Harmonizing Some Solutions for E-learning and Online Learning

BY
Amjed Abbas Ahmed
Ali Hamza Najim

amjadabbas@alkadhum-col.edu.iq

Imam Al-Kadhum (a) University College for Islamic Sciences,
Baghdad, Iraq

الملخص
من خلال هذا البحث يتم عرض معلومات وصفية للتعلم الإلكتروني، وتصميمه وتطويره بالإضافة إلى التطبيق وإدارته مع مراعاة مكوناته الرئيسية. في الأونة الأخيرة، قامت تطبيقات التعليم الإلكتروني بشيء رئيسي واحد: إزالة المسافة كحاجز نحو التعلم. وقد احتضنت تطبيقات التعليم الإلكتروني في شكل فصول دراسية عبر الإنترنت أو افتراضية خاصة في البيئات التي لديها مرفق لاستيعابها. ومع ذلك، فقد تسببت الاتجاهات الحديثة في قيام الكثير من المؤسسات ذات السمعة الطيبة بإعادة النظر في نموذجها الخاص: وهو الأسلوب الذي يتم به نشر التعليم
ABSTRACT

This paper presents a descriptive information for the E-Learning, its design and development as well as the application and its management taking into consideration of its major components. In recent times, E-Learning applications has done one major thing: remove distance as a barrier toward learning. E-Learning applications in form of online or virtual classrooms has been embraced especially in environments that have the facility to accommodate it. However, recent trends has caused a lot of reputable institutions to re-examine their respective model: the mode at which education is disseminated to their student population as Online Classrooms increased competitions among institutions all over the world. The aim of this paper is to examine E-Learning, the effects it already has on learning and future implications it might have on the education industry as its recent solutions provide outstanding features that makes people question the importance and relevance of institutions with physical infrastructures. The sample size taken into consideration is the student population of Imam Kadhim (a) College for Islamic Science, Iraq. There are also a couple of E-Learning Systems and software online and for the sake of this paper, Edx.org will be used a reference system.
INTRODUCTION

In recent times, the number of students enrolling into Colleges and Universities worldwide has increased owing to the fact that people have realised the essence and importance of building corporate careers irrespective of their disciplines. In as much as individuals have realised that, the reality institutions are experiencing is that they can only cater for the populations in their immediate environment. This brought about the creation from an innovation to reach out to more students worldwide using a distinct platform developed specifically for educational purposes.

The concept of E-Learning was given birth too and in a short time became a standard for most international institutions with multiple campuses. One of the advantages of E-Learning solutions is that it provides a general platform for students to access tutored online learning with a once in a lifetime experience that connects students from different culture, beliefs, background and even regions. E-Learning solutions has also given birth to self-paced learning which enables students to have first class university education from the comfort of their room and at their own pace of learning, a practice that makes E-Learning a different experience from the conventional learning method. Integrating an E-Learning Solution might not be a concern but harmonizing it for the targeted population might be a hurdle many institutions still find hard to climb. This research paper examines how E-Learning solutions can be harmonized to cater for a specific target population.

DEFINITIONS AND KEY TERMS

In order to be able to understand E-Learning solutions, their respective architecture and how they work, some key definitions...
and terms must be clearly understood. Five key definitions and terms are important for this research. These are

**Distance Learning**

Distance learning can be explained in different ways but the most appropriate definition is that “it is an institution based type of formal education where an environment is created that further facilitates connection of a learning group to their respective correspondence which could be learners, instructors as well as available resource through communication system” (Alao and Lawal, 2016). The communication system in most times is always interactive.

**E-Learning**

Electronic Learning (E-Learning) is a form of learning that involves learning through the use of digital devices for both teaching as well as learning. It is a two way communication. As described by Moore et al (2010) “E-learning is 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 exchange.” and collaboration.

**Online Learning**

Online Learning is what is achieved from the implementation of E-Learning. SA (2015) described it saying “Online Learning is eLearning with a mandatory involvement of a digital network which a learner needs in order to access at least part of the learning materials and services. Online learning refers to network enabled teaching and learning that allows the learner to have increased interaction with content, teacher and other learners”. For this to take place, a network enabled connection needs to be provided.

