Virtual University: The new perspective of Higher Education

Abstract

Nowadays, due to technology, many changes have come in higher education. Higher education becomes more technocrats. With the help of technology universities have started many online courses and some university established only through online mode. By this new way of distance learning they have given opportunity to some form of higher education to people who would otherwise not have, such as working adults who survive higher education due to responsibility of family. (O'Donoghue, Singh, & Dorward, 2001; Peltier, Schibrowsky, &Drago, 2007). This paper focused on the overall scenario of virtual universities by narrative review of past researches. For the review open access web based literature has been reviewed. The aim of the review was to explore concept, overall scenario, practice, advantages, disadvantages and barriers to virtual university.

Keywords: - Virtual University, Higher Education, ICT, Distance Learning

Introduction

Internet becomes handy during less than last thirty years in US, after the Rand Corporation in USA was commissioned by the U.S Air Force to do a special study…(Leiner 2000) . Nowadays Indian Government also introduced digital India initiative to make availability of ICT at each and every part of country.**The flow of knowledge** has been modified by ICT in our education system**.** With old classroom teaching ICT introduced simple multimedia based CAL and CAI education system. The educational institutes at school level are using ICT for the creation and distribution of knowledge.Many schools have revamped their classrooms by smart classrooms. In the context of this ICT age the higher education institutes must be adapt ICT for providing education. Universities have to move toward ICT based education system i.e. Virtual University.

In Virtual University the term virtual is taken form computer science where ICT based experience transferred original experience in virtual reality, become popular in the 1990s. Farrell (1999) suggests the term "virtual university" emerged about 1995.

Website of The International Council for Distance Education (ICDE) defines virtual institutions as "institutions which offer programs only by electronic means, and which are not open universities," Wikipedia offers more inclusive definitions: "A virtual university provides higher education programs through electronic media, typically the Internet. Some are bricks-and-mortar institutions that provide online learning as part of

their extended university courses while others solely offer online courses. They are regarded as a form of distance education."

Thus VU is a university for which the primary mode of engagement is via the internet. There is not any real campus the virtual network of different institutes involved in higher education is virtual university. All the functions of university are performed online. There isn't need of physical interaction for education. Programs are put on internet by different mode like; video, notes, presentation, assignments etc. Student form all round the world can be enrolled. In short the virtual university can be seen as "a metaphor for the electronic, teaching, learning and research environment created by the convergence of several relatively new technologies including, but not restricted to, the Internet, World Wide Web, computer mediated communication ..." (Van Dusen, 1997).

The popularity of virtual University is increasing day by day. Allen & Seaman, (2006) reported that nonprofit public institutions are rapidly involved in revamping of education system virtually but the other report of (Antonucci, 2001) said that total virtual universities (Institutes which offers all steps of education by online mode) more often tend to be for-profit entities. Although they are many questions remains unanswered. Question regarding its legitimacy is also a big question. Allen &Seaman (2006) raised a question that what is online education is it different way of providing education or it provides new era of opportunity to new generation of student. There are some other questions as: is this worthy in real sense, why pupil should go through online education, are the questions which are more useful for learners to choose mode of further studies. This article aims to write that it gives the answer of above questions in the form of importance, advantages, and disadvantages of virtual university by narrative review of existing researches. Investigator has tried to give some examples of virtual university from all over word and their mode of instruction.

Research methodology

The main concern of the research for this paper was to answering the questions:

1. What is present scenario of virtual university: India and other Countries?

2. How do students benefit from the virtual university?

3. What are the disadvantages associated with virtual universities?

In order to provide answers to these questions, a narrative review of existing literature has been conducted.

Research Method

For the present study narrative review techniques of qualitative research has been used. In the paper narrative review of publications related to Virtual University is presented. The data base of UNESCO (http://www.unesco.org/iiep/virtualuniversity/author_rmason.php), Google Scholar (http://scholar.google.com) and ERIC (http://eric.ed.gov) database has been used to search for related literature. The researcher has also used Reports of Online learning Consortium http://onlinelearningconsortium.orgfor keywords "Virtual University". The researcher used criteria like "full text availability", "free access" and "peer reviewed journals"

to filter the search. The researcher downloaded and read the publications related to the research questions from the top search results.

