Obstacles for integration of e-learning in higher education in Afghanistan Case study Paktia University

Maroof Khan[1], Dr. Salim Saay[2]

[1] Assistance professor Maroof Khan, Department of Computer Science, Faculty of Education, Paktia University, Afghanistan
[2] Department of information technology, Faculty of Computer Science, Kabul University, Afghanistan

Abstract
Electronic learning or online learning is a part of modern education which is dramatically used in higher education in all over the world. As well as the use and integration of e-learning is at the primary stage in all developing countries. It is the most significant part of education that enhances and improves the educational system. This research is designed to identify and point out the obstacles that influence e-learning in higher education in Afghanistan. In order to have an inclusive research a case study research is perform at Paktia University in southeast of Afghanistan. The research will demonstrate the similar obstacles on country side. This qualitative research is a combination of questionnaires and interviews, the questionnaires will be distributed on higher educational institution lecturers and interviews will be conduct with upper management and information technology department.
Most of the research has declared the use of e-learning in higher education which has influenced effectively and efficiently the education system. Afghanistan higher education is at the primary stage of e-learning However, some of the obstacles are avoiding successful integration of e-learning. The aim of this research is to underline the barriers that hamper the integration of e-learning in higher education. Nevertheless, e-learning has changed the teaching and learning process but integration is faced with many challenges in higher education in Afghanistan.

Keywords: obstacles, integration, ICT, e-learning, higher education, Afghanistan

1. Introduction
The fast progress of information and communication technology in last decades brought many changes in teaching and learning in higher education as using computer for teaching and learning, using multimedia as projector and online training in the globalized world. Similarly, Afghanistan has achieved a typical growth in term of economy in last decade which has a great impact on the development of education and others sector. According to (MoE, 2010) [2] it is stated that ministry of education has considerable attainment in the improvement and enhancement of quality of education in all educational system in Afghanistan. Where the enrollment of girls 38% of the total number of enrollment, this is the great achievement while during Taliban Regime girls were not allowed to attend educational institutions.
Information and communication technology is the need in higher education in all over the world and has dramatically changed the ways in term of teaching and learning in educational institution. Information and communication technology has brought many changes in ministry of higher education in Afghanistan typically has changed the examination, administration and teaching and learning processes. As well as higher education is the most significant sector for the development of human beings which further play an important role in the growth of economic and increase in education. According to (Muianga *et al*. 2013) [3], it is stated that information and communication technology play a vital role in the development of higher education and human capita, improve the quality of education with the support of educational contents, support the educational administrative processes, provide the opportunities for teachers and students to access online educational institutions and improve the knowledge of economy for the development of governance in a country.

After the existence of international security coalition in 2001 in Afghansitan ministry of education and higher education has expanded the opportunities for education and information and communication technology adoption in Afghanistan. The works of (MoE, 2010) [2] indicates international coalition and the government of Afghanistan gave special consideration access to education and integration of ICT in education to improve the quality of education in Afghanistan. This research demonstrates the main factors that avoid integration of e-learning in higher education in Afghanistan as well as the ways that support the integration of e-learning in education. The research will identify the main obstacles that hinder the integration of e-learning in higher education as well as the factors that helps e-learning integration in higher education in Afghanistan. This research will be done as a case study in Paktia University questionnaires will be distributed on 20 lecturers and interviews will be conduct with upper management and information technology of the university. Questionnaires include open end questions and likert scale questions to gather their viewpoints.

2. Literature review
Information and communication technology is the most important portion for the excellence of education that enhances the teaching and learning environment. It has a

great effect on the integration of ICT in higher education in Afghanistan. As this research identify the barriers for integration of e-learning in higher education will also indicates some useful ways and techniques that can overcome the obstacles affecting the integration of e-learning in higher education. As ICT dramatically change the lives of people in all aspects business, access to education, teaching and learning. Suppose most of the educational institutions do not gives value to the integration of e-learning in education due to some reasons. The reasons may be less awareness about e-learning, less professional in e-learning or lack of ICT resources. So there is a need to have an empirical work as evidence to the obstacles hindering e-learning integration in higher education.

