

EVALUATING THE AWARENESS AND PERCEPTIONS OF ADVANCED LEVEL TEACHERS IN USING E- LEARNING IN SRI LANKA

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ABSTRACT

Although the execution of e-learning initiatives has reached advanced stages in developed countries, it is still in its infancy in many developing Asian nations, Sri Lanka in particular. Sri Lanka has initiated limited attempts to use e-learning alongside traditional classrooms. However, different obstructions are preventing successful adoption of this technology. The present research aimed to highlight challenges that hinder effective implementation of e-learning among advanced level teachers. A total of 147 respondents voluntarily participated in the survey. Data was then analyzed and reported quantitatively and qualitatively. This provided in-depth understanding to the current status of e-learning in state Sri Lankan universities and highlighted major hindrances of its successful application. Moreover, teachers faced with some barriers that prevent them to employ technology in the classroom like; lack of reliable Internet connectivity, lack of training, inadequate devices for both teachers and students, and shortage of class time needed to integrate technology in classroom. The study recommends among other things to provide training programs, workshops and seminars to improve teachers' skills in integrating technology. Furthermore, it suggested to equip students and teachers with a reliable Internet connectivity and technology devices and to provide teachers with enough time to prepare for using e-learning tools.

Keywords: *E-learning, developing countries, challenges of e-learning application, Information Communication Technologies (ICTs)*

INTRODUCTION

An education system is the broader means of academic learning, beyond formal schooling and informal education. The higher education has a greater impact on the society so it has greater responsibility towards the entire education system as a whole. Achieving quality education for all is one of key development priorities. In this regard the advantage of technology has paved way for globalization. The advancement varies from small microprocessor 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(Chan, Roschelle et al. 2006, Sife, Lwoga et al. 2007). 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. 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. 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(Fuchs 2008) .The self-motivation, active participation and resistant to change from traditional learning are posing contradictory situations. 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(Toffler and Alvin 1980).They make use of technology in all aspects like enhancement for learning, communicating, and entertainment in their day-to-day life (Lee and McLoughlin 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.

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 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 pre-serve the traditional knowledge, and they should transfer it to the upcoming generations”. They should asses and expand the knowledge through research process. 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. The essential rationality 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 relay 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 great extent (Lewis and Goodison 2004). The usage of e-learning and ICT is more in student community rather than the teachers. 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 exhibits more confident 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 step 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).

E-LEARNING APPLICATION AND CHALLENGES IN DEVELOPING COUNTRIES

Prior studies attempted to identify challenges that hinder effective implementation of e- learning in developing countries. Each study considered a particular case to understand this phenomenon(Romiszowski 2004). On the other side, developing countries have apparent differences in their cultures, level of education, and economic state. Hence, further analysis is required, especially in countries where little or no research has been conducted.

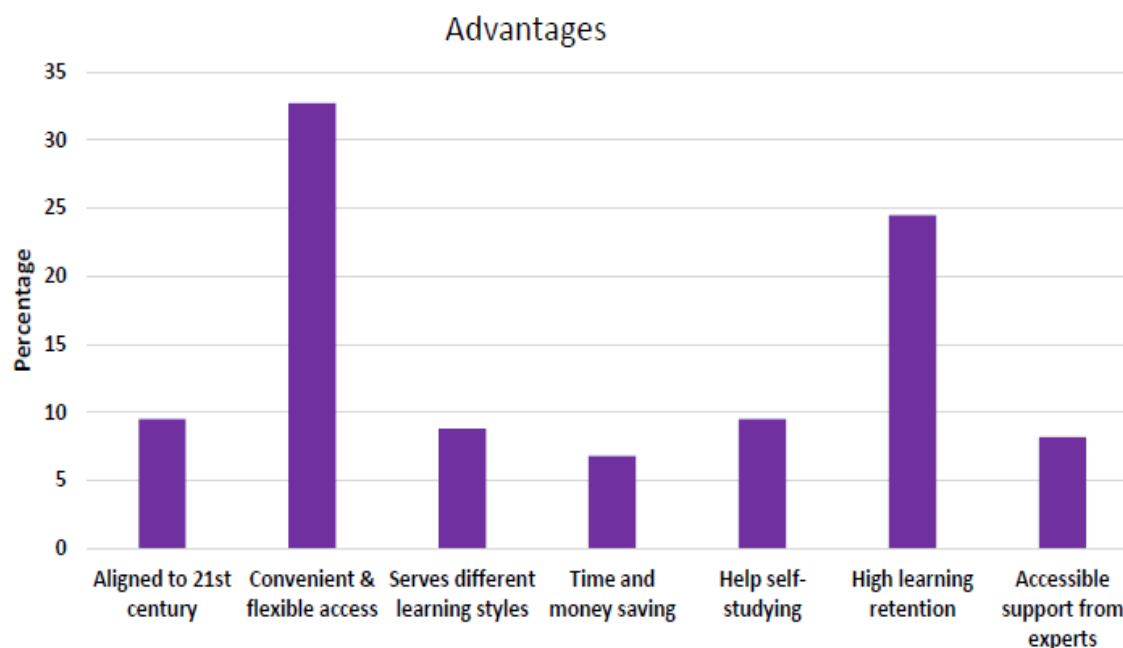
The study displayed that there is potential for e-learning initiatives in order to develop the education sector in these countries. However, poverty and lack of ICT infrastructure are the main issues that have been revealed. Moreover, classified obstacles that developing countries face in e-learning use into three groups. The first one is called "personal challenges." This group includes factors that associated with internal personal features, characteristics, and behavioral habits. The second group is "attitudinal inhibitors." It

