Perception study of benefits, prospects, and challenges of e-learning in Libyan higher education with reference to students and educators: Case Study of Open Libyan University

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Abstract: Recently, the interest of electronic platforms development had been increased rapidly, learning through electronic platforms improve the ability of both teachers and students to extend their knowledge in the field of ICT and other sciences, This study would define the features and challenges of e-learning in Libyan Open University for both students and educators, check the availability of e-learning tools, the data which used for this study is collected the from primary source through an interview and questionnaire (survey) with the students and educators of Open University in Libya, the analysis study had Implemented through SPSS of version 20.0, The results had shown that there are various factors could affect the performance of e-learning for open universities such as the difficulty to deal with skills related to electronic device for teachers, and the use of electronic platforms and e-learning tools, also in as well as the lack of network are the basic challenges of e-learning, also students may not check learning websites repeatedly, so that it should treat these challenges as well as develop this techniques for the Libyan Universities.

Keywords: e-learning, open-university, teaching.

1.0 Introduction

The emergence of the internet and ICT (Information and Communication Technology) has a huge impact among the people in this society over the way of conveying the knowledge, as a result, there is an advancement of e-learning. Electronic learning or e-learning have different definitions in the previous literature. Generally, e-learning is expressed as a learning experience or instruction content enabled or provided through electronic technology (Wani, 2013). Usually, the e-learning contents are in electronic form, so it is saved in servers or CD-ROM. Students having a networked computer or standalone computers can access the contents and it is assisted by the virtual instructor and the contents were elaborated to be interactive as well as engaging (Purcell, Heaps, Buchanan, & Friedrich, 2013).

At present, various educational institutions and universities prefer to adopt e-learning in order to increase the effectiveness of their functioning. E-learning is emerging in various developing countries which create a high potential for governments for the purpose of managing the educational demand and overcome the increasing downturn of well-trained teachers (Masino & Niño-Zarazúa, 2016). The institutions of higher education all over the world are in the era of rapid adaption. The adaption of the change in higher education degree and courses provided are relevant to internationalization, customer orientation, learning for lifelong, and virtualizing contextual trends which are considered to be a part of the society (Collis & Moonen, 2012). According to this context, there were no other options for the traditional universities but they can considerably modify the instructional process quickly with respect to the stimulation of the internet. Therefore, adaption and adoption of the technology in the 21st century is not negligible for everybody in the society especially in an educational context (Moyle, 2010). It is not exceptional for Libyan Universities

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and colleges; the majority of the higher educational institutions have beginned to adopt e-learning practices though there are some issues while using e-learning among students and educators specifically open universities. Majority of open universities in worldwide execute e-learning practices and courses for students in order to reduce the time consumption as well as it supports the educators to share their knowledge along with other reputed educators. Considering this aspect, the proposed study attempt to show the benefits, prospects, and challenges involved in e-learning execution in Open University of Libya from the perception of students and educators.

We note that in Libya, as it is the case of many other African countries Alhadi Al Ghawail E. (2019) the use of ICT in education is not sufficiently subsidized. Exception with some prestigious universities.

2.0 Problem statement

As per the statement of Rhema and Miliszewska (2010), the execution of E-learning and the need for ICTs in most of the developing countries like Libya is yet at the beginning stage. However, the open universities in Libya still make use of the old processes for education that is face-to-face communication between the teachers and students inside and outside of the classroom and further learning activities are obtainable only on campus. Though, few of the universities in Libya like Academy of Postgraduate Studies and Economic Research, Tripoli University, and Benghazi University had basic ICT structure like internet access, local area network, and computers. However, Kenan et al. (2014) explained that there are obstacles in Libyan institutions for executing e-learning include mismanagement, cultural, technological and other issues which affect e-learning to get adopted. In terms of open universities in Libya, e-learning practices are slightly emerging in recent years, for example, e-libraries system for students who make a distance education. But still, some

open educational institutions adopted printed materials for learning the purpose of students. This method of practices can consume enough time for both students and teachers. Considering this situation and the personal interest of the researcher towards the improvement of higher education in Libya induce the researcher to take this concept. Moreover, there is a scanty of research papers have focused on the aspect of Libyan students and teacher's perception in terms of e-learning effect. Therefore, the proposed research considers this issue.

