



THE 3 E'S - E-LEARNING, EDUCATION AND ENVIRONMENT

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Abstract

E-learning is undoubtedly the future of education. Technology has an important role to play in the future of education. Information and communication technology is developing at a rapid phase. The e-learning creates a virtual environment and isolated study, the student lacks in developing different skills but with the guidance of a teacher and the advances of traditional education, the comprehensive development of a student is possible. This research paper is conducted to find the effects of e-learning and its impact of the students. The outcome of the paper is that the e-learning can become active and thought provoking with the help of active participation of teacher and student through discussion and can eradicate the lack of social interaction in students Also student's learning experience could be deepened and extended and thus it helps in the overall development of a student.

Keywords: Education, E-learning, Virtual environment.

Introduction

E-learning Education is a continuous, complex and dynamic. Of late, technology occupies a prominent place in bringing revolution in the field of education. the historical developments of e-learning and identifies major stakeholders and institutions that have initiated e-learning programs after the creation of the National Task Force on Information Technology and Software Development constituted by the Prime Minister of India in 1998. National level initiatives of the University Grants Commission (UGC) and the Ministry of Human Resource Development (MHRD), Government of India to promote e-learning in the country are highlighted. Especially the information technology has got tremendous changes in education with new technology of internet. The internet is a technological development that has the potential to change not only the way of society but also to transform and restructure traditional mode of higher education, particularly the delivery and interaction with course materials and associated resources. Internet is the key ingredient in economic as well as social development in 21st century is characterized with the emergence of knowledge based society where in Internet plays an important role.

There are many terms used to describe learning that is delivered online, via the internet ranging from distance education, to computerized electronic learning, internet learning and many others. Learning system based on formalized teaching but with the help of electronic resource is known as e-learning. While teaching can be based in or out of the classrooms, the use of computers and the internet forms the major component of e-learning. E-Learning can also be termed as network enable transfer of skills and knowledge, and the delivery of education is made to a large number of recipients at the same or different times.

With the increasing number of internet users in India rivaling the US and second only to China, India's potential as a huge market for e-learning is enormous. A large number of new users are accessing the internet for the first time from their smart phones, which is an ideal, personalized and commerce enabled platform for e-learning adoption. In fact, the phase of education has experienced a sea change over the decades. Once characterized by the traditional classroom, model, education has metamorphosed into learning that is instant online, self-driven and on the go. The journey of education in India, too, has been dotted with innumerable milestones the most recent among these is e-learning. E-learning is a large and growing market with great potential in higher education.

Reform Push

The government is a strong supporter of e learning and the Department of Electronics and Information Technology (Deity) has been actively developing tools and technologies to promote it. Deity has supported e-



learning-focused R&D projects at various academic educational institutes. These include content development, R&D / technology initiatives, where the HRD projects and faculty training initiatives are taken care to improve literacy through distance education.

Purpose of research

The purpose of this research was to explore how under graduation learning is affected by: the integration of electronic devices with the emergence of the information and digital technology. As technology continues to grow as part of the higher education: landscape, mobile computing devices and the various devices which help in accessing" the information present both opportunities and challenges to higher education institutions. The goal of research is to present in-depth perspectives of students about their experiences. However, this present paper will focus on students' experiences and perceptions.

Justification of the study

E-learning (Electronic Learning) emerged as a new tool which has the potential to enhance and support the traditional learning system. It is the outcome of internet which has gifted education with flexibility in time, place and need-oriented learning. It has become an integral part of the learning used by every educational organization. It allows learner to participate and complete course work in accordance with their daily commitments. This makes e-learning as viable option for those who have other commitments such as family or work. Thus, it provides the accessibility for individuals who wish to learn at their own pace, place and time. It provides a platform for virtual learning and an uninterrupted learning through distance mode but reduces the distance between the teacher and the taught.

It facilitates searching of information and learning content on the Internet. It has also improved the conventional learning by computer-supported acquisition, distribution and creation of knowledge.

The data reveals that the universities will see more students accessing their coursework from outside the traditional classroom. As per the Docebo report issued in July 2014, the worldwide market for self-paced e-learning reached \$35.6 billion in 2011. While the aggregate growth rate is 7.6%, several world regions have higher growth rates. The highest rate is in Asia at 17.3%, followed by Eastern Europe (16.9%). Africa (15.2%) and Latin America (14.6%).

According to another report, India's online education market size has grown 200% as of 2017. India has one of the largest education systems in the world with a network of more than 1 million schools and 18,000 higher education institutions. More than half of the country's 1.2 billion population falls in the target market for education and related services.