Importance of Virtual Universities

In the digital era virtual university becomes important part of education system. Researches indicate the importance of virtual universities as under:

Report of Online learning consortium indicates that the 71.4 percent of academic leaders rating the learning outcomes in online education as the same or superior to those in face-to-face instruction .OLC (2015)

A year-to-year 3.9% increase in the number of distance education students, up from the 3.7% rate recorded last year. Total of 5,828,826 students, a year-to-year increase of 217,275 OLC (2015)

Peltier, Schibrowsky, &Drago, (2007) noted that education in online mode especially benefits nontraditional students who might not have any option for further education.

As per O'Donoghue, Singh, and Dorward (2001) "access to the Internet allows for distance learning that may encourage people, to return to education, who would not otherwise due to work or other personal commitments".

Survey of Sloan Consortium, now known as Online Learning Consortium reveals that majority of chief academic officers (65 percent) agree that online education is critical to their institution's long-term strategy (Sloan Consortium, 2011, p. 4) because of online education company losses their efficient employees. Efficient employees getjob or go for further education and get better prospects.

Moore (2003) noted that "historically, distance education has been regarded as an unimportant and marginal activity by comparison with face-to-face, on-campus forms of teaching and learning" (p. 40). "However, enthusiasm for distance education has grown rapidly with "the application of Internet-based information and communications technologies".

Thus importance of virtual university can be derived in the following points:

1. Promotes formal and informal learning.
2. Enhance capacity of distance learning.
3. Transfers the form of distance education system into new digitalized form.
4. Provides educational opportunities to students who would otherwise not have them
5. Provides education to increasing number of students.
6. Smash boundaries of culture, distance and nations.
7. Rubs the blueprints of mortar institutes and stops degradation of efficiency due to building bricks.
8. Boosts education capacity with limited costs
9. Give the chance to equip with knowledge to working adults.

About Virtual Universities

Types of Instruction

According to Moore (2003, p. 34) "distance education requires, by definition, that communication between teacher and learner be mediated by technology". In virtual university courses are delivered online. The technology becomes the medium of delivery. The benefit of technology is stressed by Epstein (2015) , as technology gives opportunity to schools to reach a wider range. And schools can offer their programs as per students' preferences and time constraints.

There are two mode of instruction; **synchronous online instruction and asynchronous online instruction**. In synchronous online instruction, students and their educator attend class online at the same time. Where as in asynchronous online instruction is the opposite. Students and their educator do not have to attend class online at the same time. Asynchronous online instruction gives the benefits that more people might be able to get their postsecondary degrees at a time when it might be otherwise impossible. Regarding virtual university instructors, generally mix of core and adjunct faculty is used to teach online courses as traditional (face-to-face) courses (Allen and Seaman, 2006) .

MODELS OF VIRTUAL UNIVERSITIES

Research of D'Antoni (2010) gave a list of 115 virtual universities. She categorized these into four basic models: conducted an extensive study for UNESCO and

1. Campus-based or distance universities
2. Consortium models
3. Distance learning institutions that deliver primarily eLearning courses
4. Virtual universities (those that predominantly deliver courses online)

➤ **Campus-based or distance universities' online learning Program**

There are 50% of D'Antoni's (2010) list of universities are Campus-based or distance university. They offer some of program by online mode. Some examples of campus based or distance universities' online distance learning program are as under.

Overall scenario

- **University of British Columbia (Canada)** offers 140 academic and 125 non academic courses online.
- **Kenyatta University (KU), (Nairobi, Kenya)** in 2014 KU revamping the center of ODL in Digital School of Virtual and Open learning. Center runs 112 courses in blended mode; online and lectures at 9 centers.
- **COMSATS Institute of Information Technology, (Head Quarter Pakistan) :**COMSATS stand for The Commission on Science and Technology for Sustainable Development in the South is an international

organization supported by 13 member countries. In 2012, CIIT started courses on virtual mode. The center launched 123online courses. It has 150 study centers for internet access and examination purpose.

