

E-learning Problems Finding of Afghanistan Universities

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Abstract: *E-learning is one of the new methods of learning, teaching and conducting research in the contemporary branch of knowledge/science. It is assumed that e-learning is fast, continuous, repeatable at anytime and anyplace. Moreover, it increases the passion and motivation of learning. Afghanistan's higher education has been trying to use this educational method effectively in the recent years. Unfortunately, Afghanistan's educational system in the past has suffered from serious shortcoming, concerns about improper infrastructure and resources in education, and also sometimes concern about old pedagogical methodologies are debated. This research answers the questions of academic community and students. The purpose of this study is to identify challenges of e-learning and suggest possible suitable solution for Afghanistan's higher education system. In this research, many questions have been answered by university lecturers and students and collected data has been preprocessed and analyzed by SPSS tool. The final result shows that, Afghanistan's higher education system is relatively decent, but not acceptable. There are still many challenges to the e-learning process in Afghanistan's higher education, and it seems very critical and fundamental. This study will advance frontier of knowledge in the domain of Afghanistan higher education system with regard to invoke e-learning method.*

Keywords: *E-Learning, ICT tools, Success factors, Higher Education*

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I. Introduction

E-learning is considered necessary in modern education. On the other hand, increasing demand for learning, lack of access to training centers, wasting time/spending time, and use of experienced professors caused experts to establish new platform of learning with the help of information technology. This method of learning is economically viable, has better quality and simultaneously encompass a large number of students to learn [1]. Developing countries also faces many opportunities and challenges [2]. Afghanistan's higher education is not exception to these challenges. Basic and professional education from the perspective of UNDP, UNESCO and WSIS are considered important for developing countries economic self-sufficiency. In addition, learning through ICT is also important for developing countries. Therefore, vocational education in Afghanistan also requires this learning method [3]. Thirty-Seven successful factors have been introduced to e-learning success and among these factors, seven challenges have been identified, including: student support, flexibility, teaching and learning activities, accessibility, academic excellence/reward for student's localization of Contents and perspectives [3]. Higher education in Tanzania has also addressed this issue and, using interviews, found that higher education for e-learning faces 5 main challenges such as poor infrastructure, financial constraints, inadequate support, lack of e-learning knowledge, and finally resilience and resistance of professors to change has been identified [4]. Another study [5] shows that the factors of successful e-learning at King Saud University are the effectiveness of its user education, organizational commitment, managerial support, technical support, positive attitude of users, easy use of tools, the effectiveness of training to engineers, the effectiveness of initiative in e-learning, enough human resources, the availability of e-learning information on the web, and the support of relevant departments have been identified. [5] [1].

Now, we can say that the classical method of teaching is no longer sufficient for this huge volume of demand for education. E-learning with help of information technology provides a convenient and quick learning method for universities students. There are several factors involved that make e-learning courses successful/unsuccessful at universities.

All of these factors should be identified and addressed. One of the key factors in the success of the e-learning process is the learning and familiarity of professors and students with the tools of e-learning/technology required. The introduction of e-learning challenges at the University of Botswana shows that poor infrastructure, inadequate IT support, lack of e-learning, lack of leadership support from the university are the main challenges in e-learning problems [6]. In addition, 29.54% of the professors did not agree with the Internet services and 59.09% of the professors said that there is not enough IT support for lecturers and students. The study is based on a recent study by 2008, 2009, and 2012 that the support and implementation of e-Learning has been

successful at the university level. It has also been shown in [6] that the level of skills has also fallen to the extreme. The importance of e-learning in terms of students, according to a national survey of elementary courses in Japan, is 44%, and in advanced courses, 59% is considered important [7]. Still, a large proportion (30.8%) of students in Japan believe that the use of e-learning tools at the tutorial level is hardly useful and 32.0% believe that it is rarely useful at the tutorial level. 27.8% believe that they are sometimes useful and 6% believe they are often useful [7]. In another article by Annika Anderson of Obero University, Sweden, using a framework, identified seven major challenges in electronic education in Sri Lanka. The research used data from 2004 to 2007 and ultimately identified challenges to student support, flexibility, teaching and learning activities, access, academic credibility, localization, and attitudes [3].

