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Review of E-Learning as a Platform for Distance Learning in Sri Lanka

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Abstract

E-learning is the best platform for distance learning as it is a cost-efficient technology. Distance learning through an E-Learning platform offers enormous opportunity for Sri Lanka, because it can open doors to everybody without hassle. Distance learning with E-Learning focuses on delivering education to students without a traditional classroom. Educational institutes in Sri Lanka may use distance learning with students who are unable to follow regular courses. E-Learning runs with web technologies which make interactions for both teachers and students easy. It also makes it easy to exchange relevant educational tools and interactive exercises.

Keywords: E-Learning, Distance Learning, Behavioural Learning Theory, Constructivist Learning Theory

1. Introduction

Distance learning is a form of active learning where the teacher and student are in separate places. It is considered a formal approach to learning. The methods employed can include video/audio recordings, any type of broadcasting method, web media, and other technologies. Distance learning programmes are already making considerable contributions. A common delivery mode of distance learning is through the use of web technologies, which use various software and computerised instruments which facilitate and improve distance education.

Distance learning is relatively new in Sri Lanka, where it has enormous potential. Distance learning provides an effective alternative for delivering secondary and higher education in Sri Lanka. This education mode allows accommodating more students at low or no cost. Consequently, distance learning can easily assist with developing a qualified Sri Lankan work force. As a result, and with the current pandemic situation, the Sri Lankan government is paying special attention to distance learning. To better understand distance learning, it is important to examine this learning approach.

2. Defining Distance Learning

Definitions are important for understanding and investigating the topic. Isman has defined it as follows: "Distance learning is an educational system which learning actions have been performed through communication

technologies by the teachers and students being different environment" [Isman, 2005]. Distance learning is considered a non-traditional teaching method. In distance learning, educational tools are used which are available in web media, such as worksheets, books, journals, and interactive exercises. When compared with face-to-face teaching and learning, distance learning is generally a more cost-effective training or learning approach.

E-Learning is one of the best-known distance learning methods and is widely used around the world. E-Learning is the best option currently available for distance learning. The main reason for this is the Internet. The Internet is making it easy to create digital content which can be stored, accessed, and interacted with on both sides. The term "E-Learning" is frequently used as it covers any form of computer-based communication, such as learning through the Internet. E-Learning methods include web-based courses and computer-based communications such as Zoom and Skype. These types of E-Learning have the potential to make learning active.

Many institutes around the world have added e-mail, Learning Management System (LMS), online journal articles, and online discussion forum to their already existing traditional courses. Online activities are frequently seen in most courses nowadays. This approach makes learning easier for students who do full time or part-time job during the week or day time. Distance learning also makes managing large classes easier, as learning tools and information can be shared through the Internet or an intranet. If a student misses a lecture, he or she can repeat the session anytime whenever and wherever they want without face-to-face contact with the teacher. In distance learning, the student uses E-Learning platform to continue their educational programme. However, it is mandated that the student have the required technology to participate in distance learning courses. Most universities distance learning courses are customised courses which require relatively little monetary investment from either the student or the education provider.

3. E-Learning

The first E-Learning system was started in the early 1980s with the help of Murray Turoff, who developed computer conferencing software in the 1970s [Hiltz, and Turoff, 1980]. It used only a local area network and specially developed software named Cosy. Communication happened only between teachers and students. With the commencement of the World Wide Web (www), the first web-based university course was started in 1995 by the University of British Columbia in Canada. A professor from the same university named Murray introduced software named WebCT. By the year 2000, WebCT was used throughout the world. It was designed for online learning [Bates, 2005].

In E-Learning, video content material can be pre-recorded and viewed whenever needed. However, on this platform, there should be interaction between teacher and student as well as student to student, where students learn and practice team decision-making and communication skills while taking part in the online class. In E-learning, it is easy to provide up-to-date materials for students at no cost. Nowadays, most universities in Europe, the USA, and parts of Asia offer fully online courses. An E-Learning course should contain the following:

- All the required study guidelines should be indicated in the university website. These should include an orientation to the course, course objectives, scheduled time periods, a list of content, recommended readings, and the course schedule and assignments.
- The teaching material should be posted by the respective teacher. This includes all the course materials, such as lecture slides, research papers, recommended readings, and any relevant raw data in a digital format.
- Students should be given access to all the relevant web-based resources, such as URLs for recommended websites, online journals and library resources, and relevant online discussion fora.
- All assignments, tests, and exams should be administered and submitted online. If media such as audio, video, or animations cannot be embedded in the website, there should be a proper channel for online submission such as Google Drive.

4. Learning Theories

In modern education, there is significant discussion as to whether teachers should apply behaviourism, the art of providing material through direct instruction, or constructivism, where teachers act as the facilitator of learning. In 2006, a researcher named Brown stated that "education policies, education models and education practices focus on constructivism" [Brown, T. H. 2006]. However, there remain core variances between the concepts when explaining the role of the teacher. In a behaviourist classroom, all things are teacher-centred, and the teacher takes responsibility for preparing and delivering teaching materials. In such a classroom, teachers reward positive behaviour and punish negative behaviour. Behavioural learning theorist believes that extrinsic motivating factors such as prizes and privileges for good behaviour enable good progress in education.

