

Challenges and Opportunity of E-Learning in Developed and Developing Countries- A Review

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Abstract-

In this article we have discussed about the e-learning environment in both the developed and developing countries, which includes their approaches, practices, challenges and opportunities they face. E-learning is getting more scope since the demand of higher education studies has been increased. E-learning gives flexible and easy environment to the students less cost and convenient time and place to study. Rather than technology and other skills, the user perception and readiness plays an important role in e-learning effectiveness in both the developing and developed countries. Apart from these factors financial support from government, motivation of students and well trained tutors are the key factor of the successful implementation of E-learning. The challenges and opportunities also vary from country to country based on the infrastructure and the stockholder.

Keywords- E-learning, ICT, Higher Education, Developed Countries, Developing Countries

I. INTRODUCTION

The higher education has a greater impact on the society so it has greater responsibility towards the entire education system as a whole (Sanyal, 2011). The advantage of technology has paved way for globalization. The advancement varies from small micro processor to personal computers. The e-learning has also grown along with the development of technology. E-learning along with ICT has a greater impact on the growth of the economic educational system of the countries. The number of courses and programs offered through online are in increase in recent times in most of the higher education institutions, through online learning. E-learning is the sensational topic that is discussed all over the world (Maddux et al., 2005). The e-learning which was stunning in the developed countries has now stepped into the developing countries too. The emergence of e-learning in the developing countries has lent its supporting hand to government to overcome the shortage of teachers (UNESCO, 2006). The e-learning which is more easy and flexible way of education has been used as the tool in the higher education, to increase the number of students in their institutions (Dhanarajan, 2001; Patton, 2000; Potashnik and Capper, 1998). The challenges for e-learning are mainly from two sources technology, human technology wise, the developing countries face problems like, computers, electricity and other technology related skills (Dhanarajan, 2001; Heeks, 2002; Rajesh, 2003). The self motivation, active participation and resistant to change from traditional learning are posing contradictory situations (Eastmond, 2000; Evans, 2005; Sehrt, 2003). If the country understands all the challenges in e-learning before implementing, the cost and time will be saved. There is always a difference that exists between the developed and developing countries in implementing the e-learning and its growth is the reason as number of computers they possess, the technology used and availability of internet. Among the developed countries USA is the one which has more number of computers when compared to all other countries. (Macleod, 2005). They make use of technology in all aspects like enhancement for learning, communicating, and entertainment in their day-to-day life (Chan and Lee, 2007). The challenges that are faced by the developed countries will not be same for the developing countries. The developing countries have more challenges than the developed countries due to lack of infrastructure.

II. E-LEARNING IN DEVELOPED COUNTRIES

Learning is the key for success and growth in the life of individual, it also suits for the organization and nation through which new technologies are learned and implemented. The e-learning makes learning easier and comfortable. The most of the e-learning activities are done in the workplace and their home. The developed countries view the development of e-learning is the responsibility of government and not only the responsibility of the concern institutions, UK has set-up a board called quality of assurance agency (QAA) as the code of practice for e-learning. According to the European university constitution, all universities have two major functions, one is teaching and other is research. The constitution defines the universities as, "they should preserve the traditional knowledge, and they should transfer it to the upcoming generations". They should assess and expand the knowledge through research process (Katsikas, 2006). E-learning with ICT act as the virtual universities through which learning become easy and flexible which may become threat to the profit oriented institutions in course of time (Nawaz and Kundi, 2010). The important reason behind the increasing number of offerings of e-learning courses in the higher education institutions is the decrease of support mainly, financial support of the government to this institutions (Maddux et al, 2005). Even though developed countries insist e-learning, the universities are more concern about their teaching methods and does not completely rely on the technology. The universities believe that independent learning can made possible with the help of ICT and give access to it to all students and teachers access and learn up to date technology and study materials and journals from nook and corner of the

world. With the help of ICT, the bonding and communication between the student and teachers has been increased to a great extent (Lewis and Goodison, 2004). The usage of e-learning and ICT is more in student community rather than the teachers (Nawaz and Qureshi, 2010). When compared the student of e-learning community and face to face learning, it is known that the online learners are capable of collaborative learning and environment of rapid development, whereas the face to face or traditional learners exhibit more confidence about their learning outcomes. To overcome this, the student should be given training and knowledge about the integration of technology with teaching and learning (Nawaz and Kundi, 2010). The university takes steps to implement e-learning in order to inculcate group collaboration and even make changes in their curriculum with learner requirements to promote constructive learning and teaching process (Nawaz and Kundi, 2010).