This paper aims to identify and assess the level of awareness of lecturer and students of Afghanistan's universities on e-learning tools. The population under study is the Afghanistan's lecturers and students of universities. Due to the widespread nature of the community studied, the case study of this research is considered "Shaheed Prof. Rabbani Education University I think the name is incorrect" and is one of the most prestigious universities in Kabul City of Afghanistan. This university is one of the four universities in the capital of Afghanistan.

The research has been conducted publicly to find the challenges of e-learning in Afghanistan's higher education and suggest appropriate solutions. In fact, the attitude of lecturer and students to discuss the importance and challenges of e-learning in Afghanistan's higher education has been discussed. By using two types of questionnaires, lecturers and students are selected randomly. According to a case study, 39 lecturers and 43 students from the third and fourth classes of the university are submitted questionnaires. This university is one of the prestigious universities of the capital (Kabul University, Kabul University of Medical, Kabul Polytechnic University, Prof. Shaheed Rabbani Education University), which has enhancing in e-learning and teaching methods. The facilities and infrastructure of this university do not differ much from the others three universities. It has even started e-learning process earlier than other universities and welcomed the Ministry of Higher Education with great pleasure. So far, one of the e-learning projects on the part of Afghanistan's higher education, supported by USWDP and introduced the Edx platform, is well underway.

II. E-Learning In Higher Education Of Afghanistan

E-learning has been accepted since 2014 as an effective learning tool in Afghanistan's higher education. According to the Ministry of Higher Education's five-year strategic plan, the e-learning strategic plan and e-learning action plan for the Ministry of Higher Education is very clear that the ministry is working hard to achieve this goal and is keen to implement and succeed [2]. In addition, the e-learning committee operates at the Ministry of Higher Education level, and weekly meetings discussing to provide necessary of trainings for all of universities in Afghanistan. Additionally, e-learning committees are active at all universities in Afghanistan and provide meetings, workshops and trainings for their university's lecturers. One of these trainings is the Edx platform training, which has been set up at three to five rounds at universities. Currently, Edx is one of the major projects that is currently underway to better integrate and improve e-learning. In this case, at least five workshops and conferences have been organized inside and outside of the country. Currently four of the top-level courses under this platform are selected from all universities in Afghanistan and will be used by Edx in the world for Edx's enthusiasts.

However, the Ministry of Higher Education needs to know what the main drivers of e-learning success are and how to succeed. Therefore, the use of experiences from different countries of the world and other universities will be extremely effective and will help Afghanistan's universities. [2]

The research that has been carried out has considered critical success factors (CSFs) to be essential. The e-learning infrastructure, the teacher's attitude, and the level of proficiency, attitude and skill levels of the students, the support of university leadership, the contents of the course, the facilities for access to courses and more others are important factors in the success of e-learning.

In the Afghanistan's higher education, one of the main challenges of e-learning is the lack of an adequate infrastructure for information technology. This infrastructure includes: lack of Afghanistan Research and Education Network (afgREN), lack of required servers, lack of LMS and CMS, and even lack of sufficient professionalism in technology units [9].

Benigno and Trentin, 2000, presents and proposes a framework for evaluating e-learning courses focusing on two characteristics: first, assessment of education, and second, the assessment of students' performance and abilities. In this article, there are factors such as student specificity, student to student interaction, teaching materials, educational environment and effective support of information technology. Research (2000, Volery Lord) explains the outcome of a survey of 47 students enrolled in an e-learning management course at a university in Australia. As a result, the three main drivers of success e-learning (CSFs)

identified: 1. Technology (ease of access and dialogue, design interfaces and interactions), and previous use of technology from the student perspective. 2. Professor (teacher's attitude towards the student, technical skills of the professor and the method of dealing with the student. 3. The previous use of technology from the point of view of students [10].

Chua and Chan, 2001, using case studies, examined the main drivers of e-learning, including: human factor, teachers' ability and their ability to communicate, teacher and students' attitudes, the level of collaboration between students and the IT infrastructure. Also, they recommended that all these factors be considered as a comprehensive approach. According to Dillon Guawardena (1995) and (Leidner Jarvenpaa, 1993), three effective variables in the e-learning environment are effective. (A) - Technology (B) - Teacher attributes (C) - Student attributes [4].