encompasses internal variables that are more relevant to attitudes and perspectives of users regarding e-learning features. Finally, "contextual inhibitors" group is relevant to external variables that comprise the lack of ICTs skills and organizational assistance in the use of e-learning technologies.

CHALLENGES

Online learning offers unlimited learning opportunities to the users though there were merely the printed versions of traditional learning (Naresh and Reddy 2015). 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. There exists the gap between the technology and teachers existing pedagogy. There is lack of integration between the teacher and technology. Another challenge that the developed countries faces is the dropout ratio is bit high (Darling-Hammond 2015). 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.

Advantages		Frequency	Percent
Valid	Aligned to 21st century	14	9.5
	Convenient & flexible access	48	32.7
	Serves different learning styles	13	8.8
	Time and money saving	10	6.8
	Help self-studying	14	9.5
	High learning retention	36	24.5
	Accessible support from experts	12	8.2
	Total	147	100



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(Sultan 2010). 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. 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(Condie and Munro 2007). 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).

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 substantial 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 whereas developing countries uses only prominent or dominant method of practice towards the implementation of e- learning(Moens, Broerse et al. 2010).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 essential 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 in turn helps in economic growth and development in educational system.

FINDING NEW PATHWAYS TO LEARNING

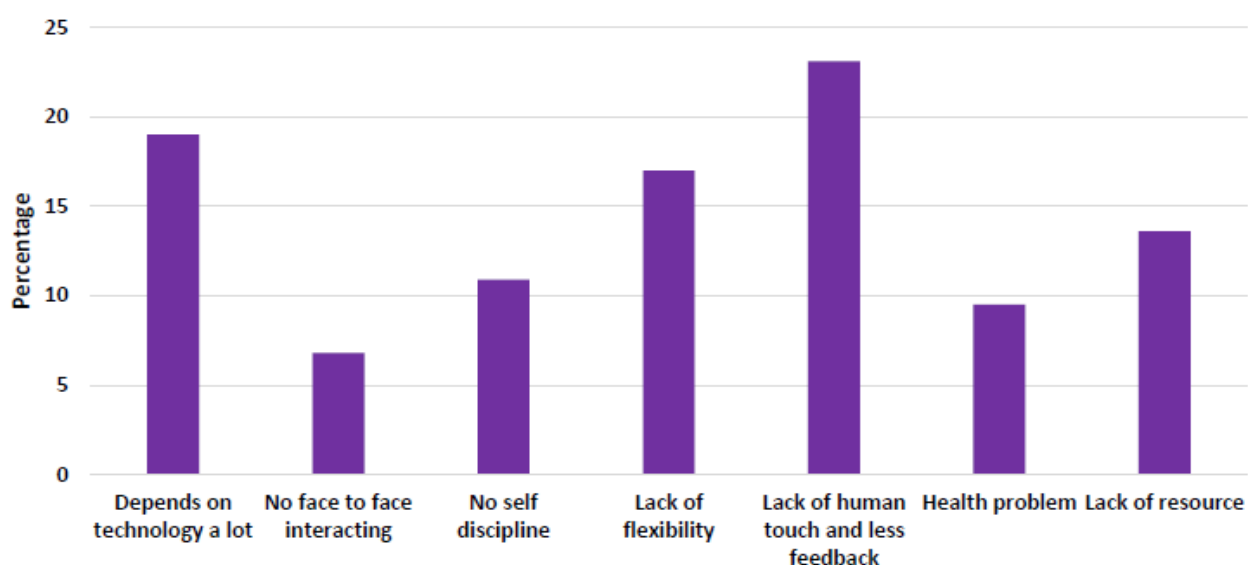
The application of e-learning has significant impacts on Higher Education. In this era, learners can flexibly choose the most appropriate learning mode in accordance with their preferences or commitments, or both. Previous studies demonstrate that effective e- learning implementation is a means to solve authentic issues of learning and achievement

.Change will not come easily in the developed nations(Govindasamy 2001). They have centuries of tradition behind their systems that will make changing a slow and sometimes painful process. There will be resistance from those who say that only the traditional way of learning is worthwhile. In the years to come, we will see these institutions fade into irrelevance as learners and those who employ them flow past looking for new ways of constantly accessing knowledge. Throughout that time; there has always been debate about the quality of the learning undertaken by distance learners. The university has ensured, therefore, that the experience of both groups of students is equivalent. The same staff who teach on campus also teach at a distance, and it is their responsibility to ensure the quality of what they do is maintained for all students. This attention to quality means that, today, Massey enjoys an enviable reputation for a high standard of learning around the world.