**Virtual College**

A virtual College as described by SA (2015) “are higher education institutions or network of higher education institutions responsible
for design, development and offer of courses and programmes in "flexible and online environment"

Online Resource

Online resource as the name implies refers to resources that are found on the internet which provides useful information towards a study. Online resources can be in form of web pages or .documents. Online resource cuts across different disciplines

E-LEARNING ARCHITECTURE

The E-Learning architecture is simple but complicated to those who do not understand the basics, technologies involved, flow of information, access rights and the bedrock for it communication. The E-Learning architecture is divided into three main parts

Access Rights and Privileges

The access right and privileges described the amount of access each designated user has after logging into the system as an architecture. The system admin usually has exclusive access right to be able to monitor and manage all system processes. The student has limited access rights which may include registration, login, access to courses been offered, related study materials and resource, assessment and assignments, course progress, assessment scores, Online forum and discussion and timetable. Instructor on the other hand might have access right to be able to perform some of the following: upload study materials including, videos, documents and presentation, upload assessment, upload .student scores, and upload performance report

E-Learning Resources
Resources refers to the materials provided by the institution for the instructors and students to help execute his job to further compliment efforts of the students as well as the instructors. Resources provided by an institution to both students and instructors might include Online library with thousands of related journals, E-books, conference papers and educational magazines.

Communication

The communication part of the architecture enhances constant communication between instructors and their respective students. This might include different technologies that allows communication through text, email, voice and even video. This is to also facilitate communication between students offering same course and instructors whenever they run into difficulties and need help. Communication might be in form of forum, video session and emails.

The architecture is given below:

Internet

The internet is the bedrock for which the E-Learning architecture, which is embedded in the University architecture functions. It provides a platform for which both architecture can functions as a system on its own with thousands of users worldwide.

University Architecture

The university architecture is that part of the whole structure that accommodates other integrated system into a single platform for them to function as a whole entity. These systems might include, fee management system, attendance system, feedback system and timetable management system. Other systems are embedded in it but comes with the E-Learning architecture.

E-Learning Architecture
This part of the structure is the part that allows student to engage in learning using provided platform like the E-Learning system. This also comes as an embedded system with integrated systems as well. This might include, Assessment management system, Online Library, forum and interaction management as well as database management system which store and manage all forms of data.

University Architecture for Student

University Architecture for Instructor

E-Learning Architecture for Student

Users

The users are the valid user who must have undergone on form of registration and has been given valid access right to some of the resources in the E-Learning system. Users can include, system admin, instructors, students and managerial staff of the respective institution.

BENEFITS OF INTEGRATING E-LEARNING

There are numerous benefits towards the use of E-Learning especially in higher education such as the colleges and institutions of higher learning. Koutsoupidou (2013) highlighted some benefits though the benefits are not restricted to only student’s perspective but also instructor’s perspective.

Disability: the fact that E-Learning is achieve over the internet solves the issue of disability to both student and instructor where distance, travel expenses and work commitment is no longer seen a barrier.

Flexibility: it gives the flexibility especially to working class of students to be able to cope with the work load and schedule as well as assessment.
Desired Route: It also gives the opportunity for people of different nationalities to be educated in a defined route that they desire and not necessarily what is available to them in terms of distance.

Internationality: E-Learning implementation achieve internationality for both instructors and students as they both get to interact and exchange ideas from people from different nationality, background and beliefs.

Drive and Enjoyment: E-Learning implementation come with different tools and forms of learning which include text, videos, animations and picture which makes it more enjoyable to the instructor preparing the learning materials as well as student learning using those materials.

Dedicated Teaching: with an E-Learning system implemented, students can have dedicated teaching by from tutors from anywhere in the world especially if the E-Learning system has been implemented to integrate nationalities from all over the world.

Better Concentration: Online teaching enables instructors concentrate better unlike traditional teaching where environmental factors interrupt lesson been delivered or even flow of dissemination.

Better Objectivity: This comes with instructors, the fact that the instructors communicate with students through email, make them more objective especially when it comes to assessment.