Gavindasmi (2002) has attempted to provide an educational basis as a prerequisite for the successful implementation of e-learning for seven factors for e-learning quality. These seven factors are educational institution support, development and design courses, education and learning, course structure, student support and support, faculty support, and assessment and inspection. According to a comprehensive study by Baylor and Ritchie (2002), the impact of seven independent educational technology components (planning, leadership, curriculum design, professional development and development, the use of technology, the prominence of the professor for change, and the use of computers by a professor outside the academic institution), five skill-related assessments (professional skill, technology integration by the professor, the mentality and professors' interest, the impact of the thinking and content of knowledge and skill of the students) has been studied step by step [4].

III. Methods and materials

What is considered as a major challenge to the Afghan e-learning process is the (repeatedly used in many paragraphs) staff, the lack of recording studios and the lack of skills to use e-learning tools by professors and students are for preparation and development of courses. Of course, the level of skill and attitude of professors and students is one of the important factors in the success of e-learning [8]. There are now internet services at many universities in Afghanistan; however, the necessary services are not available for e-learning, and there are no internal networks between universities or AfgREN and servers required at higher education. This research has been done in three stages: the provision of questionnaires, the distribution and collection of questionnaires, the analysis and evaluation of the questionnaire.

a. Stage One: Preparation of questionnaire

The questionnaire was prepared in two sections; for faculty and students of the university. For the professors, there were 19 questions and 18 students were given questions. In addition, the section of suggestions and comments is also considered. Of course, the types of questions have been in accordance with the interaction and the necessity of professors and the students. Some questions are commonly used by students and professors. For example, the importance of e-learning from the viewpoint of the teacher and student, or the role of e-learning from the teacher/student perspective. In addition, the level of teacher and student skills for the use of information technology equipment has been asked. Different questions from professors and students have been (something missing here) that professors do not use specific tools or why they use it. Another important point is that students learn more about technology tools and teaching methods. Some questions have been asked to identify the teacher's and student's attitudes toward e-learning, technological capabilities, level of use and skill types of use and application. In other words, should be know what's the difference in attitude, level of knowledge and using ICT tools between lecturer and students. When society is moving towards technology, what is the speed of change and progress in the university environment between the teacher and the student?

b. Stage two: distribution and collection of questionnaires

After providing two types of questionnaires, questionnaires were distributed randomly for teachers and students. The distribution method was in a way that was referred to every teacher's room. In case of room opening, the questionnaire was distributed to the teachers. This distribution has been for three continuous days. The distribution of questionnaires for students also was randomly. To select the classroom, at a given time, were referred to the classroom, and in each class, 10 questionnaires were distributed randomly in addition, each student who referred to the department for his administrative work has been distributed. But the first and second classes, because of their low skills and their low familiarity to the technology and the use of computers and the internet, the questionnaires has not been distributed. This questionnaire is sometimes collected after distribution and sometimes after a few days. Unfortunately, the return is not hundred percent, which itself is a sample of non-cooperation in the research process in Afghanistan. It is worth noting that nearly 90% of the questionnaires

have been gathered and are in the next stage (analysis and evaluation). A total of 82 questionnaires were collected.

c. Stage Three: Analyzing and evaluating the questionnaire

In this study, in addition to the skills of teachers and students, the challenges of e-learning at this university, the importance of e-learning from their point of view has also been studied. These issues are generally e-learning problems in Afghanistan. So what's more focused here is to find the skills of teachers and students in Afghan universities. Of course, these skills did not only affect e-learning, but also affected the scientific and educational activities throughout the process of education and research. These skills include the use of the internet, office programs, the use of presentation, Camtasia, Projector, Computer, use and production of video tutorials, familiarity with MOOC, Model, Edx, etc.

In addition, the level of e-learning problems at the university, the level of knowledge of teachers and students about e-learning, the role of teachers and students in e-learning are focused to this study. Getting the level of use and skill of teachers and students is another finding of this research. All the results of this research were analyzed and evaluated by SPSS tool. These analyzes include, the rate of challenges, success factors, importance and role of e-learning, type of learning quality, the level of knowledge and skills about teachers and students. The summary of the results of this research is shown in the following table.

