

E-Learning: The Student Experiences on Ability, Skills, and Knowledge in the Sultanate of Oman

Subrahmanian Muthuraman

Faculty of Business Studies, Arab Open University, Sultanate of Oman

Abstract: - E-Learning is rapidly becoming an essential component of Oman's educational process in all the universities and colleges and brings with it the most significant changes. The purpose of this paper is to examine the influence of the e-learning on ability, skills, and knowledge enhancement. The survey population of this study consist of students who are studying in Arab Open University, Sultanate of Oman. Convenience sampling method was used to draw 249 samples were considered for the study. The influence of the e-learning on ability, skills, and knowledge enhancement was tested through stepwise multiple regression analysis and the result shows that the e-learning predicts 62% of ability, skills, and knowledge enhancement among the students in the university. The findings of this study are that students' attitudes and approaches were precisely positive for E-learning in increasing their ability, skills, and knowledge. They were confident that it deals with a worthy approach to modern teaching and learning, and they believed that E-learning is very useful. The most promising thing students underlined is the availability and ease of access of the available teaching materials, exercises, and updated information regarding their course from effectively anywhere outside of the classroom and collection of all the learning material in one place, rapid feedback on the course LMS which will enhance their knowledge significantly. Present day the education is dependent on using e-learning applications, to develop their abilities, skills, and experiences, to enhance their academic and learning performance. More efforts have been exerted to provide by the university for a better educational environment that helps students to easily exchange knowledge, opinions, attitudes, skills, and experiences. E-learning should be designed in such a way that they are creative, interactive, relevant, student-cantered, and group based. The study suggests that there is a need for the improvement from the university management side to improve the pleasant e-learning environment for learning. It is therefore recommended that an e-learning environment can increase the ability, skills, and knowledge potential of the students. With its rapidly growing workforce of adaptable and well-educated graduates, Oman could have a unique role to play with e-learning in the region.

Keywords: *E-Learning, Ability, Skills, Knowledge Enhancement, Education, Attitude.*

1. Introduction

The impact of globalization and challenges of the new millennium has brought in a revolution in education spurred by the development of the computer. The rapid pace of the occurrence of new information leads to the need for professional adaptation to new knowledge and competences required by the labor market. The traditional teaching and learning methods cannot face the knowledge amount and the dispersion of the qualifications, jobs, and activity domains, which become more and more specialized and interconnected.

E-learning and Blended Learning. These trends, on the other hand, have expanded and shifted their focus to the extent that many academic institutions are now concerned with blended learning programs. One of these institutions is Arab Open University (AOU) in Oman, which believes that the time has come to meet the needs and expectations of its learners who are working in the context of increased responsibilities and time pressures. Arab Open University has its headquarters at Kuwait and the number of students in Arab Open University is around 45,000 attending 9 campuses in all the GCC countries. Under these conditions, there is an apparent,

compelling demand and a dire need to shift from face-to-face meetings and lectures to ones that involve a more flexible blend of face-to-face and e-learning activities. One of these trends recently applied is blended learning which aims at skilfully combining e-learning with face-to-face instruction to create a positive experience for both instructors and the students (Dweikat & Amer, 2017).

2. Purpose & Method

The purpose of this paper is to examine the influence of the e-learning on ability, skills, and knowledge enhancement. The post tested survey questionnaires were developed in conjunction with the literature review aimed at understanding influence of e-learning and students experiences on ability, skills, and knowledge in the Sultanate of Oman. The study adopted the survey research design using structured questionnaire that collects demographic data. The survey population of this study consist of students who are studying in Arab Open University, Sultanate of Oman. Convenience sampling method was used to draw 249 samples were considered for the study.