CHALLENGES

Online learning offers unlimited learning opportunities to the users though there were merely the printed versions of traditional learning (Robert Eward, 2004). In near future, the online learning may lead to the thought of need of teacher is unnecessary. The major challenge lies in the developing and implementing the strategies that are framed in order to sustain the global competitive market (Sahay 2004). There exists the gap between the technology and teachers existing pedagogy. There is lack of integration between the teacher and technology (Zhoo & Bryant, 2006). Another challenge that the developed countries face is the dropout ratio is bit high. To overcome the above challenge the e-learning course should be framed according to the user perception. There are very few challenges in the developed countries since they have proper infrastructure and knowledge about the technology.

OPPORTUNITIES

The opportunities that are available to the higher education institutions of developed countries are due to availability of resource like technology infrastructure like, computers, electricity, internet, etc. the success of implementation of the online learning depends on the extended support from top management, financial support, faculty involvement, technical skill and technology support (valdez et al, 2002). There are vast opportunities for e-learning in developed countries since they use them in all level of education. British educational Communication and technology agency (BECTA) extends its support to all the educational institutions which opens the wide opportunities for innovation, research and improvement, in ICT strategies developments and for knowledge transfer facilitators. It does not benefit only to the users or learners but also to the educational institutions and many other stakeholders. The Australian government provides opportunity by creating the information economy through which many of them have benefited either directly or indirectly which in turn helped in raising the standard of living and meet the global competitiveness (national office for the information economy, 2002).

III. E-LEARNING IN DEVELOPING COUNTRIES

The developing countries view the e-learning process as the prospective way or method to endorse the growth of economy and the relationship with other countries (Macleod, 2005). There is the perception that prevails among the developing countries that the implementation of e-learning helps in providing better quality of the education (Hvorecky et al, 2005). The developing countries started to adopt ICT by 1990's with the help of emergence of internet, growth in global economy and the digital communications (Mujahid, 2002). The sense of isolation has been reduced to a greater extent with the help of e-learning (Tinio, 2002) and also helps in digital integration among the developing nations (Macleod, 2005). The approach that is being followed by the developing countries is sort of blended approach which includes different methods and modes (Thurab, Nkhosi et al, 2005). The Indian education system is framed in such a way that it is more instrumental and focused in various aspect of the global economy (Jonathan Ezer, 2006). The adoption of e-learning and ICT (Internet Communication Technologies) has brought many changes among students and society in the following aspects like, motivation and confidence levels, it also helped them to improve the technical skills and the communication skills (Tubaishat et al, 2006). The perceptions of developed and developing countries are entirely different (Crichton and Kopp, 2006). The developing countries rely on traditional teaching rather e-learning for higher education (Sanyal, 2001). India is most expected country among developing countries to be ranked first among the development of ICT application (Krishna and Mathur, 2006). This is with held due to various reasons like technological and socio-economic challenges that prevail in the developing countries (Sife et al, 2001). The role of student and teacher is very vital to implement the e-learning. It depends on the power distance, inequalities and the external to which it is accepted and overcome them (Hofstede, 1984). The e-learning implementation can be improved by categorizing the challenges and pay attention according to the priority. There is a huge gap between the using of the technology in schools and other educational institutions and the allowing the student access them. Developing countries uses combined approach of diffusion and enabler to maximize the benefits of economic growth in very short span of time (hammed, 2007).

CHALLENGES

The developing countries have huge population, so that it takes time for technology and development to reach the entire population. The benefit of the technology does not reach to the people who could not afford huge cost for education (Macleod, 2000). Even though the developing countries face many challenges, it produces many network, software engineers and high export earnings through them (Krishan, 2006). The challenges are lack of awareness and systematic approaches towards technology, lack of technical support and administration support toward the implementation and attitude towards technology and transforming education system (Nawaz and Qureshi, 2010).