S/N	Items Factors	Student's behavior	Teacher's behavior	Comments
1	E-Learning Problems in your university <ul style="list-style-type: none"> • V. Much • Much • Intermediate • Less 	30.2% 48.8% 0.0% 20.9%	5.1% 33.3% 48.7% 12.8	
2	E-Learning Importance rate <ul style="list-style-type: none"> • V. Much • Much • Intermediate • Less 	67.4% 30.2% 0 2.3%	68.4% 28.9% 2.6% 0	
3	Roles of E-Learning in Quality <ul style="list-style-type: none"> • V. Much • Much • Intermediate • Less 	%42.9 %54.8 %2.4 0	44.7 47.3 5.3 2.6	
4	What types of Quality <ul style="list-style-type: none"> • Learning is sustainable • Learning is sustainable, efficient in work area, easy to exam, motivate to learn • Learning is sustainable, efficient in work area, motivate to learn, education is easy • Learning is sustainable, motivate to learn, education is easy • Efficient for work area • efficient in work area, motivate to learn, education is easy • motivate to learn, education is easy 	Top % 2.3 0 2.3 4.7 7.0 9.3 4.7	Top % 10.3 5.1 7.7 12.8 12.8 5.1 10.3	
5	problem rate in your university <ul style="list-style-type: none"> • V. Much • Much • Intermediate • Less 	30.2 48.8 0 20.9	5.1 33.3 48.7 12.8	
6	Level of knowledge in E-Learning <ul style="list-style-type: none"> • V. Much • Much • Intermediate • Less 	7.1 47.6 0 45.2	25.6 28.2 41.0 5.1	
7	Level of Skill for E-Learning tools <ul style="list-style-type: none"> • Camtasia • Moodle • MOOC • Edx • Camtasia, Moodle, MOOC, Edx • No idea 	Top % 55.8 4.7 0.0 0.0 0.0 14.0	Top % 7.7 2.6 2.6 10.3 12.8 0.0	
8	IT Tools are using by Teachers <ul style="list-style-type: none"> • Yes 	74.4%	94.9%	

	• No	25.6%	5.1%	
9	Success factors for e-learning in university • IT Equipment, Expert Staff, hardware/software, ability of students for IT, ability of teachers for IT • IT Equipment, Expert Staff, hardware/software, ability of teachers for IT • IT Equipment, Expert Staff, hardware/software • IT Equipment, hardware/ software, ability of students for IT, ability of teachers for IT	Top % 20.9 16.3 11.6 4.7	Top % 25.6 10.3 7.7 5.1	
10	failed factors for e-learning in university • No IT Equipment, no support top management, no enough internet, students aren't able to use IT tools • No IT Equipment, no enough internet • No IT Equipment, no enough internet, students aren't able to use IT, teachers aren't able to use IT tools • teachers aren't able to use IT tools • no enough internet, teachers aren't able to use IT tools • No IT Equipment, students aren't able to use IT, teachers aren't able to use IT tools	Top % 23.3 14.0 7.0 0 0 2.3	Top % 5.1 10.3 17.9 12.8 10.3 10.3	
11	More efficient tools • Projector/ LCD, Computer, Video learning • Projector/ LCD, Computer, Video learning, Internet, Moodle • Projector/ LCD, Computer, internet • Projector/ LCD, Video learning, Internet • Computer, Video learning, Internet	Top % 14.0 32.6 7.0 7.0 7.0	Top % 7.7 35.9 2.6 2.6 2.6	
12	Lever of Skill for IT tools • Power point • Power point, upload/download, lecturer recording, making Video learning clip • Power point, upload/download, lecturer recording • Power point, upload/download	Top % 16.3 18.6 32.6 16.3	Top % 5.1 38.5 25.6 12.8	

IV. Conclusion and Suggestion

After collecting and analyzing the questionnaires, the outcome of research showing the main infrastructure of ICT and Network infrastructure like national research/education network isn't available, so it's necessary for higher education. the necessary services by internal networks for e-learning isn't available, so it's necessary for e-learning and using ICT tools. the much more of teacher than students'' doesn't have enough capability to use ICT tools.

