Obstacles That Prevents Better Use of Information Technology: A Case Study of University College Students – Addayer, Jazan University

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Abstract

Learning through technology helps learners to empower their learning experiences and prepares them for a global workforce. The study suggests that students have negative attitude towards using technological devices and there are other obstacles that hinder the University College Students in Addayer to use the educational technology appropriately. The study draws the attention of the decision makers and learners to the meaningful use of technology in educational process.

The study is a descriptive and analytical. The (SPSS) tool is used to analyse the data collected by the questionnaire. The study ends up with statistically highlighted results and recommendations to solve the problems of using technology in educational process in Jazan University

Key words: Obstacles; Educational technology; Students' attitude; Collaborative learning

INTRODUCTION

Technology and internet connect the people altogether in a globalized world. There are new multidisciplinary uses of educational technology. As a result of the rapid development of technology and the scientific advancements, technology has become part of the classroom teaching and has been well-known in many universities all over the world. Learning through technology will help learners to empower their learning experiences and will prepare them for a global workforce. It makes them creative, active, and enrich their knowledge. This insight is conditioned by the right and well administered use and implementation of technology. Implementing technology in teaching creates a motivational environment for learners. Learners can use the technology and different media effectively to create that personal learning environment. They can make the utmost beneficial uses of computer, mobile, internet, T.V. and radio, and social websites in the field of language learning. Online learning opportunities and the use of open educational resources and other technologies can increase educational productivity by accelerating the rate of learning; reducing costs associated with instructional materials or program delivery; and better utilizing teacher's time.

The government of Saudi Arabia pays great attention to e-learning and training and facilitate learning resources for all learners at all levels everywhere and every time beyond the study halls setting. The Saudi government pays high attention and great efforts to improve its education process to reach a high global standing. So that the Saudi Ministry of Education established the National Centre of E-learning and distance education in 2007. The government gives a priority to the implementation process of e-learning tools into the educational mainstream. That is clearly shown in the 'Saudi vision 2030' program, in which one of the key goals is to ensure that in the future, five Universities in Saudi Arabia are among the top 200 Higher Education institutions worldwide. (Ministry of Education, 2017).

THE STUDY AIMS TO

• Draw the attention of the decision makers, care takers, high education learners, and others to the meaningful use of technology in educational process.

• To investigate students' attitude towards using technology for better learning process.

• To identify the obstacles that hinder the beneficial uses of technology among university students.

• To offer solutions and useful landmarks to overcome those obstacles.

SOCIAL IMPORTANCE

The study shows great deal of social significance. Scientific and technological revolution creates a mysterious view and shape the border line of daily life routine of a person of a postmodernism era. People, especially the young, indulge into using technological devices blindly. If technology is not used properly, definitely it goes for the opposite, it harms and bleeds. Unless you recognize the problem, you cannot solve it. Here, the study tries to highlights the obstacles of availing the technology so it helps to highlight these challenges and then identify the best potential solutions to address them. Hence, we can draw solutions and save our young generation of being lost in the crowded technological world and cope with the present day scenario. The study, therefore, is of great social significance.

HYPOTHESIS

The study suggests that the students have negative attitude towards using technological devices and there are some other obstacles that hinder the University College Students in Addayer, Jazan University to use the educational technology appropriately. This problem negatively affects their learning process as well as leads them to misuse the technological devices they have. This study will provide answers to some questions such as, "is students' attitude towards using educational technology for learning negative? What are the other obstacles that limit their use of educational technology?

PREVIOUS STUDIES

Saudi Arabia has made considerable investments in trying to integrate modern technological advancements into its educational system. (Jabli & Qahmash, 2013).

So that the ministry of educational states that,

"The ministry of education in Saudi Arabia has appreciated and recognised the importance of ICT in the teaching and learning process. Subsequently, it has made considerable effort to reform the educational process of university education." (Ministry of Education, 2017).

But unfortunately some studies indicate that the integration of E-learning and educational technologies still limited and slow in Saudi universities, despite that considerable investments made by the Saudi government to introduce modern technologies into the teaching and educational process (Al-Gamdi & Samarji, 2016; Quadri et al., 2017).

