. Learners have the following benefits in addition to being able to read online: flexibility in terms of time, learn at own level, Costs are smaller in comparison or cost effective, learn while working etc. there is no need to commute or use public transportation in distance learning or learning. Access to a wide range of courses is simple in online learning.

### 4.0 THE RISE OF ONLINE LEARNING

As we all know that the world is facing a very crucial time because of this corona pandemic. The pandemic not only affect the economy of a country but the most affected area is education. So in this situation online or E-learning is the only solution for the students to continue their academic study. In response to significant demand of education many online platforms offering various courses. The concept of webinar becomes famous because of this pandemic situation. Zoom calls, Google meet are the most useful app for students learning through online.

## 5.0 ONLINE EDUCATION: A BEST ALTERNATIVE FOR FUTURE

Technology advances day by day and new innovations are being implemented all the time and in every field. Now we all know that due to COVID -19 pandemic including all sectors education system is also face lots of challenges. All schools around the world were closed. Educators or teachers also adapting new challenges so online education gradually filling the gap and e learning is doing as an alternative way of learning.

The following are some of the primary reasons why online Learning can be considered as future of education:

## 1. On-demand Education:

The COVID-19 has affected the education sector as all schools shut all parts the world. Because of this education has changed extremely, with the distinctive growth of e-learning where by teaching is takes place on various digital platforms day by day. Here Learners can access online courses from the comfort of their own homes whenever they want. People from all walks of life have been able to become learners as a result of this power. In online learning there are no need of physical communication as now which is most important. So the need of this learning is most on demand right now.

## 2. Self paced education:

As technology continues to evolve, the need for on demand online training has also grown. Online learning is a self paced education as learners can learn in their time and schedule. Here Learners can choose from a variety of courses to find learning material that fits their needs. And they can also plan their own time schedule. The availability of high-quality learning materials and modern learning technologies has completely transformed the learning environment. Like students, Professionals can take advantage of online learning at any time to improve their skills and advance their careers.

## 3. Environment friendly education:

Environment is very important because it is the only home human have. It is the sources of natural beauty which is good for both physical and mental health. As we are living in 21<sup>st</sup> century and world is hit by global warming because of deforestation everywhere. Wood is the raw material of paper and it's also increase the rate of deforestation. So education without paper is a popular issue for all today.

E-learning protect the environment a lots of extent because it is a paperless method. A study done on e-Learning courses and it has been found that around 90% less power consumed in distance-based learning programs and as compared to traditional campus-based educational courses it generated 85% less amount of CO2 emissions. So e-learning is an alternative of traditional learning is more popular as here no need to cut trees for obtaining papers. It is a very highly eco-friendly and a new medium of learning.

### 4. Time and cost effective education:

Online learning has been very useful and on the top in recent years because it is easily accessible. It is very time friendly as students can access at any time and they can fulfill their existing responsibilities and commitments. Online learning allows students to use their investing time in affective way according to their need. Whenever time is most suitable to students they can engage with multimedia content and also get learning materials. Learners don't need to go anywhere; they can just simply login to the virtual campus and all the learning materials will be available in front of them.

In traditional classroom there are many fees included in the price. But online learning is less cost effective. Online courses are accessible easily and a smaller budget is needed than traditional learning. Here all learning materials are easy to download and the materials are kept online in central database.

# 5. Flexible learning:

E-learning provides students with full control and accountability for learning. It has numerous benefits as most adults because they can't make enough time for regular courses due to their personal responsibilities and work schedule. But online learning helps them as it is very flexible. In online classes various alternative ways are adopted like various videos, recorded lectures, share PDF & PPTs, provide written materials etc. For immersive learning experience students will have more options in online education through gamification, virtual and augmented reality.

# 6. Independent learning:

"Independent learning is defined as a process and philosophy of education which the learner gains knowledge through their efforts while developing the ability to inquire and evaluate". (CANDY, 1991)

Technology provides the opportunity for independent e-learning virtually anytime anywhere. As online learning is an independent learning process in terms of time and cost. Covid-19 has caused various changes to the traditional teaching-learning environment. Earlier students were being surrounded by their peers in classroom but now because of this pandemic learner have to learn remotely and independently from home. Now learner take ownership of their own learning and students often use various apps, websites, games etc. to learn independently.

