3-5 February 2014- Istanbul, Turkey
Proceedings of INTCESS14- International Conference on Education and Social Sciences

515

E-learning and Pakistan - An Era of Modern Education

Muhammad Zeeshan Akbar

Department of Microbiology & Molecular Genetics, University of the Punjab, Lahore, Pakistan
zeeshan.mmg@pu.edu.pk

Keywords: E-learning, ICT, Virtual University, Digital Collaboration.

Abstract. E-learning is a flexible approach towards learning, providing various ways of effective utilization of IT infrastructure like Social Media / Internet / TV to deliver advance training and education. It includes but not limited to Internet based learning, Computer assisted learning, virtual classrooms with digital collaboration etc.

Pakistan, where 67% of the people live in rural areas with minimal opportunities to receive quality education, e-learning is one of the key initiatives to create education opportunities through ICTs, specifically the internet within the reach of the digitally divided rural community.
Virtual University of Pakistan (VU) is among the pioneer e-learning initiative at graduate and post graduate level in Pakistan. The main motivation behind establishing such a full-fledged university is to deliver quality education at different disciplines by combining television, internet and all the modern IT approaches. The success of university has now open doors for various other educational institutes to come forward and provide quality education to the mass.

Internet is a very effective communication tool these days. You can put strength in e-learning by adding this valuable resource which can bring personalized services and an individualized approach to the learner. Despite the benefits of Internet in e-learning there are issues involve in order to spread internet technologies in underdeveloped countries like Pakistan. Culture, language, availability of infrastructure, quality control are few which can impact a lot in the success of learning via internet approach. Government of Pakistan proactively trying to spread telecommunication network across every town and village in order to provide opportunity and empowerment specifically, to the rural communities for the access of education and employment.

This paper provides a high-level overview on the background and current e-learning initiatives and directions to the policy and strategy making in Pakistan. That is not limited to benefits but also highlights the potential issues involve in order to spread education among 184 million people with only 33% live in urban areas. The paper also highlights the emerging trend of creating a Virtual Community which is not restricted to any country boundary but a single hub of same thought across everybody. The paper concludes by presenting a detailed survey on e-learning usage in Pakistan. This comprehensive survey was conducted in Jan 2013 to find out and observe the problems and their potential solutions for e-learning and ways to improve current situation of e-learning in Pakistan.

1. Introduction

Online or web-based learning is the modern approach for e-learning. Over the past couple of years, countries have developed a much deeper understanding of how online learning can become more flexible by utilizing the mix of electronic media (Internet, Satellite, Interactive TV and CD-ROM). Online learning includes the use of Information and Communication Technologies (ICT) to support face to face delivery, blended learning, and covers a variety of technologies from e-mail to Integrated Learning Systems (ILS). [1]

3-5 February 2014- Istanbul, Turkey
Proceedings of INTCESS14- International Conference on Education and Social Sciences

516

E-learning research survey was conducted in January 2013. The objective of the research survey was to collect information about e-learning and to identify the associated issues for a developing country i.e. Pakistan. The survey was circulated to 3000 participants and response was received from 2612 participants from all over Pakistan. Data was analyzed to know the key features that determine the progress and advancement of e-learning industry in a developing country.

This paper does not focus on using the emerging technologies for instruction, such as mobile technologies, as the aim is to provide a broad and high-level view of issues related to e-learning.

2. E-Learning development in Pakistan

Pakistan has a population of 184 million and 33% of the people live in urban areas and 67% live in rural areas. According to UNISCO a decade back, 56% people (adult) were illiterate with no opportunity to get the professional education. To decrease the illiteracy ratio large number of trained teachers, educational institutes were required, which was a very costly proposition. Government of Pakistan, understand the issues and developed a strategy to introduce E-Learning in Pakistan after successful setup and running of distance learning federal government institute (i.e. Allama Iqbal Open University). Virtual University of Pakistan (VU) was established in 2002 with the aim to support E-learning sector to improve both quantity and quality of professionals and to spread the education to the masses. VU partnered with colleges/institutes across the country and also started their own TV channels to ease the learning. [2][3]

Virtual University of Pakistan (VU) gathers the scattered intellectual resources on a single platform, and then makes their expertise available to students across the length and breadth of the country as well as to students overseas, all at a very affordable cost (only USD 15 / month)