Literature review

Mishra, S, (2009), E-Learning in India. *International Journal on E-Learning*, 8(4), 549-560. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE). Retrieved December 15, 2021 suggests that the establishment of a statutory body for e-learning. Other recommendations include the development of a learning objects repository, a consortia approach to e-learning program delivery, and the training of teachers to improve the present situation. *Means et al, (2009)*, in his empirical study from 1996 and 2008 concluded that students using e-learning performed better than students who did not use e-learning. The students who performed best were those who received blended learning. *Garima Singh (2016)* in her paper describes the role of the teacher and significance of e-learning in the present context. The paper emphasis on the challenges faced by the teachers in India to implement e-learning and makes an attempt to suggest varied solutions to the awareness. *Deepali Pande et al, (2016)*, in their paper titled "Current trends of e-learning in India." the *International Research Journal of Engineering and Technology (IRJET)*, volume 3, Issue 1, focuses on the current situation of e-learning in India and its future, the growth rate of e-learning in India with respect to other developed countries.



Objective of the study

1. To get in-depth knowledge about the digital technology that is enhancing e learning and educating under graduates.
2. To study student's perspective towards e-learning in enhancing the learning process.
3. To study the pros and cons of e learning.

Aspects of e-learning

E-learning is a revolution which provides the empowerment possessing of knowledge and skill for the benefits. It uses the Internet technologies to increase the opportunities in an individual. E-learning is flexible, individual and self-organized assembly. Literature shows that how e learning can be helpful if proper strategies are employed to it. E-learning can be understood as a learning process of interaction with the digitally delivered content, network-based services and tutoring E-learning facilitates the learner to access mobile. It gives the freedom to learn anytime and anywhere. The learners can acquire e-learning through the digital devices of ICT such as laptops, cell phones and tablets with different available modes like visual-audible videos, animation and pictures.

E-learning provides attention to each individual differences and so learning process being more effective and interesting to the learners. Also E-learning is a pace allowing process and so helpful for the slow learners E-learning is beyond the age limitations, racism or cast discrimination and offers the iniquitousness and uniformity in learning to each learner. Stretching the boundaries of class room, e-learning has broadened the path of education. E-learning provides new learning opportunities for learners with different and innovative ways. Also to keep pace with time, educators also-enhance the learning process by facilitating e-learning to learners.

Although the foundation of education is still reading, writing and arithmetic, today's students need broader education. The various other aspects regarding e-learning:

Live instruction

Certain curricula may require specialized instructors. By using live broadcasts, these instructors can remain in one location and provide instruction to many students in other locations. This type of specialization increases as students move into higher levels of education, for example towards advanced degrees in medicine.

Video content delivery

Pre-recorded content such as lectures documentaries and other video content may be delivered in a store and forward model so that the material can be viewed when needed.

Student-to-student interactions (video-conferencing)

Students may learn just as much from each other as they do from teachers. So communications technology can be used to connect students.

Remote test administration

In some countries, standardized tests are used to evaluate students on a level-playing field. These tests must be delivered securely and on-time to meet testing schedules. In Indonesia, this is a daunting task simply because of geography and population size. Digital delivery could be the solution.

Up-to-date materials

Basics seldom change. However, virtually all textbooks must be updated. Textbooks are expensive to purchase, maintain and deliver. Digital delivery solves this issue when coupled with e-readers.

Self-learning

Computer-based training or self-paced learning is common in higher education and trade-oriented learning. Kiosks to support this may be located close to under-served areas where populations already work. At the higher



educational level collaboration is vital to research. Post graduate students in remote locations may be able to consult instructors at the university when needed. For example in the medical field tele-medicine can only be facilitated using broadband.

The VSAT advantage

Satellite broadband, typically VSAT (very small-aperture terminal), is ideally suited to bridging this gap. In the past, satellite connectivity was typically thought of as too expensive, too slow and not reliable. With the advent of high throughput satellites (HTS) and advances in radio technology, the cost and reliability of satellite connectivity has made it an attractive option. Satellite broadband offers distinct advantages such as competitive cost; multicast capability; universal coverage; and low cost and simple installation.

Further, specialized equipment such as digital white-boards, video-conferencing systems multimedia systems and even 3D learning experiences may be connected to take advantage of the broadband connectivity. As e-learning tools become more advanced so does their bandwidth requirement, depending on which applications are in use, bandwidth requirements can vary from several hundred kbps all the way to multi-megabit connections.

