

## **E-Learning as a Means of Knowledge and Learning at Higher Education Level**

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### **Abstract**

E-learning is a new trend in educational scenario that provides easy access to learning opportunities through internet. Internet not only provides a wide range of information through a large plethora of websites on various fields of life; but also provides opportunity to learn specific courses through Massive Open Online Courses (MOOCs). These courses may be helpful in promoting knowledge and skills in various fields of life, especially in the field of education and training. This study intends to examine the perception of students, studying at post graduate level, about e-learning. The objective of the study was to find out how students of higher education in University of Azad Jammu and Kashmir (UAJ&K) use e-learning as a means of knowledge and learning. The trend of e-learning in University of Azad Jammu and Kashmir (UAJ&K) were compared to that in International Islamic University Islamabad (IIUI). A questionnaire was used to collect data that was comprised of questions related to knowledge about e-learning as well as its use among the students of higher education. The responses were analyzed by calculating frequencies and difference in the opinions of the two groups were verified through  $\chi^2$  test. The study concluded that students at higher education level are aware of the importance of e-learning, however, there is need to improve the level of access to these resources.

**Keywords:** E-learning, internet, technology, MOOCs, higher education.

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## Introduction

Students at higher education level have to promote their knowledge through self-regulated learning. It means that they have to set their learning goals and regulate their behaviours towards accomplishment of these goals. They have to find out ways to update their knowledge and equip themselves with the latest skills required in their field of study. The students of this time are privileged with the facilities provided to them by technology. Technology not only opens new prospects for conventional education but also expands learning experiences beyond classroom (Wegner, Holloway and Garton, 1999).

This era of technological boost provides a wide range of opportunities for learning through internet. WBECReport (2000) identified three promising aspects of internet.

- i- It centers learning around the learner
- ii- It focuses on strengths and needs of the learner
- iii- Makes lifelong learning a practical reality

E-learning is the learning gain through the use of electronic media, mostly via internet. Effective e-learning depends on learners' self-motivation and self-regulation. E-learning provides the opportunity of learning on one's own pace according to the interest and requirement of the learner (Deore, 2012). According to Kakoty, Lal and Sarma (2011) the flexible nature of e-learning makes students feel more comfortable in this new education system as it provides "the right information in right time and in right place" (p. 144).

E-learning provides a flexible learning environment in which teachers and learners interact in a virtual environment (Codone, 2001). Kakoty and Sarma (2011) assert that e-learning is mainly cost efficient, accessible and flexible.

According to Kakoty, Lal and Sarma (2011) E-learning involves various electronic media including online internet resources as well as broadcasting resources. These resources enhance the flexibility of learning process and provide a wide range of information in any field. There is a rapid increase in the knowledge and new information is being disseminated everyday through internet and other electronic media, therefore, information and communication technologies play an important role in keeping the knowledge and information updated. These are the tools for independent learning (Amin nd). Muhammad and Al-Karaki (2008) asserted that internet can serve as a reasonable alternative for face to face learning.

Internet and online services has brought change in the educational scenario by introducing new approaches and visions in education making the learning interesting, attractive and self-directed (Blackhurst and Edyburn, 2000).

According to Blezu and Popa (2008), E-learning has lots of prospects in various sectors like: in dynamism, in real time, in collaboration, global reach and delivery of speech. Kakoty, Lal and Sarma (2011) cited The Learning Guild Research Report that one of the most promising application area of e-learning involves improving the quality of learning contents. Vrtič (2012) argues that the sharing of learning resources by individuals and institutions on internet as Open Education Resources has profound effect on education.

Al-Ansari (2006) studied the use of internet by the faculty members of Kuwait University. He found that faculty members mostly use internet for email, information search, communication and publishing research work. Tsvere, Nyaruwata and Swamy (2013) also found that University academics use internet for finding information, publishing research papers, preparing instructional material and refreshing subject knowledge. Muhammad and Al-Karaki (2008) concluded that university students have positive attitude towards e-learning, however the use of internet for learning is not much prevailing in them.