Table 1, Facts and Figures-Virtual University of Pakistan

Work initiated:	November 2001
Inaugurated by the President	March 23, 2002
Federal Charter granted:	August, 2002
First Enrollment:	March 2002 • 500 students • 28 private centers • 18 cities of Pakistan
Currently:	Oct 2013 • 70,000 students • 29 own centers • 171 private centrers • 119 cities of Pakistan
Degree Programs:	Only one in 2002 "Computer Science" now 13
Own Television Channels:	4 TV Channels

3. eLearning startup – High level Challenges/Issues for a developing country

3.1 Infrastructure and Internet Access

Access of Internet and infrastructure availability is the biggest issue for developing countries to start their e-learning programs. The people in rural areas/villages do not have access to computers / internet and without this combination e-learning is not possible. Pakistan government took the initiative and focused on internet penetration in the country. The support of Government was the motivation for establishing the online programs. Universities also support government initiative and offered their partnership with small rural/town institutes to provide standardized facilities to the students. [2]

3-5 February 2014- Istanbul, Turkey
Proceedings of INTCESS14- International Conference on Education and Social Sciences

517

3.2 Cultural Shift

Unlike European countries, it is difficult to challenge the teacher on most of the instances since the groom-up of kids always shows great respect for a teacher. To neutralize this cultural issue, VU developed discussion boards and opinion polls to encourage their students to express and work collaboratively

3.3 Language Barrier

Acceptability of English language is the biggest challenge for spreading the education at regional levels. Urdu is the mother language in Pakistan but no. of regional languages also exists (like Baluchi, Pashto, Sindhi etc.). After analyzing the pros and cons it was decided to adopt English language as mode of education to benefit from getting the access of the content from the internet and also to provide opportunity to the students to improve their English. [4]

3.4 Financial Burdens

The motivation behind spreading up eLearning programs in villages and town is to make it optimum and affordable. VU took the initiative and set tuition fee only USD 15 a month which is still very nominal and far less then the tuition fees charged by other institutions in the country.

3.5 Quality Education, Control and standardization

Quality and standardization of educational program is the key to success. All the students across the country/university must get the same level of education. By combining satellite and electronic media like TV and Internet takes care of this big issue. All the students get the same level of knowledge and also evaluated by same level of experts. [4]

4. Survey Study

4.1 Objective of the study and Target Audience

The objective of the research survey was to collect information about e-learning and to identify the associated issues. The online survey performed in Jan 2013 and circulated to 3000 participants. The response was received from 2612 participants from all over Pakistan. Data was analyzed to know the key features that determine the progress and advancement of e-learning industry in a developing country.
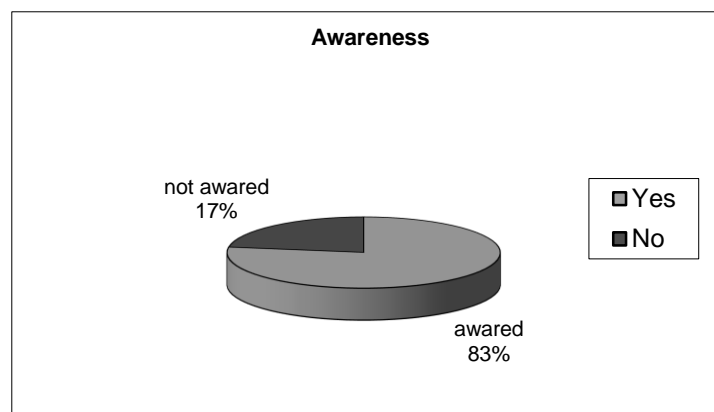
4.2 Study Results

Fig. 1: Awareness

Fig. 1 shows that 83% of the respondents know about e-learning and only 17% does not have any information/idea about it. This indeed is a very positive sign that now people understand e-learning.