3.0   Aim and Objectives

The main aim of the proposed study is to explore the benefits, challenges, and prospects of e-learning in Libyan Open University from the perception of students and educators. To acquire this proposed aim, the following objectives will be adopted:

- To check the availability of e-learning tools for curriculum development of students who make study in Open University in Libya.

- To explore the benefits and challenges of students and educators in Libyan Open University taken e-learning services.

- To show the future prospects of e-learning in Open University in Libyan higher education.

- To suggest the Open University of Libyan higher education to reframe the policy for executing e-learning that makes flexible for both students and educators.

- To examining the available e-learning tools for students and educators in Open University in Libya for curriculum development.

- To contributes the finding of how students and educators facing challenges in classroom e-learning at Open University in Libya

4.0　Research questions

Considering the research aim and objectives proposed in the earlier section, the following research questions rose:

1. What are all the e-learning tools available for students and educators in Open University in Libya for curriculum development?

2. What kind of benefits getting by students and educators in classroom e-learning at Open University in Libya?

3. Are there any challenges facing by students and educators in classroom e-learning at Open University in Libya?

4. What suggestions need to be given for Open University in Libya in terms of strong execution of e-learning in the classroom?

5.0　Literature review and related works
5.1 E-learning and Benefits of e-learning in higher education

According to the proposed definition by Rodrigues et al. (2018), E-learning is an innovative web-based system based on digital technologies and other forms of educational materials whose primary goal is to provide students with a personalized, learner-centered, open, enjoyable and interactive learning environment supporting and enhancing the learning processes. Alqahtani et al. (2020) stated that the type of e-learning as a ICT Supported Face-to-Face Learning is traditional learning supported by information and communication technology. There are numerous benefits obtaining by students in e-learning implementation. In this aspect, numerous reports stated the various benefits for both students and educators. For example, studies of Salaway et al. (2008) from US, Green & Hannon (2007) from UK, and Kennedy et al. (2006) from Australia states the benefits of e-learning among students are easy accessibility

and availability of internet (social networks like Facebook, blogging, etc. and for communication purpose like e-mails, MSN, etc.) leads to possibility of learning in shorter time period.

Studies like Agarwal & Pandey (2013); Ahmad & Bokhari (2013); Ozuorcun & Tabak (2012) reveals that e-learning lets the student do self-paced learning. This kind of learning reduces stress and gives complete satisfaction to the student (Harandi, 2015). Tagoe (2012) also stated that students prefer a mixed mode of learning than other modes of learning. As per the view of Cole et al. (2014), e-learning gives convenience to make extra outlook on interactivity among the teachers and student while delivering content. Arkorful & Abaidoo (2014) E-learning is a low-cost method and students can obtain the study material on their own instead of getting it from teachers or organization and it is time and cost saving practice. Popovici & Mironov (2015) said that different factors like age, gender, technology acceptance, learning styles of an individual and prior experience in computer influenced the insights of students. The statement from Tanveer (2015) says that the teachers accepted that training is a useful component for delivering the instructions via e-learning and they were interested to get those training. Teachers were ready to communicate through electronic means and felt that opportunities were frequent and easy. This resulted in the teacher's positive response to the facilities given by e-learning.

According to the statement by Guragain (2016), e-learning makes convenience to students for accessing it from anywhere. This lets the students learn, download and save the study materials whenever they want. It is not necessary for a student to be physically present. Further, the same study mentioned that e-learning has also given enough support to teachers by providing a convenient lecture in the classroom that reduces the time of teachers

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on giving instructions orally. Report by Gupta (2017) stated that e-learning has changed the entire learning practices for students and provides various benefits include gain learning at anytime and anywhere in lower cost, made frequent test practices etc. Marco et al. (2017) referred that the students more likely choose hybrid learning method instead of face-to-face learning. According to the statement by Yanti et al. (2018), the researchers found a more positive attitude from the male teachers towards the e-learning than the female teachers. Among various factors, teacher's belief and attitude towards the technology show their acceptance of the technology.