E-learning enhances access to education and plays an important role in the development of higher education. Torbjorn and Pitkanen (2012) [5], point out that e-learning has obviously changed the higher education in developed countries in North America and Europe as well as Nordic countries have spent more budgets in information technology tools in education and are known the world leaders in the region. Most of the developing countries trying to adopt e-learning in higher education are still at a primary episode as to calculate with developed courtiers. Nevertheless, developing countries desire to integrate e-learning in higher education which often faced with various obstacles such as imperfect infrastructure and information access, less support from educational institutions, lack of significant resources or internet access, insufficient technological skills and so on. It is believed that practice for the implementation of e-learning relies on the university to train or hire staff relevant to technological aspect.

Integration of e-learning is a new concept in higher education in Afghanistan, the integration of e-learning requires new concept and policies to support the teaching and learning process. According to Singh, Donoghue and Worton (2002), studies indicate that the major challenge in integration of e-learning effectively in higher education is training of staff because of the educational institutions contradict the acceptation of information technology in teaching and learning. They also highlight that the requirements for lecturers is not only to train to apply e-learning aspect of ICT in higher education but keep in mind theories along with ICT based learning. As well as this research point the e-learning environment which has provided the good learning experiences as judge against traditional knowledge setting. Because it is suggested that student perform well in e-learning than traditional learning environment through which quality education come into existence where students get grades and improvement.

The importance of e-learning is broad in all developing countries it gives the opportunities to all educational institutions, professionals and universities academic staff as well as students on national and international aspect to combine one regular state. As (Nelasco, Arputharaj & Paul, 2008) [4] point out that, e-learning has many benefits for the development of higher education in India. Through e-learning academic professional and students can share knowledge, Skill, experiences and enhance the effectiveness and efficiency of integration of ICT resources available in the educational institutions. They also indicated that lectures and students can easily access to unlimited warehouses of information anywhere anytime. E-learning also provides the best opportunities to access the quality faculty and quality study resources to cover distance learning. E-learning removes the bias of sex such as color, caste and religion and offer the individual instruction opportunities which engages and excite the learning environment. A Chinese proverb says that "Tell me, I will forget. Show me, I will remember. Involve me I will understand". So we can say that complicated subjects can be interactive and easy by using e-learning.

3. Materials and Tools

A case study approach is applied to collect data by using questionnaires and interview with Paktia University lecturers and interviews will be conduct with upper management and information technology department. Questionnaires will be distributed on 20 lecturers and interviews till possibility. In order to achieve well information and viewpoints to demonstrate the main obstacles that avoids e-learning integration in higher education in Afghanistan. As well as for data analysis Microsoft excel sheet will be used as a tool.

4. Result and Discussion

After data collection data need to be analyzed to achieve the goal of research as well as to summarize the distributed questionnaires and conducted interviews. The collected data is summarized using Microsoft excel sheet based on percentage. It will identify the main obstacles that hinder e-learning in higher education in Afghanistan. As well as lecturers understanding about the use of information and communication technology in teaching and learning. The result will also declare the readiness of university lecturers for integration of e-learning in higher education.

4.1 Data Analysis

In this qualitative research 20 questionnaires has been distributed on Paktia University lecturer and interviews has been conducted with upper management and information technology department at Paktia University to identify the barriers and ways to overcome the barriers influencing e-leering adoption in education. The questionnaires are distributed on lecturers their highest level of education is demonstrated in the given table 1.

Table 1: Lecturers highest Level of Education

Grade 12	Undergraduate	Postgraduate
0	3	17

To understand overall lectures proficiency in information and communication technology table 2 is summarized.

Table 2: Lecturers Proficiency in ICT

Yes	No	Don't Know
90%	10%	0%

The above table 2 shows that most of the lecturers have information about using information and communication technology which is 90%.

A question asked from lecturers about the access to computer and internet in their educational institution. Their views are summarized in table 3.

Table 3: Lecturers access to computer and internet

Yes	No	Don't know
85%	15%	0%

Table 3 indicated lecturers have 85% access to computer and internet in educational institutions where only 15% have no access to the mentioned ICT resources. In an interview a respondent said 'low internet bandwidth is a big challenge for university lecturers and disconnection of fiber optic cable due road construction and insecurity between kabul-Logar and Logar-Paktia highway road'.

Respondents also asked about student's access to computer and internet in their classrooms the views are shown as below.