**E-LEARNING SOLUTION CASE STUDY**

In order to be able to implement E-Learning for a desired environment, there is a need to critically examine already existing E-Learning solutions to understand how it work and how it can be developed to match a specific population need. For this research paper, an E-Learning solution named Edx.org would be used as
case study but first there is a need to identify the categories of E-Learning solutions

Categories of E-Learning Solutions

There are basically three main categories

First Category: this is the category of an E-Learning solution is developed specifically for an institution in which only courses offered by the institution are also offered as online courses using the E-Learning solution as a reference point. A typical example of this is Online Course offered by University Of Liverpool

Second Category: This category of E-Learning System solution is developed specifically for a distinct and specified training in which students enrol for a distinct course and certifications can only be granted upon completion by the organisation. A typical example of this is MCSE offered by Microsoft

Third Category: This category of E-Learning system solution is designed as a general platform in which institutions from anywhere in the world can put up their online courses for students all over world to enrol and take. Usually this kind of setup comes as a part of the main stream. A typical example of this is Edx

As a matter of fact, Edx has been chosen to be a case study in order to understand the development, implementation, effect and impact of E-Learning and Online solutions

Edx as a Case Study

Introduction

Edx is an E-Learning and Online Learning platform founded and developed by Harvard University and MIT. It offers high quality education and courses from the best universities in the world. It has more than 90 global partners. Its mission is reflected in three phases: increase access to high-quality education for everyone
and everywhere, enhance teaching and learning on campus and online and advance teaching and learning through research.

**Architecture**

**How It Works**

Edx works in a very simple way: it connects prospective students to prospective colleges in two ways. A student can enrol for a course that is a part of a program and upon completion, the student will get a certificate. A typical example is a student enrolling for Web Design on Edx. The course is provided by Berkeley University of California. Upon completion, a certificate can be issued the student.

A student can enrol for a course that is a part of a program and upon completion, the student will have the option of getting a certificate that particular course or use it as a prerequisite to enrol in other associated course to complete a full programme. A typical example is Essentials of Cybersecurity offered by University of Washington. Essentials of Security is a 4 course program with entails 3 other more. Completing one will create chance to complete the other 3.

**Effects of Edx Architecture**

**Career focused**

Most of the courses and programs comes with career outcomes and most of the courses are validated by top companies. One important thing is that the course have job relevance and one can start immediately the course id finished.

**Pathway to Credits**
This is more relevant especially in MicroMasters Programs, a MicroMasters credentials is comparable to one quarter of ones semesters worth which forms about 25% of a regular master’s degree. Finishing that would enable one apply for the full degree .and use credit from MicroMasters

Faster

Programs and courses take shorter time, on the average about 4 to 12 weeks. This becomes very useful in master as it allows one to accelerate route to full degree completion

Flexible

Learning is flexible as courses and programs are offered multiple time. This means a student has the privilege to take a course or program at his/her pace which makes it very flexible. This becomes very handy especially for working professionals who .combine work and study together

Affordable

Most courses and degree are very cheap as compared to when the full degree is taken on campus. The cost of traditional Master’s program can be daunting, an average of about $8,000 to about $20,000. MicroMasters cost about $800 to $1700. This which gives an affordable approach to master’s level education

INTEGRATING E-LEARNING SOLUTION FOR COLLEGES

((Imam Kadhim

Overview

There is no doubt that the effect E-Learning system solution has had on education cannot be overemphasized. It has succeeded in .helping almost every category and age group to continue learning
For student looking at earning an international degree, they do not need to travel several miles as they can earn that from the comfort of their home.

For graduates who want to advance their respect careers, there a thousands of short courses with certifications that can be done to enhance their qualification.

For working adults, it is made flexible so they can work and study at their own pace.

(Effects on Integration E-Learning (Imam Kadhim)

It will make learning easy and very flexible for the students as a lot of them can enrol for program through E-Learning System.

Because learning has become flexible, more courses can be offered to their students.

The physical barrier of having students from their locality will have been removed which means students from different states and country within the Arab region can enrol for courses offered by the school through E-Learning System.

CONCLUSION

In conclusion, harmonizing solutions for e-learning and online learning is good as it allows colleges expand worldwide to be able to serve students all over the world. This totally depends on the number of courses and variety of programs. Integrating E-Learning into their already existing platform and architecture, will enhance learning, enhance the quality of education and also increase the college rating as an institution with up to date technology for improving learning.

REFERENCES


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