According to the research, 68.4% of the professors, 67.4% of students said that e-learning is very important. The teachers agree "The role of the teachers in the quality of e-learning" 44.7% very high and 47.4% is high, and the point of view of students, the role of students is 42.9% very high and 54.8% is high. While, when asked about the quality of education, the highest percentage of teachers and students said that e-learning provides motivation for continuous learning. 94.9% of teachers said they use e-learning tools. And 5.1% of teachers are unable to use electronic learning tools due to lack of facilities or lack of familiarity with technological tools. 74.4% of the students confirmed that their classroom is using technology and e-learning tools. 25.6% of students said that their e-learning tools are not used in their class. 35.9% of teachers have confirmed that they use projector/LCD, computer and educational videos in their classrooms. 20.9% of students agreed with this question. The biggest difference was the use of educational videos that students did not agree with the teachers. In other words, a further percentage (30.2%) of students said that they used projector/LCD and computer in their classrooms and did not approve educational videos. 32.6% of the students said that effective tools in their e-learning are projectors, computers, educational videos and Internet.

There are also much differences between the teachers and students regarding the failure factors of the e-learning process, which is a summary. 23.3% of students failed to fulfill the e-learning process at their university, lacking IT facilities, lack of leadership support, and lack of adequate internet, while the three factors were confirmed by 5.1% teachers. This shows that the students do not have access to the necessary technical facilities, internet and etc. Another part of this study indicates the failed factors by teachers have been lack of IT

facilities, lack of leadership support, lack of adequate internet, lack of student's familiarity with IT tools. Therefore, 17.9% of the teachers said that the failure of e-learning at university was lack of IT facilities, lack of leadership support, lack of adequate Internet, students' lack of familiarity with IT tools, and lack of familiarity with IT tools.

Finally, the research suggests that the lack of ICT support in universities, the lack of ICT internal services, the lack of ICT infrastructure, the low level of ICT students and the low level of ICT teacher skills need to be addressed. All of the above is not acceptable.

References

- [1]. J. Oroma and H. Wanga, "Challenges of E-Learning in Developing Countries: the Ugandan Experience," *Proceeding of Inted2012 Conference*, pp. 3535 -3543, March 2012.
- [2]. A. Ministry of Higher Education, "National Higher Education Strategic plan 2015- 2020," Ministry of Higher Education, Kabul, 2015.
- [3]. M. S. U. Akbar, "E-Learning in Developing Countries: Challenges and Opportunities Bangladesh Perspective," *ICT for Development Program, Bangladesh (ICTDP'B)*, pp. 1-3, 2005.
- [4]. H. M. Selim, "Critical success factors for e-learning acceptance;," *Elsevier*, pp. 396-412, 2007.
- [5]. M. S. Saay, A REFERENCE ARCHITECTURE FOR A NATIONAL E-LEARNING, TALLINN: TALLINN UNIVERSITY, 2018.
- [6]. V. T. G. Benigno, "The evaluation of online courses," *Journal of Computer Assisted Learning*, pp. 259-270, 2000.
- [7]. M. Moakofhi, O. Leteane and T. Phiri, "Challenges of introducing e-learning at Botswana University of Agriculture and National Resource: Lecturer's Perspective," in *International Journal of Education and Development using information and Communication Technology*, Gaborone, 2017.
- [8]. K. Aoki, "The Use of ICT and e-Learning in Higher Education in Japan," *International Journal of Education and Pedagogical Science* , vol. 4, pp. 986-990, 2010.
- [9]. A. Anderssoon, "Seven Major Challenges for E-Learning in Developing Countries: Case Study eBIT, Sri Lanka," *International Journal of Education and Development using Information and Communication Technology (IJEDICT)* , vol. 4, no. Issue 3, pp. 45-62, 2008.
- [10]. D. Kisanga and G. Ireson, "Barriers and Strategies on adoption of e-learning in Tanzanian higher learning institutions: Lessons for adoptions," *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, vol. Vol 11, no. Issue 2, pp. 126 - 137, 2015.
- [11]. M. M. Shafi, "SUCCESS FACTORS OF E-LEARNING PROJECTS: A TECHNICAL PERSPECTIVE," *TOJET: the Turkish online journal of educational technology*, vol. 12, no. 2, pp. 247- 253, 2013.
- [12]. V. Garzia and A. Garavaglia, "Quality of the Learning environment in digital Classrooms: in Italian case study," *SciveVerse ScienceDirect*, pp. 1735-1739, 2012.