AENSI Journals
Advances in Natural and Applied Sciences
ISSN:1995-0772 EISSN: 1998-1090
Journal home page: www.aensiweb.com/ANAS/

Supporting Learning Through The Use of Academic Portal

[1]Mina Abdoli and [2]Mahdi Javanmard

[1,2]*Payam Noor University*

ARTICLE INFO
Article history:
Received 25 June 2014
Received in revised form
1 July 2014
Accepted 31 August 2014
Available online 15 September 2014

Keywords:
e-learning; academic portal; portal; MOOC; DE

ABSTRACT
Nowadays internet and its application have penetrated in all features of our today's social and industrial life. Education is also no exception. A dramatic growth of extension and development of e-learning is accompanied with outbreak and extension of internet services. Unfortunately, for many reasons in our country, the pace of e-learning growth is not comparable with the high-tech countries. Among reasons, one is lack of academic portal. This paper reports on an exploratory study that seeks to illuminate perspectives of using academic portal in enhancing the learning process and a case study.

To Cite This Article: Mina Abdoli and 2Mahdi Javanmard., Supporting Learning Through The Use of Academic Portal. **Adv. in Nat. Appl. Sci.,** *8(10): 49-53, 2014*

INTRODUCTION

The Internet has become one of the most important and most used media for communication and learning, as it allows for the creation of interactive and collaborative environments, whose contents and resources can be shared with a limitless number of users. Ranging from instructor-led learning to self-study, students are encouraged to actively learn from this free library. E-learning, distance education (DE), online learning, m-learning and MOOC are typical names chosen for new methods of education. This new learning technology tools provide a collaborative environment for humans to enhance their ability to understand the important processes that they deal with. The goal is to improve the qualities of communication and decision making. In the environment of knowledge automation, learning can be regarded as a process of filtering ideas and transforming them into valid knowledge. Education (teaching and learning) will face with great revolution in future years. Available hardware and software facilities lead humanity toward major revolution. To find relevant information and learning materials from this huge knowledge collection, aneffective search engine is typically needed, whichmeans that the search engine may be considered asthe entry point to the internet. This paper will examine role of academic portal at e-learning process and introduces an academic portal, CINVU.

1- Portal:

From the historical perspective the word portal is derived from the Latin word "Porta", meaning door or gate. Portals are Web-based applications which provide a single point of access to online information.

They can be regarded as virtual workplaces which promote knowledge sharing among end-users (e.g. customers, employees etc.) and provides access to data (structured) stored in databases, data warehouses etc.

2-1 Evolution:

Initially portals were merely search engines. In the next phase they were transformed to navigation sites. In order to facilitate access to large amount of information, portals have evolved to include advanced search capabilities and taxonomies. They are also called Information portals because they deal with information. Organizations are becoming increasingly aware of the opportunities obtained by using and adding value to the information lying dormant in scattered information systems. Portals can integrate applications by the way of combining, analyzing, and standardizing relevant information. Knowledge portals provide information about all business activities and they are capable of supplying metadata to support decision making. In case of knowledge portal, we do not focus on the content of the information, but we focus on how it will be used by the knowledge workers. Knowledge portals have two kinds of interface:

- Knowledge consumer interface
- Knowledge producer interface

Corresponding Author: Mina Abdoli, Payam Noor University
E-mail: mi_abdoli@yahoo.com)

Advances in Natural and Applied Sciences, 8(10) Special 2014, Pages: 49-53

The main reason for using portals is efficiency. The portal helps users to make more efficient use of their time. Other portal advantages are listed as follows:

- Providing data from multiple resources to single interface
- Providing web-based services such as chat rooms, search engines, e-mail, different groups, news, entertainment and etc.
- Providing services specialize possible for different user
- Having access to various information through search engines (AnuraGurugé, 2003)

Types of Portal:

Different classification for types of portal is possible according to various references (MarjanMansourvar, NorizanMohdYasin, 2010) (HEILA PIENAAR, 2003). But in most sources they are classified according to two criteria: functionality and content.

Types of portal according to function criteria:

- Information Portals: These portals provide information to users.
- Collaboration Portals: These portals connect users and provide facilities for them to collaborate in activities, etc.
- Expertise Portals: These portals allow users to communicate with each other and share their experiences, special interests and services.
- Knowledge Portals: These portals provide users a combination of all the above mentioned services (MarjanMansourvar, NorizanMohdYasin, 2010) (HEILA PIENAAR, 2003).