From the above studies, it is clear that the e-learning provides huge benefits to students and educators even though there are some issues while implementing and adopting this in a classroom environment.

5.2 Challenges faced by students and teachers towards e-learning adoption

Iroegbu (2020) observed that the cost of information and communication technologies are exorbitant in developing countries like Nigeria. The online teacher will find it difficult to train students those who lack in knowledge about using computers and technology. Siddiqui et al (2021) says that the Libyan students belonging to urban and rural population both were facing problems of internet availability, electricity, privacy of learning and. It is shown that they have increase study workload and they feel stress during submission of assignment and test/exams because of internet and electricity problems. According to the study by Abou et al (2014), students are difficult to be get engaged with the e-learning methods due to lack of personal contact between the students and instructor. As per the statement by Milovanović (2010), the common challenges faced are lack of skilled tutors, complexity in work

environment, the rapid development of the internet, continuous learning about the subjects and technology, and democratic and social changes. Advancement in technologies plays a vital role in education. The users' count that uses the internet is rapidly increased. Internet users are the target for most of the business organizations and educational institutions. Kyei-Blankson and Keengwe (2011) observed that instructors were not given proper training support who adapts from face-to-face to online courses. Islam et al. (2015) say that every student will have their own style for learning. Some prefer to learn by visual representation and some prefer interaction method or writing notes and some by listening instructions. In this case, it is difficult to know the studying style of an individual student through online courses. The students who learn on their own way can perform excellently in academics. Achieving to know the learning style of each student through e-learning is quite challenging. Kebritchi et al. (2017) stated that in online courses the teachers teach a pre-defined content because of this the teachers face a lack of confidence. In such cases, the role of a teacher in creating, integrating and shaping the content from their experience is given less importance. Overall, this section reveals some major challenges faced by both students and educators in general.

5.3 Prospects of e-learning

E-learning environments are evolving rapidly in terms of tools, standards, and techniques. There are some prospects of e-learning which include learners will have up-to-date information through internets because of increasing internet usage among people, students share virtual space with other practitioners and members for answering the questions, progress at a suitable pace, take part in discussions, accesses the required training at right time and with right people and they can also access the same material whenever it is

needed (Blezu & Popa, 2008). The study Koponen et al. (2011) on E-learning shows the possibilities and challenges for developing e-learning in developing countries and found to be the solution for various types of educational problems such as lack of tutors, lack of quality materials, long geographical distances, etc. With the help of e-learning, different class types can be made easier like it encourages the individuals to learn on their own without any time restriction also it has improved the methods of learning and teaching etc (Aboderin & Kumuyi, 2013).

6.0   Methodology

6.1 Research design

In general, the research covers three kinds of research designs namely descriptive, exploratory, and explanatory. Exploratory helps to examine the new facts to produce a theory, whereas the descriptive research describes several events. Explanatory research explains the relationship between the variables. By considering the major goal of the proposed work, exploratory research design will be more appropriate. The study will explore the perception of Libyan students and educators.

6.2 Research method

It is necessary to study the methods used to search the required data so that the problems in the research can be answered. In this phase, the mixed (qualitative and quantitative) method will be used for this proposed study. This technique will be selected because it enables the researcher to examine every aspect of the research to the point and also gives a complete understanding and analysis of the research.

6.3 Sources of data

The proposed research will collect the data from primary source through an interview and questionnaire (survey) with the students and educators of Open University in Libya. The interview will be carried out with prior approval from the respective universities through phone calls or direct meeting. For survey, the respondents will be requested to fill the survey through e-mail or social media and the volunteers will be later approached. Once the survey will be shared to respondents and researcher will make the follow-up in 3, 5 days and one week. Later, response will be cross-checked, data cleaning and data analysis will be carried out. There is one questionnaire for students and one interview guide for educators will be designed to get know the perception of educators and students. Questionnaire will cover different sub-questions based on the framed objectives. Questions will be Likert Scale type and some questions will be both open and closed ended type.

Interview will be directly conducted with educators once after obtaining prior approval from respective bodies. It will take only 20-30 minutes for all questions (refer appendix II) Further, the proposed study will use the secondary source from peer-reviewed journals, different magazines, newspapers, websites etc.

