A CONFORMANCE MEASUREMENT MODEL FOR QUALITY ASSURANCE STANDARD IN E-LEARNING: A CASE STUDY IN UNIVERSITY OF TABUK

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Special thanks to my beloved family

My Father, Mother, Brothers, and Sisters

To my supervisor

Thank you very much for everything

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ABSTRACT

This study discusses the importance of quality assurance standards in e-learning. Although a number of researches have studied e-learning quality standards and measures in the context of the U.S. and other developed countries, to date, there remains no significant study on learning quality standards and measures in the context of Saudi Arabia. This study seeks to identify which standards and measures will ensure quality e-learning in universities in Saudi Arabia whilst also helping to mitigate the problems of poor quality of learning, lack of management systems, and weak learning support services. To this end, this study develops a model for e-learning quality standards and measures by focusing on the University of Tabuk. The study collected 103 usable responses by using the Delphi method. The findings of reveal seven domains and 21 criteria that are considered fundamental for evaluate e-learning quality standards in Saudi Arabia. This study is set to enhance and improve the quality of e-learning programs to promote better academic performance in universities in Saudi Arabia.

ABSTRAK

E-pembelajaran telah diaplikasi dengan meluas terutamanya dalam sektor pendidikan tinggi. Penyelidikan dalam bidang e-pembelajaran juga telah lama menjadi tumpuan terutamanya dalam bidang berkaitan piawaian e-pembelajaran. Walau bagaimanapun, cabaran masih lagi dihadapi oleh kebanyakan organisasi pada ketika ini terutamanya dalam penilaian pematuhan terhadap piawaian jaminan kualiti. Pematuhan terhadap piawaian jaminan kualiti e-pembelajaran adalah penting untuk memastikan bahawa perlaksanaan dan penggunaan aplikasi e-pembelajaran di sebuah institusi pendidikan terhindar daripada masalah. Justeru itu, penyelidikan ini dilaksanakan dengan objektif untuk membangunkan model pengukuran pematuhan terhadap piawaian e-pembelajaran Kajian dilaksanakan melalui pengumpulan data kuantitatif yang melibatkan responden di kalangan staf akademik sebuah institusi pengajian tinggi di Saudi Arabia. Sebanyak 103 maklum balas telah diterima daripada staf akademik yang menggunakan aplikasi e-pembelajaran. Hasil dari kajian menunjukkan terdapat tujuh domain and 21 kriteria yang utama untuk tujuan pengukuran pematuhan kepada piawaian kualiti e-pembelajaran. Domain dan sub-kriteria yang telah dikenalpasti akan dapat digunakan sebagai asas oleh sesebuah organisasi untuk mengukur dan memperbaiki perlaksanaan e-pembelajaran dari masa ke semasa.

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INTRODUCTION

1.1 Background and Motivation

The higher education sector in Saudi Arabia since its outset in 1957 has primarily focused on traditional education in which learners are required to attend classes during their enrolment in a particular course. However, this policy changed with the establishment of the National Centre of Distance Education in 2007 as a response to the growing number of high school graduates and the increasing demand for on job training. Although this is an important improvement for higher education in Saudi Arabia, the Centre of National Distance Education should develop general procedures ensuring the quality of its e-learning programs.

Quality assurance is an integrated approach describing all the processes of institutions in higher education that can serve students and stakeholder within a number of expected standards (Kahveci *et al*, 2012). It is identified as procedures, processes, and action that enhance the achievement, maintenance, and monitoring quality of teacher education (Jensen *et al.*, 2008). Moreover, the quality assurance system in e-learning and distance learning in higher education in the United States and

United Kingdom focus on accreditation of quality and learning support services of learning to avoid problems that may arise such as weak quality of learning, lack of management system, and weak learning support services (Zhao and Li, 2009).

Recently, e-learning become one of the tools emerged from information technology. Therefore, information technology has been viewed as a best answer to universities cost and quality problems of learning such as lack of e-learning development strategy, low competence of academic department in e-learning technologies, and absence of strategy problem solution in e-learning quality (Selim, 2007). E-learning ensures education quality in the universities since the technology can provide interactive and active learning. Courses are constantly modified based on the feedback of students to enhance their understanding. The integration of different resources like online libraries, videos, and audio clips are easily utilised in e-learning environments (Goi and Ng, 2009). The development of management and ongoing improvement of e-learning quality remain important challenges for both educational institutions and for the industry (Ozkan and Koseler, 2009).