- **MOOC,** stands for massive open online course, is a platform for free online education. MOOC was launched in 2008. The New York Times called 2012 "the year of the MOOC" because main stream universities have started courses of higher education through MOOC.

  But now the results show that learners are not involved seriously in MOOC. Guo, Kim & Rubin's (2014) research on MOOC shows that few learners will watch more than six minutes of anything. MOOC is not much more effective for Humanities courses where debates are more important than content. Nowadays new methods come forward for animated content, assessment process and for practical work may boost up MOOC in future.

➢ Consortium models

There are 20% of D'Antoni's (2010) list of universities are a consortium model. In a consortium, institutions agree to work together towards common goals.

- **Canadian Virtual University (CVU)** is the organization of 11 partners offer over 2,000 distance courses. In the consortium CVU provide credit and fee transfer facility, validity of courses in other partner institutes regardless of state and country. There is a work distribution. CVU does not take the responsibility of registering students.
- **The Virtual University for Small States of the Commonwealth (VUSSC)**goals for teacher training as they give programs for professional development of online educators. VUSSC also gives the online educational resources. The responsibility of credit transfer and registering students is taken by Transnational Qualification Framework (TQF). TQF also take the responsibility of recognition of credits in member countries.
- **Open Education Resource Universities (OERu)** has members form five continents from all over word. It has more than 30 universities as a member. Over all it is beneficiary for students and universities too. Credit can be transferred in this consortium. Credit will be acknowledged for higher laddering courses. This strategy is called as Prior Learning and Recognition (PLAR) strategy. It can be built free courses with collaboration of faculties form different continents. The courses are shared so it costs low.
- **Mediterranean Virtual University** is a consortium of nine regional institutes and two European universities. But it fails after two year i.e. in 2004 may be because of cultural and linguistic barriers.
- **UK eUniversities** (UKeU) was launched in 2000, by the UK as a consortium, which was closed in 2004. In 2005 the Committee on Education and Skills gave report about the failure of UKeU. Report show the reasons behind its failure are : wrong time period(was launched during the dot-com crash), confusion over branding of institutions and that of UKeU, over-emphasis on building technology for online delivery, delay in recruitment, and impatience of higher- education administrators to see results quickly.

> ➤ **Distance learning institutions that deliver primarily eLearning courses**

Open and Distance learning institutes now introducing their courses online. In India there are 106 Universities which has recognition as ODL (Distance Education Bureau,(2015)). Among them many universities are offering online education.

For example:

> Indira Gandhi National Open University, New Delhi offers their program online.
> Baba Saheb Ambedkar Open University, Gujarat is also offering their course online mode.

Words other institutes:

> National Open University of Nigeria, also offers programs online mode.
> The Open University of Malaysia (OUM) is a private university owned by Multimedia Technology Enhancement Operations. OUM opened its doors in 2001 as an ODL institute, but quickly invested in eLearning. It now has over 100,000 learners, making it one of the larger providers of online education in the world.

> ➤ **Virtual universities**

The forth mode which D'Antoni recognized is virtual university. These are the universities which are running only online courses. There are many virtual universities in market. Most are private, with permission of government. There are big and small. Size is not matter but because there is one successful small virtual university in the UK, is Interactive Design Institute (IDI). IDI established in 2004 as a micro virtual university. It runs courses of interactive media like mobile application and other interactive media for websites. IDI is successful because of its high quality interaction. Delivery is 100% online. But the other part of virtual university has been reported in University World News. It was reported that the number of unaccredited institutions is continuously increases. Among them most of university is online university and from the U.S. or Europe.

The unregulated nature of the Internet makes it easy for websites advertising degrees to be set up and moved frequently. Concern over the integrity of online learning has even spilled over into American federal politics (Straumsheim, 2015). In efforts to thwart bogus degrees, some countries refuse to recognize non-residential degrees and this creates a market barrier for legitimate virtual universities. Possibly the most visible private eLearning institute is the University of Phoenix151 (UoP), owned by the Apollo Group in the U.S. and established in 1976. Wikipedia reports that UoP peaked in 2010 with over 600,000 learners online and in 112 campuses worldwide, but dropped to 227,000 in 2015.