Deore (2012) asserts that internet assist researchers in getting information conveniently. An online library catalog is more efficient way of finding information than a card catalog. Online library is accessible on computers and a database of research publications is available online. Bhatti, Asghar, Mukhtar and Chohan (2011) examined the use of internet by social scientists in Bahauddin Zakariya University. They found that these social scientist use internet to stay up-to-date with the latest information. They also found that lack of latest resources in libraries also leads to using internet resources.

Olson et al (2011) suggested some potential contributions of e-learning in education system. For example, it can deal with problem of shortage of teachers and teaching materials by providing online and offline electronic teaching materials; and also can improve the quality of learning and instruction by providing up to date knowledge and information. Elsaadani (2014) asserted that online instructions have significant value for the institutions of higher education.

Presently, e-learning in the form of Massive Open Online Courses (MOOCs) is gaining consideration. These online courses are available free of cost, however certification requires some charges. Noesgaard and Ørngreen (2015) argued that MOOCs are online replication of face to

face teaching however they “can provide a purposeful space for reflecting on the practice as well as an empathetic customization of the subject matter” (p. 288). Research shows that e-learning is more effective when blended with face to face teaching and learning (Zahid and Raza, 2016; Maheshkar and Soni, 2016; etc) whether in a traditional classroom or through technological sources like Skype and video conferencing.

Some researchers also debated the negative aspects of the use of internet. The reliability and credibility of all internet resources may not be out of question. Sahin, Balta and Ercan (2010) assert that despite the low trustworthiness of internet resources students usually prefer them over traditional library resources. Klierova and Uhráková (nd) reported that use of internet may result in academic dishonesty in the form of plagiarism and academic piracy. Ghazi, Ajmal and Khan (2016) studied the impact of internet use on university students. They concluded that students get updated knowledge and information from internet, however, internet also has negative effects on their health and moral values. Race (1999) suggested some good habits for using internet such as being on track for the required useful information and not distracting with the irrelevant information.

With the vast development and increased use of new technologies, the prospect of e-learning is expanding. There is growing interest in e-learning as it provides flexible and adaptable approaches of self-learning. It provides current information and a chance to contact with experts over the globe in a virtual environment. The research literature on e-learning generally look at the theoretical aspects while the importance and implications of e-learning can better be understood when this phenomenon is seen from students' perspective. Therefore, this study intends to find out the perception of students at higher education level in Pakistan and AJK and their involvement in e-learning process. The importance of self-learning at higher education level is evident. Students needs to be aware of the opportunities that technology provides them for self-learning. The question is that to what extent students at postgraduate level use e-learning as a means of knowledge and learning.

## **Methodology**

This study was descriptive in nature. A survey was conducted to collect the data. Quantitative methods were used for data analysis.

## **Sample**

Participants of the study were selected through convenient random sampling. The selected students belonged to different departments of social sciences in the University of Azad Jammu and Kashmir (UAJK) and International Islamic University Islamabad (IIUI). The total number of participants were 102 out of which 56 (55%) students were from UAJK and 46 (45%) from IIUI. All students were enrolled at post graduate level.

## **Instrument**

A questionnaire was developed in the light of literature review for collecting information about students' knowledge and use of e-learning. It consisted of 15 questions related to various aspects of e-learning. The reliability of questionnaire was determined by Cronbach alpha. The value of Cronbach alpha (.73) revealed high internal consistency of the instrument.

## **Data Collection**

Questionnaires were delivered to respondents through personal contacts as well as through emails. The total number of students contacted was 120, however, 102 responded positively. The return rate was 93%.

## **Data Analysis**

The data were analyzed through frequencies and percentages of responses. Chi square test was applied in order to compare the responses of the students of these two universities.

## **Results**

Following results were obtained after data analysis.

In The University of AJK 25% of students have access to internet at university only, 50% at home only and 25% at both while in IIUI 10 % have access to internet at university only, 40% at home only and 50% at both. There was a significant difference in the access of both universities' students to internet ( $\chi^2 = 7.604$ ,  $df = 2$ ,  $p < .05$ ).