3. Literature Review

E-learning is not about taking a course and putting it on the desktop. It is about a new blend of resources, interactivity, performance support and structured learning activities (Masie, 2006). E-Learning will address the needs of the learners and provide quality programs which enable a basic understanding of the modern world. This system emphasizes the independence of the learner and places the responsibility for learning on the learner. E-learning stimulates the ability to discover new ideas, and it promotes construction of new knowledge (Dragomir, et al, 2013). Online discussions allow students to enter comments whenever it is convenient for them. This makes it possible that more discussion will take place and much more information will be exchanged in the group than if only one person can speak at a time, like in the traditional classroom environment. The most important aspect of e-learning is interaction, which leads to the creation of online learning communities that diminish isolation by bringing together in a common venture to increase the exchange of ideas, collegiality, and networking (Sabau, 2008).

Higher educational institutions have been using the Internet and other digital technologies to develop and distribute education for several years, but e-learning concept offers the prospect of a radical new approach of the higher educational process focused on the opening up traditional universities for those unable to attend on-campus and face-to-face forms of teaching and for lifelong learners in the workforce at a time when effective use of knowledge is seen more and more as the key to economic success (Blin & Munro, 2008).

E-learning refers to the use of Internet technologies to deliver a broad array of solutions that enhance knowledge and performance (Rosenberg, 2001). The use of suitable and relevant pedagogy for online education may depend on the expertise and exposure to information and communications technology (ICT) for both educators and the learners. Some of the online platforms used so far include unified communication and collaboration platforms such as Microsoft Teams, Google Classroom, zoom etc., which allow the teachers to create educational courses, training, and skill development programs (Petrie, 2020). Students can learn anytime and anywhere, thereby developing new skills in the process leading to life-long learning (Dhawan, 2020). Effective online instructions facilitate feedback from learners, make learners ask questions, and broaden the learner horizon for the course content (Keeton, 2004). It is highly important that students focus on the content rather than the delivery method. The system of e-learning refers to the tools by which students can gain access to content.

Hexagonal E-Learning Assessment Model (HELAM) is a conceptual e-learning success evaluation model for assessing learner satisfaction with both internet-based learning management systems and blended learning. HELAM has been developed for assessing the e-learning effectiveness according to 6 dimensions of e-learning: Technical Issues: System Quality, Technical Issues: Service Quality, Technical Issues: Content Quality, Social Issues: Learner Perspective, Social Issues: Instructor Attitudes, and Supporting Issues (Ozkan, et. al. 2008).

In the HELAM model, user satisfaction is the main point of the evaluation. It is defined by two different variables one of which is expectation from LMS, and the other one is confirmation of these expectations. If the level of user satisfaction realized is below than the expected net benefits, then the LMS can be regarded as unsatisfactory and unsuccessful. Vice versa, if the level of user satisfaction realized is above or equal to the expected net benefits, the LMS can be regarded as satisfactory and successful (Ozkan, et. al. 2008).

4. Results & Discussion

The analysis reveals that majority of the respondents 72% were in the age group of 21 – 30, 21% fall between the age bars of 31 – 40. In respect to the gender, 38% of the students are men and 62% of the respondents are female. This is because of the full-time ministry students. In respect to the student status in the university, 48% of them are full time students sponsored by the Ministry and the remaining 52% of the students are open learning students.

In order to understand the student affiliation to their specialization, the department in which they registered was enquired and it was tabulated and it was found that 51% of the student belong to the Business department, as it is one of the largest department in the university, so the weightage was given more to them, 28% of the students are belong to Information Technology department, 13% of the students are belong to Education department and the remaining 8% of the students are in Language Studies department which is one of the smallest department in terms of number of students enrolled.

Step wise regression is used to examine whether there is a significant impact of e-learning education on knowledge enhancement.

Variables	Model 1		
	B	SE B	β
Constant	1.556	.797	
E-learn	1.104	.054	.785
R²	0.616		
Adjusted R²	0.615		
F	410.78		
df	(1, 256)		
Sig (P)	0.001		

Unstandardized regression coefficient (B), the Unstandardized standard error of regression coefficients (SE B), the standardized regression coefficient (β)

The table reveals that E-learning variable is entered at Step 1 and predicts only 62% of knowledge enhancement ($R^2 = 0.616$, $F(1, 256) = 410.78$, $p=0.001$). The R^2 for the overall study suggest that there is a moderate effect (62%) of e-learning on knowledge enhancement. Model Equation: $Y = 1.556 + 1.104 (E\text{-learn})$. This would suggest that e-learning plays a significant role on knowledge enhancement.

