

# Spreading Education Online: Issues, Strategies and Benefits

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## Abstract

Online learning is an extension of distance learning. Online education is a new phenomenon since 1990s and increasing dramatically worldwide. E-learning offers flexibility for learning in terms of entry, course components, modes of learning and point of exit which serve the learners 'control and choice for the content, sequence, time, place and method of learning', including well thought assessment. There is a great deal of zealous expression about online education at every level of present day institutional environment. Strategies for facilitating the adoption and effective use of online education are the issues of importance to educational administrators identified in this study. Thus, this study has aimed to look at recent research in order to understand the online education adoption by the individuals as a learning tool, affecting factors and how to enhance the quality of online education. The study also focuses on research that sheds light on learning and teaching in online distance education.

**Keywords:** Online Education, Education Management, e-Learning, Flexible Education, Teaching & Learning

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## **Introduction**

The innovation of the World Wide Web in 1992 made online education more and more accessible. It allowed educators to develop new pedagogical models in blended manner to make education more viable and competent. The 21st century thus begins with a paradigm shift towards online education so far (Harasim, 2000). In response to these changes, many states, institutions, and organizations have been working on strategic plans to develop online channels to impart education (Kim & Bonk, 2006) widely. Online learning has become trendy because of its potential to provide more flexible access to content and instruction, availability of learning experiences (Marianne et al., 2012). Online education has been proved to exhibit numerous potential advantages over many traditional methods of education and learning. It is less expensive and faster to deliver, promotes self-efficacy, provides good accessibility from anywhere and anytime, and gives students more control over their learning processes, (Smith & Rupp, 2004; Cantoni et al., 2004; Dewhurst & Williams, 1998). A majority of teachers expressed information technology is a valuable teaching tool for all core academic skills and increases students' academic performance.

Online education as a more advanced teaching mode, encompasses instructional content or learning experiences specifically delivered or enabled by electronic technology, and incorporating a wide variety of learning strategies and technologies such as internet based learning (e.g. MOOCS), video-conferencing, satellite-delivered education, and use of virtual networks. Online education include delivery of course materials, tuition or assessment by means of asynchronous (one-way) learning where interaction occurs intermittently with a time delay and at the learner's own pace, and synchronous (two-way) learning, or real-time online learning where learning takes place at the same time pace.

Online learning suggested as a means for improving educational outcomes and increasing access at lower costs. With the current advances in Information and Communication Technologies (ICTs) by way of improved computer power, faster data transfer rates, and attendant lowering of costs, coupled with the fact that the effective integration of these technologies into educational curricula has been demonstrated to have positive effects on student learning (Harvey, 2003; Kiluk, 1994; Salpeter, 1998), technology-enabled instruction, especially online learning, has emerged as the most feasible and economically sound means of expanding access to quality higher education (Coleman, 2011).

Thus, online education is being rapidly accepted by academic communities around the world as a simultaneous or complementary way of education delivery.

### **Purpose of Study**

The paper aimed to study the online education adoption by the individuals as an effective learning method. The paper examines the present status of online adoption; its affecting factors, implementation barriers, and discusses the strategic to enhance the quality and adoption of online education.

### **Review Study**

Education is a strategic aspect that a society needs to continuously apply in order to sustain a global competitive advantage and create a better standard of living. On this regards, online education has increasingly been used in most parts of the world as a viable alternative to the conventional education (Coleman, 2011). In order to understand online learning, it is necessary to explore the traditional concept of education, which is usually comprised of a combination of knowledge, skills, attitudes and values. Education is the development of individual according to his/her needs and demands of society, of which he/she is an integral part. The remarks of different educators highlight the following features of education (Kumar and Ahmad):

1. Education is both unilateral as well as bi-polar in nature.
2. It is a continuous process.
3. It is knowledge or experience.
4. It is development of particular aspects of human personality or a harmonious integrated growth.
5. It is conducive for the good of the individual or the welfare of the society.
6. It is a liberal discipline or a vocational course.
7. It is stabilizer of social order, conservator of culture, an instrument of change and social reconstruction.

It can be seen that traditionalists cannot support online education because it goes against their basic educational assumptions (Nyatanga et al., 2002; Freire, 1994). Even though, traditional learning methods prove dominant in higher education, universities are eagerly investing

substantial resources in online educational technology to improve its quality and delivery processes (Larsen et al., 2009). Some educators are worried that the presence of technology in education will demean the flow of the traditional education (Trinkle, 1999; Nissenbaum & Walker, 1998).

Jasperson et al. (2005) stressed that the utilization of a new technology is vital to implementation success and its prolonging use will yield a long term benefit from investment in online education technology. According to Liaw (2008), the great advantage of using technology in teaching and learning is that it increases flexibility where both teaching and learning can take place anytime and anywhere. Locke, Moore & Burton (2001) believe that there is no significant difference that exists between traditional learning and distant technology learning that does not warrant them as equally good or bad.