There are many studies that trace the adoption and integration of technology into educational sector in the Kingdom. Omran Alharbi and Vic Lally in their study entitled " *Adoption of E-Learning in Saudi Arabian University Education: Three Factors Affecting Educators*" indicate that despite the improvement of learning and teaching process by the adoption of information and communication technology in teaching, still there are some factors hindering the successful implementation. This paper detects about 32 relevant literature studies regarding factors affecting effective application of e-learning in Saudi Universities. It concludes that lack of time, lack of training and lack of institutional support were the major factors influencing faculty members' decision to adopt information technology in teaching practice. The study offers some solutions like, reducing academic staffs' workload to allow them to have more time to use E-learning tools, the provisional training, and institutional support for academic staff. All of that are considered as essential to the successful implementation of technology in education. (Alharbi, 2017).

"Multimedia and Language Acquisition: English Language Learners in Jazan University" is a study conducted by Abdulmajeed Alhanash which explores that the inefficiency in English language acquisition in Jazan University refers to many barriers. It also investigates the importance of using multimedia for foreign language learning. It comes to an end, based on students' responses, that mobile and computer applications are necessary, motivational, interesting, and easy to use. It also emphasizes that training to use educational technology is strongly recommended for both students and instructors. It concludes that the weakness in English language acquisition is mainly caused by the misuse of technology. Integrating technology in the educational process is a must and an urgent need to avoid the misuse of Double-edged technology. Students need to be directed towards meaningful use of technology. So that instructed professional use of technology enhances students' pronunciation and interpersonal skills as well as listening skill and comprehension. (Alhanash, 2018).

The study, " Effectiveness of Using Information Technology in Higher Education in Saudi Arabia", by Fahad Alfahad examines the beneficials and efficiency of information technology in higher education in the Kingdom of Saudi Arabia. Results indicate a positive and optimistic view about information technology value

to improve student access and to enhance the quality of teaching and learning. Implementation of information technologies can pave the way for universities to determine the world class demands of technology in education. It makes universities innovative and able to meet the needs of the business and industry market with graduates of high standard technological qualifications. (Alfahad, 2012).

A doctoral dissertation by Albalawi was an investigation of the current use of web-based instruction in Saudi institutions and the facilitating and impeding factors affecting faculty decisions to participate or not to participate in web-based instruction. Information gathered shows a positive result regarding the attitudes of faculty toward development and implementation of a distance-education program in Saudi Arabia. (Albalawi, 2007).

John King, U.S. Secretary of Education, says, "*One of the most important aspects of technology in education is its ability to level the field of opportunity for students.*" The 2016 NETP (National Education Technology Plan), builds on the foundation of the 2010 Plan, *Transforming American Education: Learning Powered by Technology*, traces the modern advances, chances, and research which show how teaching and learning can be enhanced with the innovative use of technology. The 2016 NETP clearly states how technology can transform formal and informal learning through elements such as qualified teachers, high-quality curriculum and resources, strong leadership, infrastructure, and aligned assessments. (U.S. Department of Education, 2017).

"*Teaching and Learning with Technology: Effectiveness of ICT integration in Schools*" is a study by Simin Ghavifekr. It aims to investigate teachers' views about the effectiveness of information technology integration to support and maintain the process of teaching and learning. The study concludes that the integration of technology into schools has a great effectiveness for both teachers and the students. It also indicates the importance of teachers' well-equipped preparation with technology in the success of effective educational process based on technology as well as it highlights that teacher training programs play a significant role in students' learning quality. (Ghavifekr, 2015).

METHODOLOGY

The study is a descriptive and analytical. Data is collected from various resources like books, previous studies, journals, periodicals, and then a questionnaire. The study tool is a questionnaire that was checked and approved by a committee of the College teaching staff. It was administered and distributed to a wide range of the study sample, the students of the English Department, University College – Addayer, Jazan University in Kingdom of Saudi Arabia. It was distributed to 130

female learners in the college. Items of the questionnaire are divided into two categories; one of them is related to students' attitude towards using educational technology for learning and the other one is specified for the suggested obstacles. The Quintet Likert Scale is used to measure study sample responses to questionnaire items. Each item is given one degree out of the following five degrees (5,4,3,2,1) respectively representing (strongly agree, agree, neutral, disagree, strongly disagree). The analysis process is conducted using the statistical tool SPSS. Then setting the results is followed by a bunch of great valuable recommendations and solutions.