3-5 February 2014- Istanbul, Turkey
Proceedings of INTCESS14- International Conference on Education and Social Sciences

518

Motivation Behind Launching eLearning

- Technical Innovation
- Standardization of Education
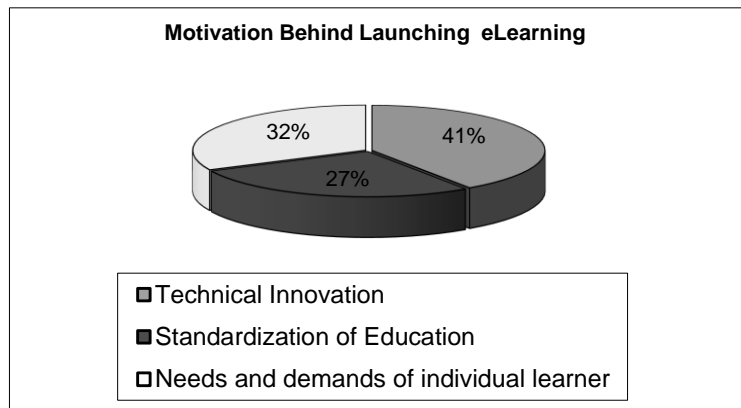- Needs and demands of individual learner

41%, 27%, 32%

Fig. 2: Motivation behind launching eLearning

Fig 2, 41% of the people think technical innovation is the main motivation while 32% thinks standardization of education.
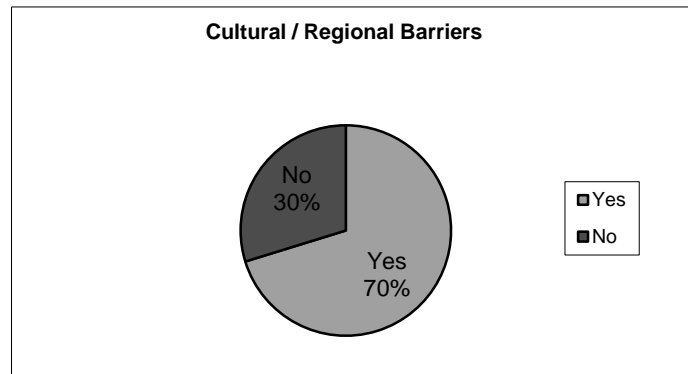
Cultural / Regional Barriers

No 30%
Yes 70%

- Yes
- No

Fig. 3: Cultural/Regional Barrier

Fig. 3, it is evident that 70% respondent agreed that eLearning is a great sources to demolish cultural / regional barriers by utilizing uniform English language and providing same quality and standard of education across the country.
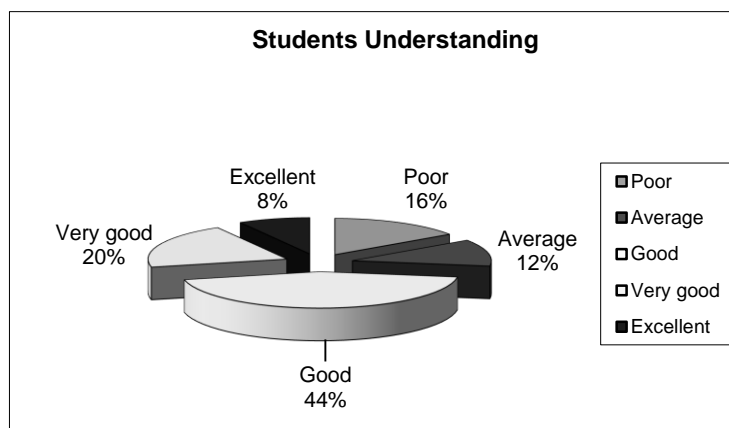
Students Understanding

Excellent 8%
Poor 16%
Very good 20%
Average 12%
Good 44%

- Poor
- Average
- Good
- Very good
- Excellent

Fig. 4: Students Understanding

Fig. 4, 64% of the respondents rated understanding as Good or higher which is quite significant achievement

3-5 February 2014- Istanbul, Turkey
Proceedings of INTCESS14- International Conference on Education and Social Sciences
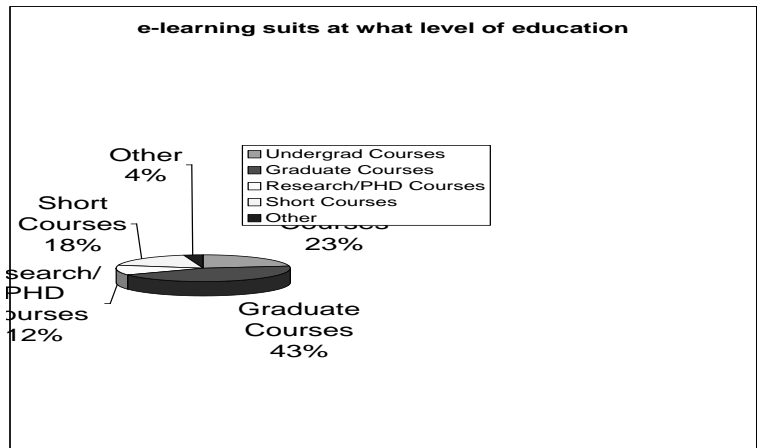
519