In the University of AJK 80% of students use internet for academic purposes, 6% for entertainment 14% for social contacts while in IIUI 25 % use internet for academic purposes, 14% for entertainment 61% for social contacts. There was a significant difference in the purpose of use of internet of both universities' students ( $\chi^2 = 43.445$ ,  $df = 2$ ,  $p < .01$ ).

In the University of AJK 25% respondents were members of an academic group on internet while in IIUI 70% respondents were members of an academic group on internet. ( $\chi^2 = 20.258$ ,  $df = 1$ ,  $p < .01$ ). In the University of AJK 9 % were members of a research group on internet while in IIUI 21% were members of a research group on internet. There was no significant difference in the response of both universities' students about being a member of research group ( $\chi^2 = .304$ ,  $df = 1$ ,  $p > .05$ ).

In the University of AJK 9% were members of an e-learning program on internet while in IIUI 16% were members of an e-learning program on internet. There was no significant difference in the interest of both universities' students in e-learning programs ( $\chi^2 = 2.073$ ,  $df = 1$ ,  $p > .05$ ).

In the University of AJK 89% had the opinion that e-learning is helpful at higher education level while in IIUI 80% had the opinion that e-learning is helpful at higher education level. There was no significant difference in the opinion of both universities' students ( $\chi^2 = 1.577$ ,  $df = 1$ ,  $p > .05$ ).

In the University of AJK 14% were registered in an online course while in IIUI 12% were registered in an online course.

All the students of UAJK and IIUI who were registered in an online course completed the course. All the students who completed the online courses found these courses beneficial and were willing to register in another course.

The most stated reason of not registering in a course was that students were unaware of online courses (40%). Other reasons were that students did not find suitable courses (30%), did not have interest in e-learning (20%) and did not get enough time to register in an online course (10%).

## Findings and Discussion

It was found that most of the students in UAJK have internet access at home only and university provides only limited facilities of internet to students. Especially students studying in the departments of social sciences have minimum provision of online resources. On the other hand IIUI provides online facilities to students on a larger scale.

Most of the students at higher education level use internet for academic purposes in UAJK. Majority of students in IIUI use internet for social contacts. Students of IIUI have access to the internet both at home and in university, that may be the reason of getting extra time for activities other than academic ones. According to Brändström (2011) student use internet formally in school settings for academic purposes and informally in spare time for entertainment and social contacts.

The students at this level are required to self-learning and internet provides them the opportunity to gain knowledge and information in a flexible, adaptive and accessible way. Though students use internet as a source of knowledge and information, there is little trend of joining an academic or research group online. In their study for examining online education as a tool for learning Maheshkar and Soni (2016) concluded that difficulty in students' access to computer and internet is hindrance in joining online classes.

Students are mostly unaware of online educational resources that can be helpful in their educational and professional development. They cannot find suitable online resources to get benefit from. Other distractions like entertainment and social contracts may keep them off the track. Fuchs and Woessmann (2004) found that accessibility to computers at home may distract students from effective learning.

The trend of enrollment at postgraduate level has been increased these days and e-learning resources are widely available for self-learning that is inevitable at this level. This study explored the involvement of postgraduate students in e-learning and found that despite being aware of the presence of these valuable resources, students' involvement in e-learning is limited. The study has some limitations. First the sample was small and conveniently selected. Only students of social science were taken as sample because these students are generally considered more unlikely to use e-learning resources as compared to physical sciences. This general view may be verified through further research. Secondly the involvement level of students in e-learning was self-reported. A systematic study may be designed to examine the effect of e-learning on student achievements.

## **Conclusion**

Though the importance of e-learning is evident at higher education level, there is little awareness in students. Students use internet for learning and academic purpose, however, they rarely involve in a regular academic program or join academic or research group. The aspects of

entertainment and social contacts on internet may distract students resulting inefficiency in learning useful knowledge. The institutes of higher education should not only facilitate students for accessing online learning resources but also provide information and training for effective use of internet and other electronic learning resources. The problem that students cannot access learning resources on internet can be addressed by allowing students to access institutionally subscribed resources from any convenient place. Students of higher education are aware of the usefulness of e-learning, therefore, appropriate guidance and training will lead to effective use of learning resources.



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