DATA STATISTICAL ANALYSIS

The study investigates the benefits of using technology in learning process. It highlights students' attitude of using technology in education and suggests some other obstacles that prevent them using technology appropriately in learning process.

Descriptive and analytical statistics methods are used in this study. The Statistical Package for the Social Studies (SPSS) tool is used to analyse the data collected by the questionnaire. Some measures and statistics are calculated such as mean, standard deviation, reliability (Cronbach's Alpha), and ANOVA and test statistics.

The study tool is divided into two categories. Each category consists of ten items. Cronbach's Alpha is used to calculate the reliability statistics of the items to measure the internal consistency of the questionnaire items. The table below shows the result of 0.877. For the attitude category and 0.803 for the category of suggested obstacles. This means that the items have high internal consistency and indicates stability of the study instrument.

Table 1
Reliability statistics of the two categories

Category	Cronbach's Alpha	Cronbach's Alpha based on standardized items	N of items
Attitude	.877	.876	10
Obstacles	..803	.796	10

The validity of the study hypotheses is also tested to ensure that the dimensions of the study model is subjected to normal and natural distribution. According to Won, 2004, the coefficient of skewness (Pearson) is ranged between 3 and -3 to measure the normal distribution of the study dimensions.

Table 2
Descriptive statistics of skewness

Categories	N	Skewness	
	Statistic	Statistic	Std. error
Students' attitude towards using educational technology for learning	130	-1.194-	.212
Obstacles hinder students' use of educational technology for learning	130	-.347-	.212
Valid N (listwise)	130		

The table above shows the Skewness coefficient that is ranged between (-1.194 and -.347) and this range shows that the sample is subject to normal and natural distribution because it is within the field of (-3, 3). So the study hypothesis validity can be tested.

To test the validity of the hypotheses, the table below shows the descriptive analysis of the questionnaire items grouped into two categories (attitude and suggested obstacles). It refers to the means of students responses. The maximum degrees of the ten items of each category is (50) according to the Quintet Likert Scale. For the first category (attitude), the means as shown in the table below is (43.69) so the grand means is (4.369). It is positively very high because the items are built up positively and this proves that the negative attitude hypothesis is wrong. It shows that students have a positive attitude towards using educational technology.

Table 3
Descriptive statistics of means

Categories	N	Minimum	Maximum	Mean
Students' attitude towards using educational technology for learning	130	19.00	50.00	43.6923
Obstacles hinder students' use of educational technology for learning	130	16.00	50.00	34.2462
Valid N (listwise)	130			

While the means of the second category as shown in the table above (suggested obstacles) is (34.24) so the grand means is (3.424). This means that the hypothesis of the second category is correct. It shows that most of the suggested obstacles are correct. So the table below will show the mean of all suggested obstacles.

Table 4
Descriptive statistics of means for the second category "obstacles"

Suggested obstacles	N	Minimum	Maximum	Mean	Std. deviation
You spend much time using technology for chat rather than learning.	130	1.00	5.00	3.9154	1.08574
You think using educational technology in education is useless.	130	1.00	5.00	2.0077	.84904
You are in lack of technological tools like mobile/computer/educational programs.	130	1.00	5.00	3.2308	1.31502
Your family never allows you to use technological devices.	130	1.00	5.00	1.6615	.77313
There is no clear cut policy for integration of technology into educational process.	130	1.00	5.00	3.3846	1.14380
You find it difficult to get support from information technology unit in the college.	130	1.00	5.00	4.2769	.93191
You need training for better use of technology.	130	1.00	5.00	3.8231	1.21020
You find it difficult to use up to date educational programs for learning.	130	1.00	5.00	3.5308	1.17591
The network connectivity is very poor in the whole area.	130	1.00	5.00	4.5923	.75428
Teaching staff never use educational technology in the class.	130	1.00	5.00	3.8231	1.07448
Valid N (listwise)	130				

The Table 4 proves the invalidity of two suggested obstacles and they are (Your family never allows you to use technological devices) and (You think using educational technology in education is useless).