6.4 Target population

The targeted population opted for the proposed study will be educators for interview and students for survey method from Open University in Libya.

6.5 Sampling unit and sample size

The study will choose two sampling methods for both interview and survey method. For interview, the convenient sampling method will be chosen

based on the convenience of researcher and voluntary basis of respondents, the sample size will be decided. For survey, samples will be randomly selected through random sampling method. This proposed study will select the ten educators for interview and 100-150 students for questionnaire method.

6.6 Validity and reliability

To ensure the research validity, the methods and theories utilised to conduct this proposed research will be select from familiar secondary databases. Additionally, empirical data will be utilized in the research from a telephonic or direct interview with candidates. Study reliability will be ensured through interview guide. Once the gathering of data gets completed, the study would perform inferential statistics and descriptive analysis through SPSS of version 20.0.

7.1 Analysis the collected data and discuss the result:

specification of studied sample:

- The experience in education for (Teachers): This is related to the years of education.

Table (1): The percentage of experience in education

Years of teaching	0-5	5-10	10 and above
Percentage %	25.90%	41.20%	32.9%

- The age of the selected sample:

Table (2): specifications of selected sample

Age(range)	20-25	25-30	30-45	Above45
Percentage%	39.5%	20.8%	20.20%	19.5%

– ICs skills: this means the capability of the studied sample to use the technologies related to e-learning such as computers, tablet device, as well as dealing with electronic platforms for both teaching and studying issues. The percentage of three levels of ICTs skills for the studied sample shown in table (3).

Table (3): The percentage of ICTs skills of the selected sample

Elementary	Moderate	Advanced
5.2%	41.09%	53.80%

– The time of online learning daily:

Table (4): Percentage of daily e-learning

Time of learning online(hours)	1-2	2-4	4-6	6-8	8-10
Percentage	63.15	31.02	4.31	1.6	0.01

7.2 Analysis the collected data and discuss the result:

– By using SPSS tool, the data statistically is analyzed. According to Likert scale, the scores are classified as following:

Table (5): Scores classification

Very low	Low	Moderate	High
1-1.8	1.8-2.6	2.6-3.4	4.2-5

Table (7): Items used to investigate the benefits and challenges of e-learning for the students

No.	Items	Mean	Standard deviation	Materiality%	Grade
1	Learners are incapable to ask and obtain the answer.	2.86	1.25	57	7
2	The e-learning tools(smart device, computers, strong net) us not completely available	3.25	1.195	65	5
3	learners are worrying when they dealing with exams through the online program	4.05	0.98	80.5	1
4	there is no ability to be online easily when I need	3.32	1.44	45.2	4
5	facing difficulty e-learning because the lack of network	2.91	1.25	58	6
6	The disability of communicating learners with the instructors.	3.52	1.13	69.8	2
7	learners do not check learning websites repeatedly, thus the late in getting tasks	3.41	1.15	68.15	3

From table (7), it could be seen that the item (3-learners are worrying when they dealing with exams through the online program) had reached to the highest value of mean (4.05), the deviation was (0.98), while the lowest value had been gotten by item (1- Learners are incapable to ask and obtain the answer), the mean was (2.86) and the deviation (1.25).
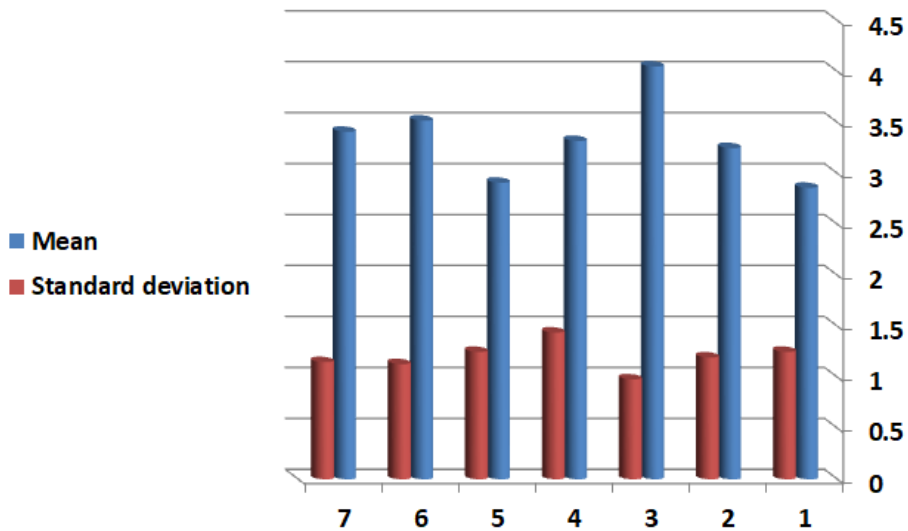
Fig (1): the chart represented Statistics of view of students about e-learning