Step wise regression is used to examine whether there is any impact of benefits and challenges on e-learning.

Variables	Model 1			Sig (P)
	B	SE B	β	
(Constant)	2.715	1.230		.028
benefits	.870	.044	.787	.000
challenges	-.091	0.045	-0.080	.043
R²	0.679			
Adjusted R²	0.676			
F	265.44			
df	(2, 251)			

Unstandardized regression coefficient (B), the Unstandardized standard error of regression coefficients (SE B), the standardized regression coefficient (β)

The table reveals that E-learning variable is entered at Step 1 and predicts only 68% of benefits and challenges ($R^2 = 0.679$, $F(2, 251) = 265.44$, $p=0.001$). Model Equation: $Y = 2.715 + 0.870 (\text{Benefits}) - 0.091 (\text{Challenges})$. This would suggest that e-learning system has more benefits than challenges.

E-learning usage and adoption among users is a challenging issue for many universities, both in developed and developing countries, but it is likely to be less of a concern in developed countries over the willingness of their students to accept and use the e-learning system, as significant progressive steps have already been taken, according to literatures (Almaiah et al., 2016). Eltahir (2019) indicated that the challenges of adopting e-learning system in developing countries, however, remain a reality due to the digital divide with the developing countries. There are a number of technologies available for online education but sometimes they create a lot of difficulties. These difficulties and problems associated with modern technology range from downloading errors, issues with installation, login problems, problems with audio and video, and so on (Dhawan, 2020).

From the findings, some important implications and recommendations can be given in this regard. First, since students have positive attitudes towards the e-learning, teachers and instructors should try their best efforts to create a more flexible environment that employs a combination of resources and involves the provision of additional materials and guidance to enable learners to optimize their learning experience (Dweikat & Amer, 2017). The instructors at AOU are the persons to be responsible for improving methods of delivery of the instructional materials, they must be trained and motivated to improve their skills and potentials in this regard.

It is also suggested by Polding (2007) study which suggests that keeping staff engaged with the process of integration is the most important aspect of e-learning as it leads them to feel confident and supported throughout the entire cycle causing the process of change run more smoothly and yield to better results. Taking into consideration the advantages of e-learning should not be the objective as the human element will always be the most dominant factor in running the process of learning. E-learning can be used to support and supplement the human teacher and learner when enriching the educational setting and make it very relevant and appealing (Dweikat & Amer, 2017).

E-learning should be designed in such a way that they are creative, interactive, relevant, student-centred, and group based. E-Learning is rapidly becoming an essential component of Oman's educational process in all the universities and colleges and brings with it the most significant changes. With its rapidly growing workforce of adaptable and well-educated graduates, Oman could have a unique role to play with e-learning in the region (Muthuraman et al., 2020)

The use of e-learning environments to support teaching and learning has had great impact on the way content is developed and managed. In most cases, both teachers and students have had to re-adapt the way they prepare, access, and engage with educational matter (Mwanza & Engeström, 2005). Educators must spend a lot of time in making effective strategies for giving online instructions. Educators or teachers in the form of facilitators face a lot of trouble while working on these technologies in the form of how to start using it when to use it, how to reduce distractions for students, how to hone students' skills via e-learning technologies (Dhawan, 2020).

5. Conclusion

e-Learning is rapidly becoming an essential component of Oman's educational process in all the universities and colleges and brings with it the most significant changes after the COVID 19. With its rapidly growing workforce of adaptable and well-educated graduates, Oman could have a unique role to play with e-Learning in the region. Oman may be able to position itself as a leader in developing and providing high quality e-Learning material with a true flavor of Arabic culture. The successful implementation of e-learning strategy at higher educational institutions level requires not only adoption by enthusiastic innovators but also institutional structures must be put in place to support the sustainability and mainstreaming of e-learning initiatives.

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