Fig. 5: Education Spread

Fig. 5, 55% of respondent are in the favor of providing eLearning at graduate and higher level since people at that level require their own time to study along with work
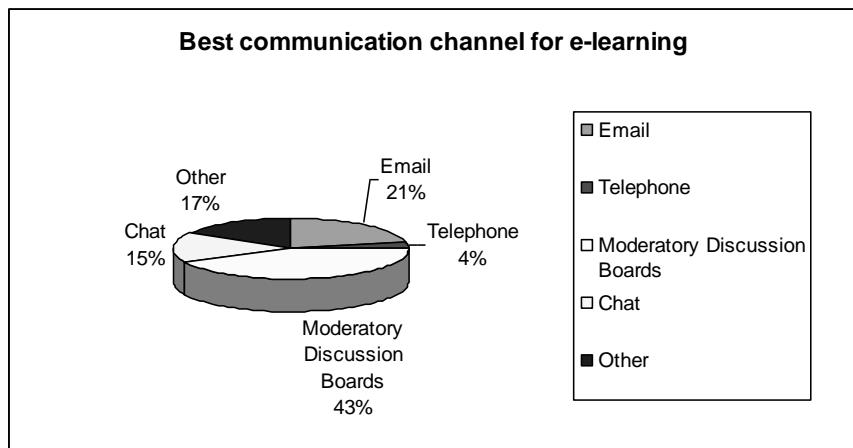

Fig. 6: Mode of Communication

Fig. 6, 43% think Discussion/Opinion Boards should be used as mode of communication for standardized and quality eLearning programs.
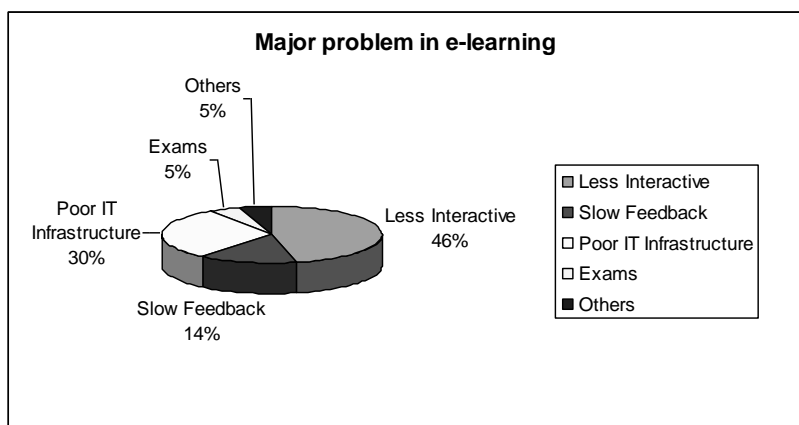

Fig. 7: Problems

Fig. 7, since eLearning is a flexible mode of learning 46% respondent thinks it is quite less interactive. This might be true when the study is student centric rather than centrally monitored and evaluated.

3-5 February 2014- Istanbul, Turkey
Proceedings of INTCESS14- International Conference on Education and Social Sciences

520

5. Summary

In short, without proper planning and management it is difficult to achieve desired results. While we are encouraging people to adopt eLearning program we have to strength the controls. There is no doubt that e-learning is main factor in breaking the cultural barriers in the region and around the globe but quality, standardization, monitoring and control has to be there for achieving the desired results. Private institutes cannot achieve all this without the support of Government to improve the facilities of Telecommunication, Internet and IT infrastructure in the country as these are considered as the backbone for e-learning. Recently, the Punjab government has distributed more than 100,000 laptops to students under E-Youth Program, Solar Systems under Ujala Pakistan Program etc. established Computer labs with computers, interactive whiteboards, internet and intranet to give students broad access to educational resources online.

6. Acknowledgement

References

[1]Ali Raza, eLearning Programmes Overhaul Pakistan's Education, Aug 2013.

[2]Alamdar Khan, The Education System and prospects for e-learning in Pakistan

[3]Ministry of Education, http://moe.gov.pk

[4]Dr.Irshad Hussain, Student Attitude towards Virtual Education