A business opportunity

In underdeveloped and developing countries, e-learning raises the level of education, literacy and economic development. This is especially true for countries where technical education is expensive, opportunities are limited and economic disparities exist.

Pros and cons of E-learning



Pros of e-learning

Cost effective: E-Learning is more cost effective than traditional learning because less time and money is spent traveling. Since E-learning can be done in any geographic location and there are no travel expenses this type of learning is much less costly than doing learning at a traditional institute.

Flexibility: Flexibility is a major benefit of E-learning, E-learning has the advantage of taking class anytime anywhere. Education is available when and where it is needed. E Learning can be done at the university, at the office, at home, on the road, 24 hours a day, and seven days a week. Learners like E learning because it accommodates different types of learning styles. They have the advantage of learning at their own pace. Students can also learn through a variety of activities that apply to many different learning styles. Learners can fit E-learning into their busy schedule. If they hold a job they can participate in E-learning right at their desk.

Personalized learning: E-Learning encourages students to peruse through information by using hyperlinks and sites on the worldwide Web. Learners are able to find information relevant to their personal situations and interest. E-Learning allows selection of learning materials that meet their level of knowledge, interest and what they need to know to perform more effectively in an activity. E-Learning is more focused on the learner and it is



more interesting for the learner because it is information that they want to learn. E Learning is flexible and can be customized to meet the individual needs of the learners.

Develops knowledge: E-Learning helps develop knowledge of the Internet. This knowledge will help learners throughout their careers. E-Learning encourages learners to take personal responsibility for their own learning. When they succeed, it builds self-knowledge and self-confidence.

Relationship between Knowledge Management (KM) and E-learning: KM and E-learning both address the same fundamental problem: facilitating learning in organizations. The similarities of knowledge management processes to E-learning processes make the two easy partners for companies that have recognized their importance. Properly developed, E-learning creates a growing repository of knowledge that will continuously deliver to employees just what they need to know at any particular moment, and in a style that each individual can understand. E-learning at this level is similar to its efficiency counterpart in inventory management; it can be thought of as "just in time learning."

Cons of e-learning:

Though E-learning is supportive tool for the learning process, the abundance information may cause the diversion from the main objective of learning. Because of the absence of a teacher, the total responsibility of outcomes relies on the learners. Also, without the control of teacher and schedule to be followed, the learner may lead to procrastination.

In e-learning method, the learners may not be able to develop the communication and social skill that of in traditional education. E-education has provided abundance information rather than knowledge enrich with values and cultural norms. Also, as E learning comprises of the machine (mobile, -laptop or tablet) and a learner, the process of learning being mechanical rather than live interaction as held in real classroom. The continuous use of computers also leads to medical issues.

Outcome of Research

E-learning is really a great tool for students who can access their interest of area wherever they are. Hence the technological developments have made a difference even the learning process of students.

Students Perspective

- E-learning helps the students for the purpose of learning and enhancing their knowledge level.
- It helps to study the topics of student's interest rather than only with syllabus.
- It also helps to enhance the motivation level of students.
- It leads to the improved level of enhancing the knowledge with wide connectivity of various professors and leaders.
- With the help of technology students are able to engage themselves with various kinds of activities like presentation, learning with various languages which further help them for going higher education abroad etc.
- It helps the students to even get them placed in various other higher education for their future,
- It enables the students to gain the world level knowledge.
- It enables students to visualize the exact images and diagrams of any subjects like biology, history, the graphs, visual and technical representations, so that it would be easier to be remembered.
- Commerce students are more enthusiastic to use ICT for their learning purpose.

Conclusion

E-learning in these days has become an integral part of the education system. In order to maximize this potential, E-learning implementations should endeavor to satisfy the needs and concerns of all stakeholder groups as much as possible. As the above discussion, the traditional education is the knowledge beyond the time and E-learning is the need of the time. The only way to meet the higher goals of education is to embrace the changes. The



revolutionary structure of education can be form by weaving the traditional education and E-learning together as both the methods complimenting each other. The role of teacher is pivotal in this transformation as it provides numerous opportunities to make the learning process effective. As E-learning' has expanded all the boundaries of education, teachers have the freedom to decide the way of teaching and learning process. The e-learning creates a virtual environment and isolated study, the student lacks in developing different skills but with the guidance of a teacher and the advances of traditional education, the comprehensive development of a student is possible. The e learning can become active and thought provoking with the help of active participation of teacher and student through discussion and can eradicate the lack of social interaction in students and could decrease their cognitive load and thus enable them to focus on sense making and facilitate ontology construction. Also student's learning experience could be deepened and extended and thus helps development in an all-round way.

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