Table 5
One-sample test

Test value = 0

Categories	t	df	Sig. (2-tailed)	95% confidence interval of the difference	
				Lower	Upper
Attitude	90.886	129	.000	4.2741	4.4643
Obstacles	71.473	129	.000	3.3298	3,5194

The significant of (.000) shown in the Table 5 for the two categories indicates that students' attitude as well as suggested obstacles for using educational technologies are statistically significant.
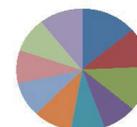
RESULTS

The data is collected and statistically analyzed. Hence, the study comes to some results. The first category portrays students' attitude towards using educational technology. It shows their positive attitude as their responses highly shows that educational technology is important in education. It is a fact that most world class universities are

implementing and integrating technology into educational process. Hence, students are aware and strongly agree for its importance in a percentage of 73.8%. Then they strongly agree in high percentage (55.4% and 63.1%) for educational technology eases the learning process and makes it attractive respectively.

- ■ Educational technology is important in education in today's world.
- ■ ET enhances/eases learning process effectively.
- ■ ET makes learning process more attractive.
- ■ ET makes you creative and active learner.
- ■ ET reinforces your confidence to participate freely in the class.
- ■ ET helps you to contact with your teachers and friends.
- ■ Using technology encourages you to express yourself easily.
- ■ Using technology in the class motivates you.
- ■ ET improves your skills and personal abilities.
- ■ ET facilitates knowledge acquisition by wide range of electronic resources.

Figure 1
1st category: students' attitude

Personally, educational technology. makes them creative, confident, and motivated ; that is shown by agree and strongly agree responses in a proportion of (33.8% - 44.61%), (38.5% - 43.8%), and (40% - 46.9%) respectively.

It, also in high percentage, encourages them to express themselves freely and improves their skills and helps them to contact and be connected with their educational community. Electronic resources also enhances their knowledge acquisition. The first category shows students' high appreciation and acceptance of using educational technology.

The second category of the questionnaire is about the suggested obstacles that hinder students' better use of educational technology. Two of them are given very low positive proportion of students' responses. It means they are not considered as obstacles. The first is that "students see educational technology as useless" and the second is that "family never allows the student to use technological devices". While the other eight variables represent eight obstacles in often high proportion. The poor network connectivity represents the major obstacle by a percentage of (70.8%). Then the difficulty to get support from IT unit in the college by agree and strongly agree proportion of (32.3% - 51.5%) respectively.
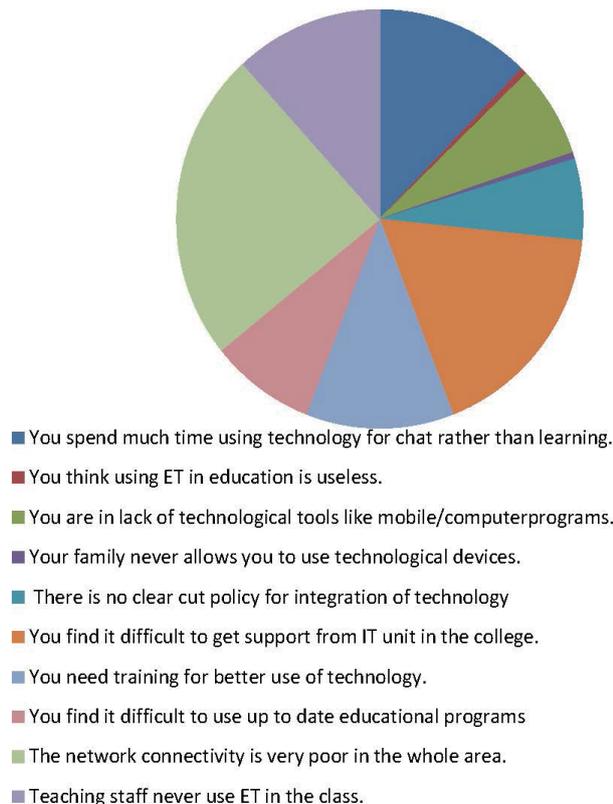

■ You spend much time using technology for chat rather than learning.
■ You think using ET in education is useless.
■ You are in lack of technological tools like mobile/computerprograms.
■ Your family never allows you to use technological devices.
■ There is no clear cut policy for integration of technology
■ You find it difficult to get support from IT unit in the college.
■ You need training for better use of technology.
■ You find it difficult to use up to date educational programs
■ The network connectivity is very poor in the whole area.
■ Teaching staff never use ET in the class.