Types of portal according to content:

- Vertical Portals**:** These portals concentrate on the industry domain. A vertical portal acts as a gateway to present the products and services of a specific industry to the users. A vertical portal, also called vortal provides all the tools, information, articles, research findings and statistics related a domain. A good example of these portals is cnet.com, which presents computer and related information; mp3.com that focuses on mp3, audio, production, pets.com, woman.com, etc.
- Horizontal Portals: These portals provide a variety of resources and information on different topics to the general users. Yahoo.com and msn.com are classic examples of horizontal portals. They are considered as "megaportal" and they have search engines to help users search for information on a large variety of topics such as weather, stock or news. Horizontal portals facilitate their members with personalized web page through different channels.
- Intranet Portals: These portals are used by members who are in the enterprise network or intranet of organizations, institutions, etc. Enterprise portals provide employees with updated information such as documents for management system, applications, online training, etc, as well as facilities to communicate using emails, messaging, or web meetings.
- Knowledge Portals: Knowledge portals service users by providing access to useful information and resources. These portals increase the effectiveness of searching.
- Enterprise Portals: portals also called corporate portals support their members by providing accessing to suitable resources of the certain company or organization. An enterprise portal is useful for the company's own employees as well as the company's business partners such as suppliers and customers. With its link to public web portals, an enterprise portal provides a virtual workplace for each user. One of the most important advantages of this portal is the ability to access its services via mobile devices services like cell phone, PDA's or hand-held PC's which are useful when out in the field, for decision making and other business or company's tasks.
- Market Space Portals: These portals support business-to-business and business to-customer e-commerce (MarjanMansourvar, NorizanMohdYasin, 2010) (HEILA PIENAAR, 2003).

Academic Portal:

Enterprise Knowledge Portals (EKP) that can distinguish knowledge from information and can produce knowledge from raw data and information has undoubtedly been the most significant development of 1999.

In May 2000 a Web indexing workshop in the Netherlands decided to start an academic portal initiative in Europe. Main components will be: indexing and searching tools; cross-searching automatic indexes and human-made subject gateways; directory services; video-on-demand and streaming.

A primary function of the academic portal would be to provide researchers with an alternative means of retrieving dependable information beyond the capacity of commercial Web sites. They were introduced to provide support in four distinct areas: as a medium for facilitating learning; as a medium for interactivity; as a medium for metacognitive thought and reflection; and as a learning tool. The goal would be to provide highly

Advances in Natural and Applied Sciences, 8(10) Special 2014, Pages: 49-53

focused search engines adapted to the technical languages of the various academic specialties (HEILA PIENAAR, 2003).

The Advantage of Using an Academic Portal:

An academic portal or knowledge factor portal creates with one or set of specific goals e.g. class content provide. This portal provides collection of content in order to support process or specific process. For example, an automated virtual classroom program may require resources from other application such as electronic content and connection with user to can gain necessary information regarding content of virtual classroom and its presentation.

Academic portal will help to improve knowledge management system circle. These portals facility processes to share, create, exchange and reuse knowledge.

Comstech Inter-Islamic Network on Virtual Universities(CINVU):

Analyzing and designing a new computer system can be time-consuming and expensive. While the project is in the analysis phase, and before a system is designed and installed, a feasible solution must be found. The term "feasible" has several meanings when it is applied to computer-based projects.

The proposed system must be technically feasible. The technical feasibility of a system is the extent to which the system can be created and implemented using currently existing technology.

The proposed system must also be financially feasible. A system's financial feasibility is the extent to which the system can be created, given the company's current finances. In addition, the proposed system must be operationally feasible. When a system demonstrates operational feasibility, it operates as designed and implemented. Thus, the company must ask: Will the proposed system produce the expected results? Will users be able to use the proposed system, or is there a chance that it will be so difficult or inconvenient to use that users will not adopt it?

Finally, the proposed system must be time feasible. A system's time feasibility is the extent to which the system can be installed in a timely fashion and meets organizational needs. All of these feasibility questions are difficult to answer, but they must be answered. Technical, operational, financial, and time feasibility are best determined when the studies are based on a sound knowledge of computer systems, an understanding of the state of the current market and its products, and experience.