## 7. Available to global audience:

Internet and new technologies give education a new platform and global meaning. As online learning is accessible to the whole world, you sit on a corner the world and you will get all the

news through internet. Like this also there are lots of means through which we can get education. We can learn and teach globally in response to significant demand of the learner; many online learning platforms are providing various courses at a affordable price. These services provide knowledge globally. As a result if a webinar organize in America we all can take its benefit by Google meet or Zoom call.

# 6.0 Positive aspect of online learning

- I. Online course can attend by the students from anywhere, anytime. Parents of students can also see their children's class. Working students also can attend online classes no matter what their work schedule might be, they can attend all class anywhere in the world if they have internet access.
- II. Online learning allows students-centered teaching approaches. Here every student has their own way of learning on their time and that work best from them.
- III. Course materials are available anytime anywhere. Students have the ability to read and reread literature, explanations, literature.
- IV. As online learning is a flexible method of learning here teacher can teach students from any location from any part of the globe and this allows the students to expose their knowledge that can't be learned in traditional class or in books.
- V. Online learning provides lots of options to the students to choose online courses on low cost. They must select subjects and topics according to their need and interest easily.
- VI. Online learning develops retention power among the students. It explains various concepts and theories in the form of videos, audios, images, descriptions, recorded lectures, documentaries, charts etc. These techniques help the students to understand and remember all concepts easily. It makes easier for students with respect to equations, problem-solving and other topics.
- VII. Learning online can also helps student learn the technical skills which they need on future. Students can also add new skills using various online applications and discuss them during their job interview in future.
- VIII. Online classes are appropriate and useful for all age group and they can complete their studies through online available courses. School students also find their learning materials or notes in various online applications like BYJUS APP.

## 7.0 Negative aspect of online learning

- I. Online learning can causes social isolation. There are many students and teachers who spend much time on online because of their online classes. But due to the lack of human communication it may begin to experiencing signs of social isolation. It is a negative aspect of online learning.
- II. Online learning g is a very effective method of education at improving the academic knowledge of the students. But sometimes it neglected communicational skills of the students. Due to the lack of face to face communication between classmates, groups, students and teachers in an online context, the students might find themselves that they are unable to work effectively in a team setting.
- III. Online learning mostly focus on theoretical learning than practical. E-learning providers choose to focus largely on developing theoretical knowledge among learners rather than practical skills. Because without face to face communication it is difficult to give

- practical knowledge. This lack of practical knowledge is one of the negative aspects of online learning.
- IV. E learning is not suitable for all discipline, it is limited. All educational disciplines are not created equal and all study fields can't be used effectively in e-learning. E-Learning is more suitable for social science and humanities, rather than scientific fields such as professional courses viz. medical science and engineering, vocational courses which require a certain degree of hands-on practical experience.
- V. Attending classes in front of a laptop or mobile for longer hours can give various health issues like eyestrain, headaches, ear problem, bad posture and other physical problems.
- VI. It is not good for all as everyone has not the capacity to buy a computer or a smart phone. Internet prices are also increasing day by day. Hence everyone cannot afford online education.
- VII. Online learning also creates a lot of distraction. Because many students open their mobile phones to learn something but end up browsing social media websites, chatting, sharing photos and videos or playing video games instead.
- VIII. E learning is not possible on those areas where internet connection is not access.

### 8.0 CONCLUSION

Education is an essential part of individual's life; it will either make them or break them in the possibility relying upon their vocation. Education is completely different today compared with the 1900 because of advance or noticeable development that carry out more evident teaching method. Nowadays, the value of online education cannot be overstated. Learning is a lifelong process that people from all walks of life need for a variety of reasons. It should not be limited to academic settings. Learning is a continuous process; we have to learn in any situation. The present scenario is also not suitable for teaching learning process as the whole world is fighting with COVID19 CORONA VIRUS. All educational institutes face lots of obstacle as physical classroom situation is not allowed. But we human are found the alternative of traditional classroom as we choose e-learning or online learning over traditional learning. But these learning methods also have advantages and shortcomings. But it is an excellent method of learning that can help develop student's performance.