Figure 2
2nd category: suggested obstacles

Then some personal barriers like using technology for chat rather than learning, the need for training for better

use of technology, inability to use up to date educational programs, as well as the lack of technological tools, all construct strong wall of obstacles that impede the utmost benefits of using technology in educational process. Unfortunately, the result here is frightening and shocking that the students will not be able to cope with the dramatic and astonished technological advancements that shape many if not all spheres of our daily life. Almulhem and Al-Shammari in their studies confirm this result and state that despite the great investments into technical infrastructure, professional training and equipment however, the adoption of ICT and ICT approaches by educators at the University level has been limited. (Almulhem, 2013; Al-Shammari, 2015).

Another serious problem is that some teaching staff never use educational technology in the class in a proportion of (26.2% and 34.6%) for agree and strongly agree responses. To some extent, some students see that there is no clear cut policy for integration of technology into educational process.

To summarize the results, the study comes to an end that:
• The university students have positive attitude towards using technology in education.
• The study shows that educational technology is important and eases the learning process.
• Educational technology makes students creative, confident, and motivated and encourages them to express themselves as well as improves their skills.
• They are in need for collaborative learning environment and encouragement to develop their skills to cope and stand up to the dramatic mutation and technological revolution in the globalized world of today.
• The poor network connectivity represents the major obstacle followed by the difficulty to get support by the IT unit in the college.
• Students daily use of technology is for chat and not learning and this constitutes a big problem as well as training is a necessity.
• Teaching staff don't use technology in the class and ther is no clear plan for technology implementation in educational process.

RECOMMENDATIONS

In accordance to the analysis and result discussion above, here are some recommendations which will help solving the problem and draw the attention of the policy makers in Jazan University as well as the caring staff and students to take actions seriously. Technology integration into the education mainstream is a contemporary issue that should be discussed elaborately and various solutions will mark the land for solving the disturbing problems of educational technology the U.S. Department of Education declares that "*When carefully designed and thoughtfully*

applied, technology can accelerate, amplify, and expand the impact of effective teaching practices. However, to be transformative, educators need to have the knowledge and skills to take full advantage of technology-rich learning environments". (U.S. Department of Education, 2017). Here is a bunch of highlighted recommendations:

• Support students as well as teaching staff in the university by the useful up to date educational programs for all specializations to avoid being stray and lost in the imaginary world of technological inventions and to maintain their self-study and improve their skills.

• Policy makers should be aware of the urgent need and the importance of integration technology into educational mainstream.

• A great deal of technological advancement in the profession should be implemented into the course mainstream.

• There should be systematic and well organized procedures of using educational programs officially in all colleges and institutions affiliated to Jazan University.

• Training should be taken in consideration as priority and planned in accordance to the students' as well as staff needs.

• Students have to be guided and controlled by being connected and supervised by the university unit of teaching and learning and educational centers.

CONCLUSION

The study ends up with landmark and statistically highlighted results. It concludes that the students have no problems regarding their attitude towards using technology in educational process. The first statement of the hypothesis is approved to be wrong as shown in the analytical study in a very high proportion.

The second hypothesis statement of the study is also approved but correct that there are some obstacles that impede and prevent students of beneficial use of technology. Frightening obstacles are highlighted by students' responses like the lack of support, absence of training, inability to use advanced programs, poor net connectivity, and the lack of systematic and well planned policy of using educational programs. The study, hereby, microscopically has investigated those problems and set up a bunch of recommendations that have great deal of significance. They are shinning marks in the way to solve the problems of using technology properly in educational process in Jazan University. Therefore, the study represents great relevance academically and socially.

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