Technology is making a society increasingly interconnected in what many have come to call the “*connected Age*” (Coleman, 2011). ICT literacy reflects the need for the students to develop learning skills and enable them to think critically, analyze information, communicate, collaborate, and problem-solve, and the essential role that realizing need to learn these skills in today’s knowledge-based society (Kay & Honey, 2005). New developments in the Web provide individuals with various opportunities of personalizing the tools and services, and performing self-directed learning in an open and social context with their personal learning environments (Klamma et al., 2007). The rapidly changing business and social environments require the development of constantly learning and creative, independent, responsible and autonomous people. With the increased use of social tools in learning and work processes, social shaping of these tools will become more democratic and dependent of people (Burns & Light, 2007).

In the contemporary institutional setting, there is currently a great deal of passionate expression about online education on part of students, professors, and administrators. New generation of students’ are demanding that new modern technology, be integrated into all courses, as well as traditional courses that are held in a classroom with a professor and students physically present (such as EdX, Stanford University etc.). Institutions for higher education and professional development have increasingly embraced online education, and the number of students enrolled in the programs is rapidly rising (Coleman, 2011).

As technology evolves at the rapid pace of business, institutions adopt online education. A number of institutions have marked the profit potential of online education. Today’s students are part of a group who

have not only embraced the Internet, but also carry around a variety of digital technologies in their pockets. This group could benefit profoundly from a new generation of online technologies that fits their new digital reality and adapted to the requirements of institutional policies. (Coleman, 2011)

El Tartoussi (2009) indicated that successful education does not lie only on technology, but rather careful planning and adoption strategies must be closely investigated. The success of online education in any academic institution starts by instructors' acceptance, which in turns initiates and promotes students' utilization of online education in classes. Alexander, (2001) believes that online learning will produce these advantages:

- Improving the quality of learning
- Improving access to education and training
- Reducing the costs of education; and
- Improving the cost-effectiveness of education

According to the JISC (2009) report, the future demands skilled, digitally-aware learners with the capacity to participate in learning throughout their life, using technologies of their own choosing. The is need to focus on the transformative potential and benefits of learning technologies, recognizing the changing student needs and connections between the higher education and the workplace (HEFCE, 2009). It is unarguable that online education is rapidly growing as a form of training delivery and most found that the clear benefits to online education will guarantee its role in the overall learning strategy.

Despite the wide use of information and communication technology in university teaching, research on adoption of online education suggests that it has not reached its full potential (Zemsky et al., 2004). This entails that more work should be done in order to improve university teachings with utilizing information & communication technology. The reasons for resisting online education in the university is due to lack of institutional and administrative support, a lack of student preparedness for online learning environment, a lack of technological competence on the part of facilitators, shortage of time, need for technical support, and academic integrity concerns (Betts, 1998; Schifter, 2002; Oomen-Early & Murphy, 2008).

Development of distance learning courses need good market research and business planning where a quality-based approach is necessary (Lawton and Barnes, 1998). Strategies for facilitating the adoption and effective use of online education are an issue of importance to

educational administrators across the globe. The ‘information revolution’ has forced most economies into an era which demands effective use of ICT. However, understanding of pedagogical issues in the online realm is a basic requirement to create an effective online education program. To effective adoption and maintaining quality of online education following points should be followed (Moore & Kearsely, 1996):

1. Analyzing the needs of the learner
2. Designing instruction based on students’ learning needs
3. Developing instructional materials
4. Implementing instructional sessions
5. Evaluating the results systematically

Successful implementation of online education therefore depends on building a strategy that meets the needs of the learners and the institutional business goals. Many online education initiatives have justified on the assumption that ICT could improve the quality of learning while at the same time improving access to education at reduced costs (Bates, 1997).

## **Methodology**

This research study seeks to gain insight, and to assess e-learning adoption among people. Therefore, this research confines itself to the qualitative approach where in-depth review is conducted to collect the requisite information. In the undertaken study, data and relevant information were collected through secondary sources mainly scientific literature and articles published in selected journals and professional magazines.

## **Role of Online Education**

Online Education has formed new markets for teaching and learning material and equipment, attracting the attention of academic institutions as well as companies (Nagarajan & Jiji, 2010). This has led to better integration of systems engaged in government organizations, corporations and other business institutions. It could be an important tool for schools, universities and various organizations around the globe. These are due to the inherent advantages of the technology.

The number of students aspiring for education is becoming larger day by day, making it impossible to develop the traditional infrastructure

to provide to the ever growing need. Online Education can help meet these growing demands (Rajpal et al., 2008). Due to the larger workforce requirement professionals are inducing towards the attractive and soaring incentives to join the race, thus posing a threat to the education industry in terms of dearth of qualified, experienced and competent faculties, experts and the trained professionals. Developing online education systems also serve the industries by providing new development avenues to the professionals and students. E-education will also enable the efficient use of resources anytime and in any part of the country easily and it also enriches the learning process.

### **Benefits of Online Education**

Online learning will be able to make available a world class education to anyone, anywhere, and anytime (Nguyen, 2015). Educational institutions seeking to position themselves to be the most competitive in the new international marketplace, and e-education is best way to add competitive advantages with teaching and learning, and ultimately to the institution. Online education allow students to learn anywhere with the 360° flexible way (Sonwalkar & Maheshkar, 2015). It also allows learners' ability to empower themselves. Further, the use of online and distance training has removed the need to travel in order to join together to learn and study (Cornford & Pollock, 2003). It is intended to enhance and complete the traditional face-to-face teaching and learning in control with extremely interactive and self-learning tools (Nagarajan & Jiji, 2010). Online training is scalable because it offers the ability to add instructors and students as needed. In addition, online education reduced employee travel cost and time. Educationally we see benefits for the students not only through their learning of the course material, but also through their learning of new technologies.