## 9.0 REFERENCES

- **1.** Agarwal, S., & Kaushik, J. S. (2020). Student's Perception of Online Learning during COVID Pandemic. Indian Journal of Pediatrics, 87(7), 554. https://doi.org/10.1007/s12098-020-03327-7
- 2. Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. Journal of Educational Technology Systems, 49(1), 5–22. https://doi.org/10.1177/0047239520934018
- 3. Mcbrien, J. L., Cheng, R., & Jones, P. (2009). International Review of Research in Open and Distributed Learning Virtual Spaces: Employing a Synchronous Online Classroom to Facilitate Student Engagement in Online Learning. InternationalReview of Research in Open AndDistance Learning, 10(3), 1–17. https://www.erudit.org/en/journals/irrodl/2009-v10-n3-irrodl05155/1067862ar/

- 4. Pham, L., Limbu, Y.B., Bui, T.K. (2019). Does e-learning service quality influence e-learning student satisfaction and loyalty? Evidence from vietnam. International journal of educational technology in higher education, 16, 7 https://doi.org/10.1186/s41239-019-0136-3
- 5. Brain, Daniel. (2020). The future of e-learning: why online learning is the future of education. Retrieved from https://elearningindustry.com/why-online-education-is-future-of-learning
- 6. Tamm, Sander. (2020). Disadvantages of e-learning. Retrieved from e-student.org, https://e-student.org/?s=Due+to+the+lack+of+human+communication
- 7. McKain, Danielle. (2019). Independent E-Learning: Khan Academy, Motivation, and Gamification. Opening Up Education for Inclusivity across Digital Economies and Societies, 17, 10.4018/978-1-5225-7473-6.ch006
- 8. Susanti, Novi., Erviana, Ria. (2020). Electronic-based mathematics learning for student's creative thinking ability. Numerical: Jurnal Matematika dan Pendidikan Matematika, Vol. 4 No. 2 (2020), Retrieved from http://journal.iaimnumetrolampung.ac.id/index.php/numerical
- 9. Mangal, S. K., Mangal, Uma (2009). E-learning and virtual classrooms. Essentials of Educational Technology, 33, 764-780
- 10. ACM. Nafrees et al (2020). Journal of Physics: Conference Series, Volume 1712. International Conference on Computational Physics in Emerging Technologies (ICCPET) 2020, Mangalore, India, IOP Publishing Ltd
- 11. Heng, Kimkong., Sol, Koemhong. (2020). Online learning during COVID-19: Key challenges and suggestions to enhance effectiveness. Retrieved from https://cefcambodia.com/2020/12/08/online-learning-during-covid-19-key-challenges-and-suggestions-to-enhance-effectiveness/
- 12. Mudassir Khan, Mohd Ayyoob. "The scope of E-learning in the computer science & technologies." International Journal of Computer Science Engineering and Information Technology Research (IJCSEITR) 6.6 (2016): 1-6
- 13. Banerjee, S. O. U. M. E. N. D. U., and S. U. N. I. L. Karforma. "Object oriented metric based analysis of space efficient LSB based steganography including compression for securing transmission of e-learning documents." International journal of mechanical and production engineering research and development (IJMPERD) 7.3 (2017): 11-18
- 14. EJIMONYE, JOVITA CHINELO, NJIDEKA DORATHY ENEOGU, and JOY CHIKODILI OMALIKO. "A SURVEY OF THE DETERMINANTS OF EFFECTIVE ELEARNING EDUCATION IN NIGERIAN SECONDARY SCHOOLS: A WAY OF IMPROVING ECONOMICS LEARNING AND SOCIAL DEVELOPMENT IN POST COVID-19."

International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) 11.3 (2021) 247-256

- 15. MARTÍNEZ, DANIEL, OCTAVIO JOSÉ SALCEDO PARRA, and MARCO ANTONIO AGUILERA. "MACHINE LEARNING APPLIED TO ICFES TESTS TO IDENTIFY MEASUREMENT PATTERNS IN STUDENTS." International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) 10.6 (2020) 1-8
- 16. OFFORDILE, EDMUND EBERECHUKWU, et al. "IMPROVING THE ACADEMIC ACHIEVEMENT OF LOW ACHIEVING SECONDARY SCHOOL STUDENTS IN PHYSICS USING PEER TUTORING LEARNING STRATEGY: IMPLICATIONS FOR ENGINEERING CAREER." International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) 11.3 (2021) 201- 212