The major obstacle for the integration of technology is social and culture difference that exists in developing countries (Tubaishat et al, 2006). The perception on e-learning depends upon the experience, age, gender, accessibility to technology etc (Mehra&Mital, 2007, Nawaz, 2010) and the lack of educational technology and poor integration towards globalization. It also faces challenges like lack of support from government on the financial front, lack of efficiency and qualified trainer to teach the e-learning technology. The challenges also lie in poor availability of software and hardware that supports the e-learning environment and quality or standard of education. The factors affecting the acceptable of e-learning among student are unawareness, cost involvement to learn computer technology and low computer literacy level. There is lack of change and awareness even offer introduction of ICT in education system in teaching and learning approaches. The level of proactive and discipline is less in e-learning when compared with traditional learning in developing countries (Schulmeiste, 2008).

OPPORTUNITIES

The opportunities that are provided by ICT to developing countries are enhancement in enrollment of students into educational system and provides many learning opportunities to huge population (Tinio, 2002). The population of developing countries is the boon and asset to them and increase in the demand for higher education can be overcome by implementing e-learning (sattar, 2007). The up-gradation of learning and teaching process could be overcome through implementing e-learning in the education system (Nawaz et al, 2001). The implementation of ICT helps to enhance the educational system as well as the economic growth and helps in development of human resources (Tubaishat et al, 2006 and Nawaz et al, 2011). The reason behind the external opportunity for e-learning is funding from multilateral organization and international agencies which avoid the financial issues in implementing the technologies supporting e-learning (Hameed, 2007).

IV. COMPARISON OF DEVELOPED AND DEVELOPING COUNTRIES

In this section the approaches and practices that are followed by the developed and developing countries are discussed. The developed countries follow two types of approaches towards the e-learning environment. They are substantive and instrumental. The developing countries also follow two types of approaches towards e-learning environment and are similar to those of developing countries but since they are more effective due to infrastructural support. The practices that are followed by the developed countries are active and substantive method where as developing countries uses only prominent or dominant method of practice towards the implementation of e-learning. The challenges and opportunity that are faced by developed and developing countries are more similar, in developed countries there is a lack of motivation and active participation on the part of the users. When we discuss about developing countries they face many challenges and the most important among them are lack of technology or infrastructure and lack of support from the government. When we come to the opportunities front, the developed countries have more opportunities in the resource professionalism, and the developing countries have availability of ICT and which inturn helps in economic growth and development in educational system.

V. DISCUSSION

The developing countries follow the foot prints of developed countries along with their own strategies in the implementation of e-Learning environment. The reason behind this approach is the developing countries use the technology which was already used by the developed countries. In USA the level of usage and application of internet and e-learning in the education system varies among the developing countries itself this differences arises since each of them follows their own method of education system. The main challenge lies in training the teachers, while implementing the e-learning environment. The developed countries are well trained and updated with the technology used. The user perception also plays major role in the e-learning in both developed and developing countries

VI. CONCLUSION

This paper compares the e-learning environment and its difference between the developing countries. This paper has identified the challenges and opportunity faced by them. The developing country faces more challenges like lack of infrastructure, trained instructors, lack of financial support, Government policies and less student readiness. But e-learning provides more opportunity since it is in developing stage. The things that are to be learned from developed countries are support from the government, proper training regarding technology and awareness of e-learning and user's readiness to learn new technology. If the developing countries could adopt the success factors of developed countries in terms of e-learning implementation there is huge potential market for e-learning in developing countries since it has huge population and huge difference in student and faculty enrollment ratio. The developed countries have financial support from the government with clear action plans for future proceedings. They have uninterrupted electricity supply and internet facility. Even though developed countries are strong in infrastructure the challenges faced are found related to student engagement, student motivation, and high student drop out ratio. Opportunity for the developed countries is to implement successful e-learning models, which in turn improves the economic growth of the country. They increase productivity to maximum level with minimum effect by using ICT through which knowledge can be shared across the world. If proper steps are taken, the challenges and the differences between the developed and developing countries can be minimized to a greater extent in implementation of e-learning in higher education. Developing countries like India the premium institution (IIT's) taking some initiation towards implementing e-learning in an Indian context. NPTEL is the portal created by IIT's and they started offering online courses across the world.

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