The developing countries ensue the foot prints of developed countries along with their own strategies in the implementation of e-Learning environment(Naidu 2006). 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 various 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(De Castell, Bryson et al. 2002).

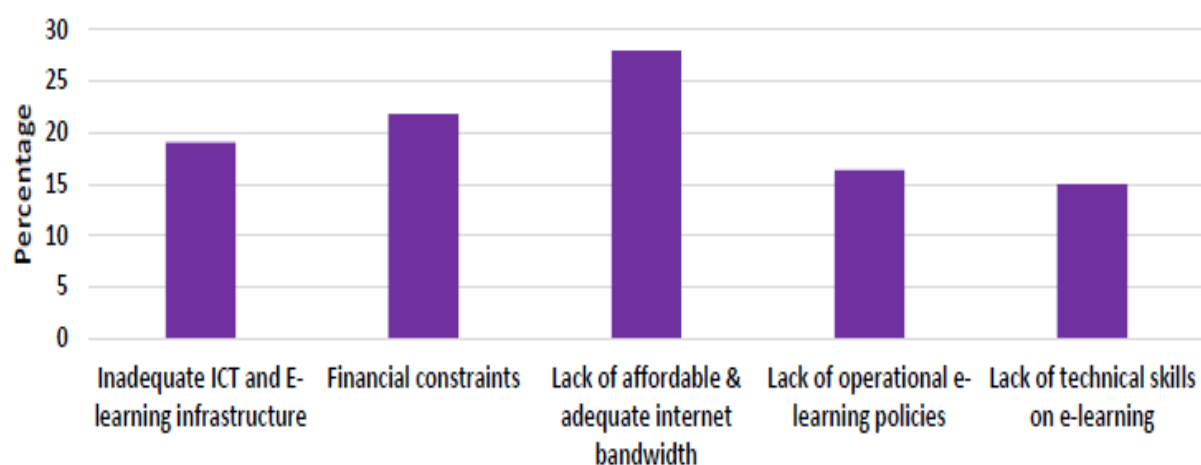
Disadvantages		Frequency	Percent
Valid	Depends on technology a lot	28	19
	No face to face interacting	10	6.8
	No self-discipline	16	10.9
	Lack of flexibility	25	17
	Lack of human touch and less feedback	34	23.1
	Health problem	14	9.5
	Lack of resource	20	13.6
	Total	147	100

Disadvantages



				Frequency	Percent(%)
Valid	Inadequate ICT and E-learning infrastructure			28	19
	Financial constraints			32	21.8
	Lack of affordable & adequate internet bandwidth			41	27.9
	Lack of operational e-learning policies			24	16.3
	Lack of technical skills on e-learning			22	15
	Total			147	100

Challenges



RECOMMENDATIONS

From this analysis, it can be distinctly indicated that a successful implementation of e- learning is not something that can be achieved by, for example, installing an e-learning system and providing access for all users. However, a set of initial steps must precede e- learning application. This study render some recommendations that can be followed in order to fulfill the objectives of e-learning implementation in Sri Lankan public universities(Ossiannilsson, Williams et al. 2015). These recommendations were inspired from the respondents' comments.

CONCLUSION

The present research aimed to cast some light on major challenges that hinder effective application of e-learning in developing nations. A case was chosen from Sri Lanka because e-learning has been recently implemented in some public universities. Findings exhibited that the use of e-learning in Iraq is still at a very early stage(Al-Azawei, Parslow et al. 2016). In addition, it was illustrated that most public universities have started limited attempts to apply either custom or open source e-learning applications, but the majority of academic staff still do not have enough knowledge and skills to use it properly. This investigation confirmed the findings of existing studies about obstacles to e-learning integration in developing countries, and filled the gap regarding the Sri Lankan context(Jahan, Habib et al. 2012).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. This research sought to identify the main challenges in e-learning adoption developing countries face. Generally, responses were classified into either external or internal factors. The former is related to educational institutions or current circumstances in Sri Lanka. The latter, on the other hand, is associated to intrinsic features of users themselves. The interesting result is that both academic staff and students highlighted similar challenges. This suggests that decision-makers, leaders, and e-learning administrators should exert great effort to address them. In a case of mixed methods, quantitative analysis can be first reported and then it can be supported or rejected by qualitative results.

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