Online Teaching and Learning

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Abstract: Online teaching and learning refers to education that takes place over the Internet. A significant number of colleges in the US and abroad are moving from the traditional face-to-face classes into fully online, web-based courses. Online education, often called distance education or web-based education, is currently the latest, most popular form of distance education. It has recently become an integral part of many university programs. This paper provides a brief introduction to online teaching and learning.

Key words: online teaching, online learning, electronic/digital learning, web-based learning, distance learning, online education.

I. INTRODUCTION

Education is the process of transferring knowledge, values, methods, skills, and beliefs from one individual to another. Distance education originated in the United States in the 1800’s when teachers and learners at the University of Chicago were at different locations and tried to connect through correspondence courses. In the mid-1980s, the first online college courses were initiated by several universities and schools. The advent of the Internet was a catalyst for moving distance online education to the next level [1]. The Internet is now playing a bigger role in our lives and dictating how we live, socialize, teach, and learn. As the Internet is developing into a main educational tool, online education offers the educator and the learner access to numerous resources. During the last decade online education of various kinds, often called distance education or web-based education, has become a normal part of many university programs.

Online teaching and learning is designed to reach and engage the modern learner on one-to-one basis anywhere, anytime. A popular one involves Massive Open Online Courses (MOOC), which have grown involving many researchers and research institutions [2]. The reasons for offering online course include easy and convenient access for students, higher degree completion rates, and the appeal of such courses to nontraditional students. In a similar vein, barriers to the adoption of online courses include lack of faculty commitment and high costs of implementation and delivery of the courses [3].

The key to a successful implementation of online teaching and learning is taking student characteristics into account. Strategies that work for conventional full-time students may not be effective for adult learners with full-time jobs and family responsibilities. These students are mostly practically-oriented with keen interest in tools and technologies [4].

II. ONLINE TEACHING

Online teaching offers exciting opportunities to expand the learning environment for diverse student populations. As the demand for online teaching increases, college professors may be asked to consider teaching their classes’ online. Online teaching shares much with face-to-face teaching, but it also has a unique set of skills and requirements. Both approaches are similar in content, except in pace and delivery. Rather that developing the courses from scratch, a company has emerged to take care of the courses. Professors just need to use Course Management System (CMS) software to prepare and deliver their courses. Using the software allows instructors to get it right from the beginning.

For online teaching to be successful, it is recommend that the instructor should follow the following seven principles [5]: (1) encourage student participation, (2) encourage student cooperation, (3) encourage active learning, (4) give prompt feedback, (5) emphasize time on task, (6) communicate high expectations, (7) Respect diverse talents and ways of learning. To these principles one may add seven more [6]: (1) address individual differences, (2) motivate the student, (3) avoid information overload, (4) create a real-life context, (5) encourage social interaction, (6) provide hands-on activities, and (7) encourage student reflection

III. ONLINE LEARNING

The process of learning is complex and it involves the auditory, visual, and tactile senses. The traditional way of learning at a campus university is not for everyone. Online learning is for those who wish to study for a degree alongside work or
other commitments. Online learning has been referred to as a form of distance education and as web-based learning, e-learning, and digital learning. It is offered over the Internet and uses web-based materials and activities.

Student need to be technologically savvy to use technology tools that may be required. Students of the digital age appear to be independent, more technology disciplined, and technology savvy, well suited for online environment. Online learning at your own pace is beneficial for a high-quality college degree.

Whether offered on campus or delivered online, each course offering must meet the same rigorous criteria and the strict academic standards. The only difference is in the way the course is delivered. Generally, students are required to have access to a computer system with high-speed Internet connections. They may also expect electronic academic support services such as registration, financial aid, libraries, tutoring, and advisement.

IV. BENEFITS AND CHALLENGES
Online education provides great opportunities and great challenges. It has benefits for the students and instructors. It offers the convenience of time and space, cost-effectiveness, and flexibility. Online learning allows student to pursue an internationally recognized degree without the need to attend classes on campus. Online education is preferred by students who cannot participate in traditional classroom settings. It is convenient since it allows one to study anywhere that has an Internet access. Online courses are available 24/7. Over the past decade, the number of online courses have also grown rapidly. Although online education may work for everyone, some less-developed countries see the online education as cost effective. It is needless to say that online teaching and learning (in either synchronous or asynchronous manner) is applied in all disciplines such as engineering, computer science, medicine, nursing, business, music, and social sciences. Online teaching and learning is becoming common even in business organizations.

Issues facing an online instructor include being effective in delivering the course, responding to student emails, getting used to the online tools and infrastructure. Critics of online teaching and learning question its value, effectiveness, and quality. Since online teaching and learning systems have not been able to convey interactions between the instructor and students; its educational effectiveness is lower than the traditional face-to-face lecture. Responding to student email messages in a timely manner can be challenging since it requires significant amount of instructor’s time. It takes a lot of time to prepare and teach an online course. The challenge of online education largely depends on online instructors. There is also the issue of intellectual property and ownership of materials placed on the web [7].

Issues facing online students include the requirement of self-directed learning and self-discipline which may influence the success or failure of online learners. They may be tempted to procrastinate in working on their assignments. The issue of quality in online learning has been raised and it is as complex as the reality of online learning itself. The Quality Matters Program based in the US (www.qmprogram.org) has established national benchmarks for online courses and has become internationally recognized [8].

V. CONCLUSION
Online teaching and learning is relatively new. It is exploding in recent years as an option in colleges and universities both within the US and abroad. Most universities and colleges agree that online education is critical to their long-term strategy. Online courses are best taught when they are engineered to take advantage of the learning opportunities afforded by the online technologies. As the demand for online education by those who have jobs and require lifelong education increases, there are more and more expectations on the implementation of on teaching and learning system.

For more information about online teaching and learning, one should consult [8-11] and the journal devoted exclusively to distance learning: Distance Education.

REFERENCES


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