Table (8): Items used to investigate the benefits and challenges of e-learning for the teachers

No.	Items	Mean	Standard deviation	Materiality%	Grade
1	I think that information sharing online takes longer time	3.11	1.32	62.4	3
2	For some materials, face-to-face learning is more useful than learning online	2.72	1.233	73.89	5
3	There is difficulty during upload learning content	2.04	1.19	40.8	7
4	E-learning increase responsibilities of staff	3.45	1.13	68.4	2
5	evaluating the learner is difficult in e-learning system because there is doubt of the learner's identity	2.95	1.27	59.7	4
6	There is difficulty to use the ICT skills related to instruments (computers, smart phone ….)	3.87	1.137	77.4	1

No.	Items	Mean	Standard deviation	Materiality%	Grade
7	e-learning increases the ability of teachers to improve their performance un education	2.33	1.026	46.5	6

From table (8), it could be seen that the item (6-There is difficulty to use the ICT skills related to instruments (computers, smart phone ….)) had reached to the highest value of mean (3.87), the deviation was (1.137), while the lowest value had been gotten by item (3- There is difficulty during upload learning content), the mean was (2.04) and the deviation (1.19).
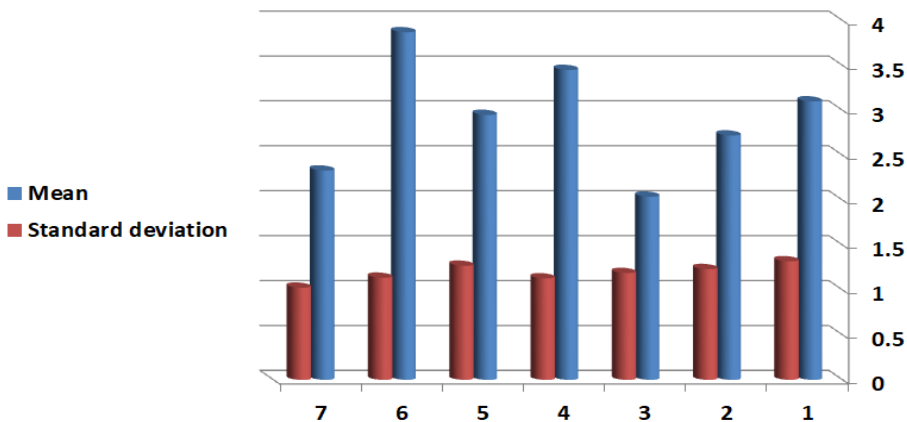

Fig (2): the chart represented Statistics of view of teachers about e-learning

8.0 Conclusion

From this study which aimed to check the availability of e-learning tools for curriculum development of students who make study in Open University in Libya. In addition to explore the benefits and challenges of students and educators in Libyan Open University taken e-learning services. The results show that there are some challenges could affect the affectivity of e-learning for open universities such as the difficulty to use the ICT skills related to electronic device such as (computers, smart phone ….) for teachers, also

responsibilities of teacher's increase will be increase in addition to the complexity of evaluating the learner due to the possibility to doubt. On the other hand, the lack of network could be one of the basic challenges of e-learning as well as students may not check learning websites repeatedly, thus they will late in getting their tasks. e-learning will increase the ability of teachers to improve their performance if they had been trained on the using of electronic device and platforms related to e-learning.

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