CINVU Establishment:

The feasibility plan of Comstech Inter Islamic Network on Virtual Universities (including open, distance and virtual, that are based on technological infrastructures and knowledge engineering and management) was prepared by Payam Noor University (PNU), I.R. of Iran. The proposal was approved according to the 14th General Assembly Meeting of the Standing Committee on Scientific and Technical Cooperation (COMSTECH) under the Organization of Islamic Cooperation (OIC) held on 11th – 13th January 2011, at Islamabad, Islamic Republic of Pakistan. Based on that proposal, the Network is an autonomous, non-political, non-profit organization, with international approach, that works under the support of COMSTECH. It is established with the aim of realization, monitoring and evaluation of its statute objectives. CINVU was officially opened by the Coordinator General of COMSTECH, on Sunday, 8th January, 2012 at Payam Noor University which is the permanent secretariat of the Network (www.cinvu.net).

CINVU Mission:

The CINVU is a registered distance and e-learning network with the mission to provide a new framework for a comprehensive education in the 21st century based on a four building blocks of education: Islamic Values, Global Understanding, Excellence in Everything and Service to Islamic World. It exists to share knowledge and improve understanding amongst OIC members and to promote policy and practice across the whole OIC countries and beyond. It does so through the organization of acknowledged OIC conferences, its publications and information services, and by taking an active role in a wide range of important OIC projects using modern scientific and technological resources.

Network Structure Pattern:

Structural pattern of the entire CINVU network would be in the form of Interconnected Islands in which virtual universities are connected as members of the network, like traveling companies and chain stores having similar power and potentials or even acting as complementary members in giving services more effective in different geographical areas for the strategy of the virtual organization and based on synergy property, efficiency and potential would be increased more and more (see "Fig.1").

Advances in Natural and Applied Sciences, 8(10) Special 2014, Pages: 49-53

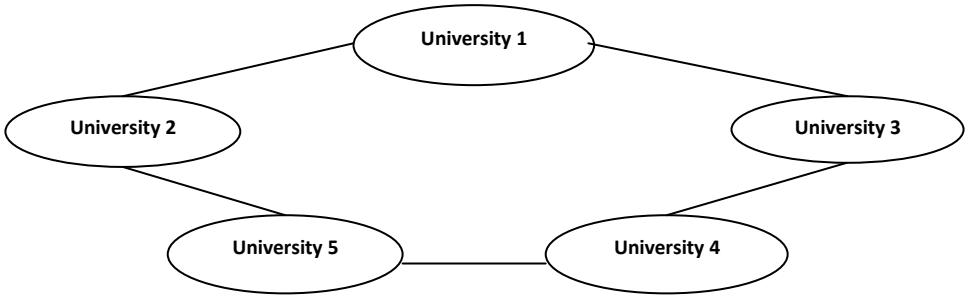

Fig. 1: Pattern of the Virtual Universities Network

Structural pattern of the network core can be visualized in the form of a Spider Web, in which network management as the guiding organization is responsible for establishment of the network toward certain and specific objectives, working with other members having potentialities and facilities and disable to exploit the market in an optimal manner; through interaction and guidance (see "Fig.2").

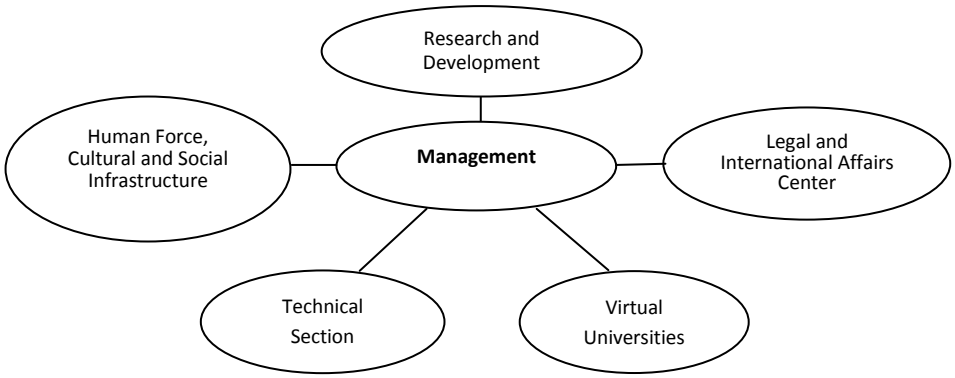

Fig. 2: Pattern of the CINVU Core

Network Modeling:

One very important part of CINVU is the network. Most computer systems have at least one internal local area network, and one or more connections to external wide area networks such as the Internet. CINVU should have multiple office locations scattered over a geographic location. The model created here for CINVU illustrates the desired computer network. One technique used to model a corporation's network environment is to create connectivity maps. More precisely, three different modeling techniques can be used, depending on what type of network you are modeling: wide area connectivity maps, metropolitan area connectivity maps, and local area connectivity maps. Only wide area connectivity map will be described here.