### **Limitations of Online Learning**

One of the most important and direct contrast with traditional education is online learning cannot offer human interaction. Another challenge posed by online learning is that it cannot cope with thousands of students that try to join discussions. Building relationships with your instructor and classmates will require more effort in an online environment. Further the only method of communication of online learning is through e-mail, chat room or discussion groups. People cannot interact with others to face to face. It is the unnatural

communication way. Online learning can be difficult, if it is meant for disciplines that involve practice. Lastly, probably the biggest challenge posed by online learning could be technology, at this might affect older adults even more. The problem may arise when the students' technological capabilities or training might not be enough to do what's expected (Li & Irby, 2008).

### **Future of Online Education**

The internet is an essential tool for adapting online education which provides significantly different and interesting possibilities for computer mediated communication and learning from other forms of educational technologies (Coleman, 2011). Colleges and universities have increasingly embraced online education, and the number of students enrolled in distance programs is rapidly growing in colleges and universities. Many institutions, organizations have been working on strategic plans to implement online education (Kim; Bonk, 2006; Ally, 2004).

Environmental characteristics, environmental satisfaction, learning activities, and learners' characteristics are important elements for developing environment for online education (Liaw et al., 2007). In online education environment, environmental characteristics such as one-way or two-way interaction will create a high-level communicative environment and environmental satisfaction will increase learners' perceptions of technology that might endorse their participation in the learning processes. Moreover, learning activities in online education provide a great chance for learners and instructors to share their knowledge and experience.

Students all over the world will have access to virtually any course subject as free MOOCS offering everything. Leveraging online courses, students will become continuous learners, cultivating new skillsets in their overall carrier (Agarwal & Paucek, 2015). Self-efficacy, self-directed behavior, and autonomy are primary characteristics of learners that necessary to identify (Passerine & Granger, 2000). Multimedia instructions will enable the learners to develop complex cognitive skills, such as understanding important elements of conceptual complexity, ability to use acquired concepts for reasoning and inference, and competence to apply conceptual knowledge to novel situations with flexibility (Spiro et al., 1995). In order to promote higher-order thinking through technology-based learning environments, instructional strategies which promote learners to make connections with new information to



old, acquire meaningful knowledge, and employ meta-cognitive thinking skills are required within the e-learning environment (Ally, 2004). Many higher education institutions are now adopting web-based learning systems for their online courses. However, there is a limited empirical examination of the factors underlying student adoption of web-based learning systems (Ngai et al., 2007). Successful implementation of a system and adoption by learners requires thorough understanding of user acceptance processes and ways of convincing students to engage with these (Saadé & Bahli, 2005).

### **Implication of Online Education Adoption**

This study aimed to estimate online education adoption among people. To knowing online adoption and how it can be assessed, factors affecting online education adoption, implementation barriers and factors encouraging the assessment of its adoption considered and following conclusions derived:

Online Education is able of supporting a range of educational practices that utilizes the Web and communications technology to support individual and group communication.

Students and faculties are not much adept with online education system that is biggest barrier in maintenance of delivery modes.

It appears that the factors which are most likely to impact negatively on students to hinder them from attending online classes is students' level of access to computer and internet connectivity which is not viable to every student.

The most important factor that would influence most universities to adopt online education consists in the fact that course assessments with regards to the curriculum are developed to meet course objectives. Hence, it will give a clearer picture to educators in their delivering processes and meet students' expectations concerning those courses (Coleman, 2011).

Regarding the barriers to the adoption of online education, these are 'fear of failure in internet/e-learning services', 'fear of internet fraud', 'low speed of internet' and 'unavailability of internet and access device to everyone'.

Strategies to enhance adoption of online education, blended learning opted by the institutions rather than full adoption of online education. High funding for content development, development and technical support staff, attracting student to enroll for online courses, and change

management, considering workload issues and intellectual property rights are issues of online education.

## **Conclusion**

Online learning has become a widespread method for providing education at the graduate and undergraduate level because of its perceived potential to provide more flexible access to content. Most of the online curriculum today is presented by universities and colleges who are moving into the online environment (Muir, 2001). Instructors, Students, Curriculum and Technology are elements of online learning where utilization of technology is very important to implementation success and its prolonging use will yield a long term benefit from investment in online education adoption. Online learning is adapting at just about every college and university in the nation (Lawrence et al., 2012) since the learning is an active process where learners should actively engaged in associated activities. Flexibility for learning, course components, modes of learning and point of exit offer learners to control and choices courses, sequence, time, place and method of learning, including flexible time bound assessment (Burns & Light, 2007). Successful adoption of online education by learners requires thorough understanding of user acceptance processes and ways of convincing students to engage (Saadé & Bahli, 2005).

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