# E-Learning System of Asia Through Open Courseware (OCW) and Educational Resources (OER) for Universal Access to Knowledge and Information

Soumen Kayal, Department of Library and Information Science, University of Calcutta, Kolkata, India Baisakhi Das, Department of Library and Information Science, University of Calcutta, Kolkata, India

### **ABSTRACT**

One of the most impressive uses of information and communication technology is the advent of e-learning. The current E-learning system mainly plays a role of learning assistance such as providing learning content or learning information, and sometime it provides channels or platform in the learning environment for discussion and interaction. In recent years E-learning has changed sophisticatedly in teaching method in higher education of Asian countries. The success of E-learning depends on the some circumstance like learning effectiveness, cost effectiveness, institutional commitment, access, faculty satisfaction, and student's satisfaction. Accessing has become more widely permitted through the open courseware. Open Courseware is one of the effective new types of E-learning system raised in recent years. This paper discusses the importance of e-learning system in higher education, and universal access to knowledge and information in the network and digital environment through Open Courseware. Some of the major initiatives and the targets segments covered by the online education have also been studied in this article.

#### **KEYWORDS**

Communication Technology, E-Learning, Open Courseware, Universal Access of Information

### INTRODUCTION

We live in a consistently changing World. The presence of computers has revolutionized the world. Computers have brought a host of new technologies for education. One of the most effective uses of information and network technology is the advent of E-Learning. E-Learning means making Internet as a platform for all learning activities electronically. Learning has changed as well. Starting from the ancient guru-kula system to the formal classroom learning in schools to distance education, the process of learning in education has come a long way. The advancement of a number of e-learning systems is changing higher education completely, especially in terms of content, delivery and quality. There are five main participants - authors, students, leaders, teachers and Administrator (system administrators) playing active role in E-learning. In general, e-learning is the delivery of education which includes activities related to instruction, teaching and learning through various electronic media such as Internet, intranets, extranets, satellite TV, video/audio tape and/ or CDCD-ROM. Similarly, Open courseware is the process of e-learning repository of the study and learning materials in digital form in the web which is open for every user i.e. Open Access. These repositories envisage to store, index, preserve, distribute and share the digital learning resources with any time access offering interoperability.

DOI: 10.4018/IJWLTT.2017040103

### **OBJECTIVES**

- To understand the concept of Open Courseware and Open Educational Resources in academic perspective.
- To identify the relationship between Open Courseware and E learning system.
- To identify the core component of E learning.
- To exemplify OCW and OER initiative in Asian countries.
- To recommend suggestions for proper measure to improve the condition of accessing OER.

#### **REVIEW OF LITERATURE**

Imran (2012) investigates that in present scenario of rising demand for higher education and university system being reluctant to change their conventional academic programmes e-learning becomes highly important. Christensen (2010) in his study argued that teaching, which is surrounding the education system in the form of Massive Open Online Courses (MOOC) is going to disrupt and change the existing system of education. An Open Education Resources (OER) framework emphasized (Nikoi & Almelline, 2012) that 4ps- 'Purpose, process, Product and policy' must be taken in account from societal and higher education perspective before designing an OER. This idea has tries to find out the viability, sustainability and policy of OER for higher education. Bansal, Chabra and Joshi (2013) elaborate the OER movement in Indian higher Education and to introduce the Open educational resources initiatives in Indian higher education. They have also discussed the progress of OER in India along with the recommendations that address these issues. Wen & di (2014) in their study conducted a survey on 114 under graduate students at Ming Chuan University, concluded that the students who received open educational resources along with their traditional class rooms teaching got higher grades as compared to those students who opted class rooms teaching only. Sinha (2008) describes about the universal access to knowledge and information in the network and digital environment. He highlights the Open Access Declaration, Open Access Movement in India and aboard, open source software for establishing institutional repositories and digital libraries for open access. According to Sarma and Majumdar (2010), OCW provides learner and opportunity to disseminate knowledge beyond the traditional classroom environment. They have focused on present scenario of the open courseware initiatives in India that can be helpful and necessary to the e-learners.

## Concept of E-Learning and E-Teaching

E-learning generally refers to computer enhanced learning. Technology is used as a support to the learning process. New Zealand's Ministry of Education defines e-learning as, "learning that is enabled or supported by the use of digital tools and content. It typically involves some form of interactivity which may include online interaction between the learner and their teacher or peers, e Learning opportunities are usually accessed via the internet, though other technologies such as CD-Rom are also used. (Ministry of Education, 2004)

E-learning is described by European commission as... "the use of new multimedia technologies and the Internet to improve the quality of learning by facilitating access to resources and services as well as remote exchanges and collaboration".

Kaplan-Leiserson considered e-learning "... a wide set of applications and processes such as web-based learning, computer-based learning, virtual classroom, and digital collaboration. It includes the delivery of content via Internet, Intranet, extranet (LAN/WAN), audio- and video tape, satellite broadcast, interactive TV, and CD-ROM".

The University of Sheffield, U.K describes E learning as a learning which has all the parameters of face to face learning namely clear aims, learning outcomes, evaluation and assessment but with additional flexibility of using technology. Technology Enhanced Learning (TEL) OR E learning describes broad approach of using technology to support teaching and learning processes, design and delivery". (Ministry of Education, 2004)

10 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: <a href="www.igi-">www.igi-</a>

global.com/article/e-learning-system-of-asia-through-opencourseware-ocw-and-educational-resources-oer-foruniversal-access-to-knowledge-and-information/177900

# Related Content

# Student Perceptions of Learning Digital Literacy Online in a Leadership Program

Hua Bai (2023). Research Anthology on Remote Teaching and Learning and the Future of Online Education (pp. 1737-1757).

www.irma-international.org/chapter/student-perceptions-of-learning-digital-literacy-online-in-a-leadership-program/312806

# A Novel Methodology for Cloud of Things-Based Secure Higher Education Framework Using Zero Knowledge Proof System

Kuntal Mukherjee, Sudhanshu Maurya, Ranjan Kumar Mandal, Mukul Thakurand Farzana Khatoon (2022). *International Journal of Web-Based Learning and Teaching Technologies (pp. 1-21)*.

 $\underline{\text{www.irma-}international.org/article/a-novel-methodology-for-cloud-of-things-based-secure-higher-education-framework-using-zero-knowledge-proof-system/285565}$ 

### Fake Universities as an Emerging Issue

Mehdi Dadkhahand Giorgio Bianciardi (2016). *International Journal of Web-Based Learning and Teaching Technologies (pp. 49-52).* 

www.irma-international.org/article/fake-universities-as-an-emerging-issue/168548

# The Role of Virtual Worlds for Enhancing Student-Student Interaction in MOOCs

Rosa Reisand Paula Escudeiro (2016). *User-Centered Design Strategies for Massive Open Online Courses (MOOCs) (pp. 208-221).* 

 $\underline{www.irma\text{-}international.org/chapter/the-role-of-virtual-worlds-for-enhancing-student-student-interaction-in-moocs/143445}$ 

# Multimedia Authoring for Communities of Teachers

Agnès Guerraz, Cécile Roisin, Jan Mikácand Romain Deltour (2009). Solutions and Innovations in Web-Based Technologies for Augmented Learning: Improved Platforms, Tools, and Applications (pp. 317-333).

www.irma-international.org/chapter/multimedia-authoring-communities-teachers/29656