Tabuk University was founded in 2006. The University of Tabuk is situated in Tabuk, in the higher north western region of Saudi Arabia. At the 11 faculties in the university, there are around 500 academic teachers and around 16,000 students. The University of Tabuk offers various academic programs and courses (Alhawiti, 2011).

The University of Tabuk started offering e-learning in 2007/2008. The dean for e-learning provides both teachers and students with the technical support required for e-learning. The dean of e-learning and distance learning gives seeks to enhance e-learning communication between faculty and students. According to the university's plan, it is expected that most its courses will be delivered online through e-learning facilities by applying good strategies to ensure the quality of e-learning education.

Recognising that adopting quality assurance standards is an important part of the success of any e-learning program, a lot of research has been done in the U.S. and other countries about e-learning and distance education quality standards and measures (Alhawiti, 2011). However, there is still no significant effort focused on establishing such standards and elements for measuring conformance to the standards in Saudi Arabia. Thus, this study seeks to assist the University of Tabuk and other Saudi universities to better deliver e-learning programs by developing a model for assessing the quality and the rigor of such programs.

1.2 Problem Statement

E-learning has become a popular mode of instruction in higher education institution due to advances in the Internet and multimedia technologies. The demand and strategic advantages of e-learning has encouraged higher education institution to adopt e-learning standard. While there are abundant standards available for higher education institution, higher education institution is still facing problem in particular associated with the conformance of their e-learning to the adopted e-learning standard. Therefore, this study seeks to explore the quality assurance standards of e-learning and to identify the criteria for measuring the conformance of e-learning to the standards.

1.3 Research Questions

This study seeks to answer the following questions:

i. What are the e-learning quality standard domains currently adopted by faculty members at the University of Tabuk?

   The first question seeks to identify the current domains standard of e-learning quality assurance through a systematic review of articles on e-learning quality

assurance standards especially in the University of Tabuk. The researcher will drive a set of domain standards with a focus on e-learning quality standards adopted by the university.

ii. What are the criteria that can be utilised to measure the conformance to the quality assurance standards?

The second question seeks to identify the measurement criteria for each domain standard which measures the conformance of e-learning quality assurance standard in the university.

iii. How to develop a model to measure the conformance to the quality assurance standards?

The third question seeks to develop a new model that can measure the conformance to the e-learning quality assurance standards based on current domain standards and its measurement criteria. This model can enhance the academic quality and students outcomes at the University of Tabuk.

1.4 The Importance of the Study

This study aims to examine the e-learning quality assurance standards that can be adopted by the University of Tabuk to enhance academic standards and student outcomes by developing a new model that measures the quality of its e-learning programs.

1.5 Objectives

This study aims at developing a conformance measurement model for quality assurance standard in E-learning. To achieve this aim, this study has outlined three research objectives

i. To examine the current e-learning quality standards domains and practice adopted by university.

   Through a systematic review of articles on e-learning quality assurance standards especially in the University of Tabuk. The researcher will drive a set of domain standards with a focus on e-learning quality standards adopted by the university.

ii. To identify the criteria that can be utilized to measure the conformance to the quality assurance standards.

   The researcher will identify the measurement criteria for each domain standard which measures the conformance of e-learning quality assurance standard in the university.

iii. To propose a model that facilitate the university to measure their conformance to the quality assurance standards.

   The researcher will develop a new model that can measure the conformance to the e-learning quality assurance standards based on current domain standards and its measurement criteria.

1.6 . Scope

The following points are involved in this study

i. The study uses University of Tabuk as a case study organization to investigate their e-learning quality standard.
ii. The study focus on the criteria that can be utilized to measure the conformance to the quality assurance standards at University of Tabuk.
iii. The study will apply on academic departments of e-learning in three faculties at University of Tabuk which offer e-learning courses and programs.

1.7 Chapter Summary

This chapter describes the important of e-learning quality assurance standard and its measurement criteria. The research background and motivation have been discussed as an introduction to this study. The objectives and scope of this study have been listed, and the importance of the study explained.

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