There are more than hundred institutes listed on UNESCO's website. Most of are from US, UK and other developed country.

Advantages

There is a saying that 'Old is gold'. So we except that new ICT based education should be with all benefits of old education system. From the researches investigator extract some advantages of virtual university are as follows:

Ahmad (1998) has reviewed literature regarding virtual university and its environment. The result of critical review suggested that there are many advantages of virtual learning than traditional learning environment like: flexibility, lower expense, boundary less education and increment in retention

A book of Harasim, Hiltz, Teles, and Turoff (1995) gives various styles of networking for educational purpose. The book includes a section on online learning. The book gives several advantages associated with virtual universities, based on previous research evidence that ; and enable learning to become more individualized by expanding the time, place, and pace of education and emphasize interaction and collaboration between students and academics.

Janicki and Duncan (1998) , suggested that students change from a passive learner, to an active participant, the educators change from the distributor of knowledge to the distributor of understanding and intellectual breakthroughs.

The virtual universities may allow students to gain more independent learning skills by becoming more active participants in their own learning processes. This can be seen as a key advantage that virtual universities have over traditional university environments.

Ahmad et. al. (1998) gives the another benefits that virtual university suitable for all type of learners as fast learners are no longer constrained by need of slower learner as well as slow learners may not loss any opportunity to learn because of their speed of learning and understanding. This suggests that virtual university could not prevent students due their learning abilities.

Thomas MANN, quoted in 1999, said "Assist the new without sacrificing the old" and the best servitors of the news… may be those who know the old and carry it over into the new.

One of the advantages of VU is that there is an interaction between teaching and learning and the interactivity between students, teaching staff and others experts could be achieved easily through CMC.

Disadvantages

Following are some disadvantages of virtual university:

- According to Chao (1998) , when utilizing web based course material, academic staff are not only required to undertake training on the new technology, but also need time to develop teaching materials, and need support from students and administration.

- Mamaghani (1998) , iconcluded that although there are several major advantages associated with the use of the web in learning environments, the author also highlights some important problems that can occur with the utilization of the web for learning or teaching purposes.

- Wayne Mackintosh (OER Foundation, personal communication, 2013) noted that about 85% of academics are willing to share their course materials, but only about 15% are willing to use them. A consortium appears to be weaker if universities are expected to use the course materials developed by their peers. Any consortium that expects faculty to use materials developed by others will likely have curriculum adoption and adaptation issues. At best, communal curricular materials become useful reference materials for instructors and learners.

- Mamaghani (1998) implies that problems with computer hardware malfunctions, setting up software to provide access to an educational institution, remote dial-in access, and heavy traffic on the web can create all kinds of learning barriers for students. She indicates that if these issues are not addressed accordingly when a virtual university is established, the potential exists for major hindrances to the students' learning processes.

- Mamaghani (1998) identifies the cost of training as a potential problem, the author has not considered the implications to students and academics.

- It is possible that when the university funds are limited, the virtual learning environment is limited too. This in turn suggests that this cost factor could provide serious problems to academics and students as they would be limited in their abilities to teach and learn.

- Academic leaders (29%) reported that their faculty accepts the "Value and Legitimacy of Online Education." Among schools with the largest distance enrollements, 60.1% report faculty acceptance while only 11.6% of the schools with no distance enrollments do so. (OLC,2015)

Conclusion

As education shifts and changes to suit current technological trends, and as the traditional, classroom-based university becomes a thing of the past, it becomes increasingly important to address the future implications for students and academics who conduct their learning and teaching in a virtual university environment. After observing above process of virtual university one questions remain about accreditation and the quality of assessment. Accreditation is required to assure students that the online institute has certified online instructors who have the expertise and educational qualifications to design and carry out the curriculum. Assessment standards need to be particularly closely monitored in virtual universities. For example, respondents in studies of opinions about online degrees will rate an online degree from Stanford the same as an on-campus degree, because the name of the granting institution is recognized. Much of the existing literature on the virtual university concept is based on anecdotal evidence. This suggests that future research on issues associated with virtual universities should be addressed through research evidence such as case study research, or forms of empirical assessment. For further research one can take the issue of accreditation and assessment of this kind university and its quality.

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