According to Draper, constructivism is "the philosophy, or belief, that learners create their own knowledge based on interactions with their environment including their interactions with other people" [Draper, 2002]. Teachers who apply constructivist learning theory show students the relevance and meaningfulness of a particular subject and encourage them to become expert in the subject. Students are encouraged to explore the subject. Teachers who apply constructivist learning theory encourage students to use quizzes, critical thinking activities, group activities such as discussions, and problem-based learning projects. These are a few activities in which students synchronise with each other.

Table 1: Learning Theories

	Behavioural Learning Theory	Constructivist Learning Theory
Brief Description	Behaviourism is a worldview that operates on a principle of stimulus response.	It is the knowledge that constructs the educated person. The constructivist approach is based on the evidence which they replicate on their own experiences.
Preliminary Facts of Learning and Knowledge	The learner is inert, responding to environmental stimuli. The learner is a blank slate. Behaviour is shaped through positive and negative rewards and punishments. Association, operant behaviour, conditioning. A relatively permanent change in behaviour.	Education is a dynamic, revising method of building knowledge. Knowledge is created based on personal experiences and theories. Depending on persona, the learner performs their own analysis and knowledge-building procedures. The learner is not empty but brings past experiences and cultural factors to a situation. Problem solving and edifice the meaning for the situation.
Learning Concept	Corroboration and pre-established learning methods.	Intrinsic motivation.
Centred on	Teacher.	Learner.

When comparing learning theories as in Table 1, it is best to use constructivist learning approaches to introduce E-Learning as a distance learning concept in Sri Lanka. As the current trend is toward student-centred learning, and most student will prefer constructivist methods. Modern educational technology can be used to promote successful practices through E-Learning, and it helps to identify and apply it to the learning process. Educational technology applied in distance learning must shift theoretical foundations from behaviourism to constructivism. Educational technologies are developing rapidly, and this shift will bring about more beneficial results. Modern social practices require students to think, construct knowledge, and learn by using technology from a constructivist perspective. Most educational institutes in Sri Lanka are adapting their classes and syllabuses according to the needs of distance learning. Adding learning material to E-Learning platforms will help students learn and practise subjects.

5. Distance Education in Sri Lanka

In the latter period of the 1980s, there were civil disturbances in Sri Lanka, and all educational institutes were closed due to student unrest. The Open University of Sri Lanka was highlighted as the only state university functioning under these tiring conditions through its distance learning methodologies. Open University was the only university in Sri Lanka able award degrees, of course through distance education, in collaboration with Athabasca University in Alberta, Canada. The academic methodologies and procedures adopted for some programmes at Open University in Sri Lanka. These methods were followed to other state and private universities later.

It is high time that Sri Lankans migrate to distance learning with E-Learning platform systems which suit both traditional education and geographically for both state and private universities. We should keep in mind that the use of Information Communication Technology (ICT) in Sri Lanka varies by geographically. The following are key dimensions which we have to address when introducing E-Learning platforms as distance learning:

- Telecommunication and Internet facilities
- Availability of technology and technical equipment
- Traditional education system

When converting current distance learning from traditional educational infrastructure to E-Learning platforms in Sri Lanka, the government must pay closer attention to these three dimensions. Related tasks can easily be accomplished if the government facilitates basic infrastructure addressing these dimensions. In Sri Lanka, various target groups require distance learning, such as independent learners studying at home, people in the workforce who need certifications, and students who study part-time while working. At present, nearly 10% of students in Sri Lanka are distance learning because it allows them to work while learning. However, with the current coronavirus situation in Sri Lanka, the University Grant Commission is expecting more students will participate in distance learning.

As the current situation in Sri Lanka has motivated them to promote E-Learning platforms for distance learning, most state and private institutes are taking timely steps to adapt courses for E-Learning with their own systems by following systems used in more developed countries. If relevant measures can be adopted, institutes will benefit. Distance education via an E-Learning platform simultaneously reduces costs and caters for a wider range of students. Maintenance of the quality of courses must be ensured by the respective institute with the help of various professional bodies listed by University Grant Commission Sri Lanka.

Distance learning is a challenging task for conventional education systems, but it is a good system for motivated people who want to promote or change their career. The workforce will without doubt be elevated. Educated people produce new ventures. Distance learning with E-Learning needs to be embraced to develop the country. I have found that numerous professionals and degree holders (including current government servants) lack IT skills. This makes it challenging for them to move to the next level or promote their capacity. This can be addressed through promoting distance learning. Furthermore, to legitimise distance learning sooner, institutes should be allowed to introduce short courses delivered through distance learning. These courses can be monitored and filtered by professional bodies including the University Grant Commission.

6. Summing up

Throughout this paper I have highlighted key areas of distance learning, key components of successful E-Learning, and which learning theory to follow to make effective E-Learning tools for distance learning. For developing countries like Sri Lanka, E-Learning through the Internet is an appropriate technological approach to distance learning. To drive the distance learning system in the proper direction with technology appropriate to Sri Lankan systems, the three identified dimensions must be attended to. With administrative support from the respective professional bodies along with the University Grant Commission, educational institutes in Sri Lanka

could introduce distance learning courses to students on E-learning platforms. This will be helpful for anyone willing to gain knowledge or seeking certification while working.

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