Wide Area Connectivity Map:

In order to create the wide area connectivity map, we begin by identifying each site or location in which CINVU might have an office. Each fixed site isdenoted by a circle, mobile or wireless sites are indicated by circles containing the letter W, and external sites, such as suppliers or external agents, are denoted by circles containing the letter G. A solid line between two sites indicates a desired path for data (or voice) transmission. "Fig.3" shows four sites, Istanbul, Islamabad, U.A.E. and Kuala Lumpur, in such a map. The user in Kuala Lumpur may be a government office and thus is shown as a site with a G. Also, there are wireless users in the Islamabad office, and they are shown all together with a single circled W.

After identifying the sites, the characteristics for each link must be defined, creating a map that shows the wide area network interconnections forthe entire business. "Fig.4" shows how the link characteristics can be used to more fully define a connection—in this case, the one between Tehran and Islamabad. The distance between these two cities is 1234 miles; the level of security for the connection is medium; the duplexity is full; the desired data rate is 256 kbps; the latency across the network is 200 ms; the quality of service is ABR; and the delivery rate is 99.9 percent.

Advances in Natural and Applied Sciences, 8(10) Special 2014, Pages: 49-53

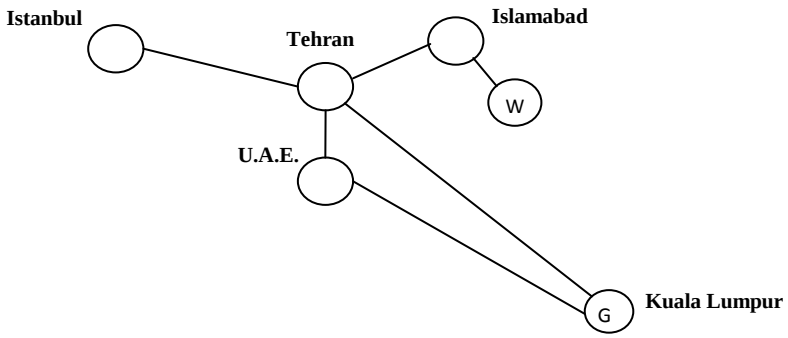

Fig. 3: Example of a wide area Connectivity map for Sites in Tehran, United Arab Emirates, Kuala Lumpur, Islamabad, and Istanbul.

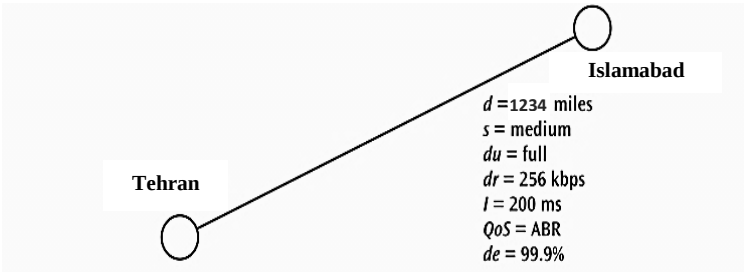

Fig. 4: Detailed linkCharacteristics for the Connection between Tehran and Islamabad

Conclusion:

ICT advantages have made it possible to enhance the interactive capability of DE. Among OIC members, however, it seems focusing on the use of sophisticated technologies can decrease public access to education. The selection of appropriate technologies and the design of learning systems are therefore crucial in determining the level of openness of a DE system. Conceptually, CINVU, one of the youngest Networks in world, is a system intended to overcome the constraints of distance, both temporally and spatially, economic factors, and demographic limitations, with the ideal opening up educational opportunities for all. In a very short span of time, it will allow OIC Universities to overcome many of the negative perceptions associated with DE programs. Perhaps inevitably, a certain segment of traditional academics still does not accept DE as an acceptable means for delivering educational quality, but slowly they are being won over by the visibility and quality of the CINVU's programs and the eminence of the specialists associated with them.

REFERENCES

AnuraGurugé, 2003.Corporate Portals Empowered with XML and Web Services, USA: Digital Press An imprint of Elsevier Science.

MarjanMansourvar, NorizanMohdYasin, 2010. Web portal As a Knowledge Management System in the Universities, World Academy of Science, Engineering and technology, 70.

HEILA PIENAAR, 2003. Design and Development of an Academic Portal, Libri, 53: 118-129, Germany.

http://cinvu.net/NSite/FullStory/News/?Serv=1&Id=32