Table 4: Students access to computer and internet

Yes	No	Don't know
20%	80%	0%

This table point out that 80% of the student do not have access to computer and internet in their classroom while only 20% of the student have access to computer and internet. In an interview one of the respondents says 'e-learning integration without proper access of lecturers and students to ICT resources and availability of ICT resources

to students is impossible'.

For sustainable system we need to have electricity a question asked from respondents about the proper electricity.

Table 5: Availability of proper electricity

Yes	No	Don't Know
40%	60%	0%

Electricity is the main sources to have proper technology system it sees Paktia University has 40% proper electricity and 60% has no proper availability which has a huge effect on integration of e-learning in higher education. Most of the interview participant indicated that lack of proper electricity in educational institution is a big barrier that hinders e-learning integration for distance learning as well as for teaching and learning purposes.

A question asked from lecturers how often they use the information and communication resources as computer, internet, printer, smart board etc while teaching the subjects their responses are analyzed as below.
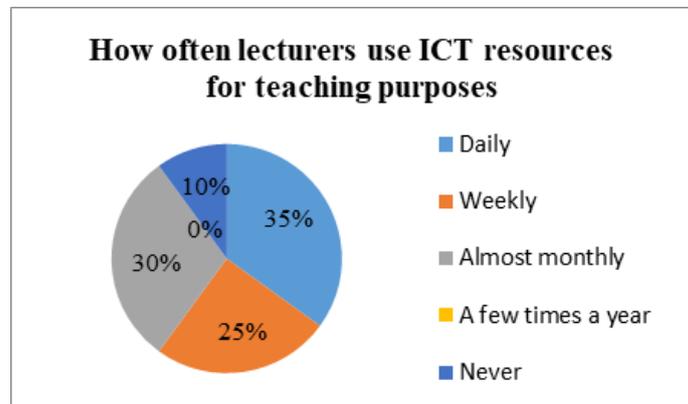

Fig 1: Shows lecturers ICT resources usage in teaching

Figure 1 shows that only 35% lecturers use ICT resources while teaching and 25% of the lecturers use computer, internet, projector and other relevant devices weekly where as 30% almost monthly and only 0% use a few times a years while 10% of them do not have access to ICT resources. Figure 1 show lectures have access to ICT resources for integration e-learning.

As well as a lectures also asked about student access to technology resources their views points are summarized in the given figure.

Fig 2: Show student's access to computer and internet

Figure 2 point out that in Paktia University 25% students have access to computer and internet for learning purposes, 35% weekly, 10% almost monthly and 15% a few times a year while only 15% of the students do not have access to computer and internet.

A question asked from participant about their ability for integration of e-learning in higher education their views are summarized in the given table.

Table 6: Lecturers readiness for integration of e-learning
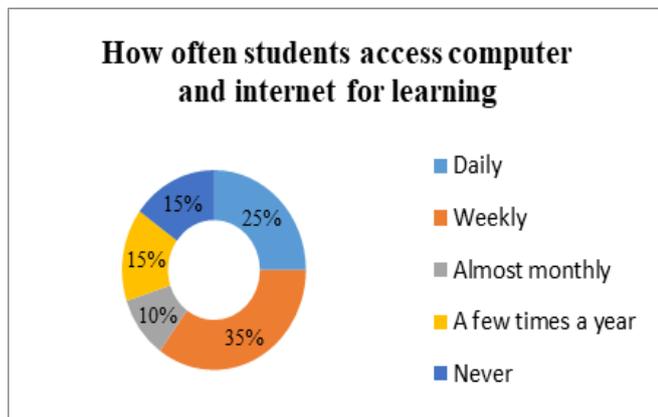
Yes	No	Don't know
80%	15%	5%

Table 6 indicates the lecturer's readiness for integration of e-learning in teaching and learning purposes where 80% of the lecturers are ready to adopt e-learning and only 15% are not ready to integrate e-learning in teaching and learning processes where as 5% are confused for its integration. Most of the participant in an interview also point out that 'all educational professional are ready to adopt e-learning in their educational institutions which enhance the quality of learning'.

In this research a likert skill question asked from lecturers to what extent they are agree or disagree with the given statement that hinder e-learning in higher education. The

table shows their viewpoint as.

Table 7: Shows lecturers views about the given statements

Statements	Strongly Disagree	Somewhat Disagree	Disagree	Agree	Somewhat Agree	Strongly Agree	NK/NA
Lack of ICT resources	5%	20%	30%	15%	15%	15%	0%
Lack of professional in e-learning	0%	0%	10%	45%	40%	5%	0%
Lack of e-learning trainings	5%	0%	25%	15%	10%	45%	0%
Less awareness about e-learning	0%	0%	15%	35%	35%	20%	0%
Lack of digital library in institution	0%	10%	20%	35%	10%	25%	0%
Lack of contents in national language	0%	0%	10%	55%	15%	20%	0%
Lack of technical support	0%	10%	15%	30%	10%	35%	0%
Insufficient e-learning infrastructures	5%	0%	25%	10%	40%	20%	0%
Lack of institutional support in e-learning	0%	15%	15%	10%	30%	30%	0%

In table 7 some statements for e-learning in higher education were identified to the lecturers that hinder the e-learning in education to understand the main obstacles. And to know to what extent they are agree or disagree with given statement. Statement one asked about lack of ICT resources regarding 30% were disagree, 20% were somewhat disagree and only 5% were strongly agree. While 15% were agree, 15% were somewhat agree and 15% were completely strongly agree. Here it seems equality between these two main opposite words which is agree and disagree.

Statement two indicates lack of professional in e-learning in which only 10% of the respondents were disagree while 45% were agree, 40% were somewhat agree and 5% were strongly agree. This shows that there is a lack of e-learning professional.

Statement three in table 7 presents information about lack of e-learning trainings where 15% were agree, 10% were somewhat agree and 45% were strongly agree. As well as 25% were disagree, 0% were somewhat disagree and only 5% were strongly disagree with this statement. It shows that there is lack of e-learning training in institutions.

Statement four indicates information about less awareness. In which 15% were only disagree where as 35% were agree, 35% were somewhat agree and 20 % were strongly agree. This indicates that there is less awareness in educational institutions.

Lack of digital library which is also a main factor influence e-learning in this statement 20% were disagree, 10% were somewhat disagree and 0% were strongly agree. While 35% were agree, 10% were somewhat and 25% were strongly agree with the given statement.

Regarding statement six lack of contents in national language only 10% were disagree where as 55% were agree, 15% were somewhat agree and 35% were strongly agree. It shows that there is a strong need of information in national language in e-learning integration.

Statement seven provide information about lack of technical support. Regarding lecturers indicated their views as 15% were disagree, 10% were somewhat disagree. While 30% were agree, 10% were somewhat agree and 35% were strongly agree.

A statement asked about insufficient infrastructure about e-learning 25% were disagree and 5% were strongly disagree where as 10% were agree, 40% were somewhat agree and 20% were strongly agree. This indicates there is a need for e-learning infrastructures.

The last statement in this table asked about the lack of institutional support in term of e-learning in educational institutions. Where 15% were disagree, 15% were somewhat disagree and 0% were strongly disagree. While 10% were agree, 30% were somewhat agree and 30% were completely strongly agree.

5. Acknowledgment

6. Conclusion

The aim of this research is to highlight the obstacles that hinder the integration of e-learning effectively and efficiently in higher education in Afghanistan. As ministry of higher education implementing e-learning in some public universities a case study research is conducted. The research point out that e-learning implementation need more opportunities in many aspect in educational institutions need to accomplished before integration. Research also indicates that most of the lecturers, students and administrator do not have sufficient knowledge and understanding about e-learning so integration will take time but they trying to integrate. In this research findings demonstrate some obstacles that hinder e-learning in higher education, student's access to computer and internet in classrooms, lack of proper electricity in educational institutions, daily access to ICT resources in teaching and learning, lack of professionals in e-learning, lack of e-learning trainings, lack of contents in national language, lack of awareness, insufficient e-learning infrastructures, and educational institutions support. In some interviews respondents point out lectures acceptance, less time and fiber optic cable severance due to insecurity and construction between Kabul, Logar and Paktia highway road are also considered the barriers that influence e-learning integration in higher education.

However to overcome the obstacles and integration of e-learning take part in higher education in Afghanistan skilled staff need to be hire, most e-learning trainings need to be delivered, educational institutions support and encouragement play an important role, proper sources of electricity need to arranged with redundancy on losing power and support of ministry of higher education will give chance to public universities to adopt e-learning in teaching and learning process.

7. References

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