IMPROVING LEARNING MANAGEMENT SYSTEMS TO BETTER ASSIST COMPUTER SCIENCE TEACHING IN QATAR HIGHER EDUCATION INSTITUTIONS

[ABSTRACT]

Mais Alkhateeb  
Lusail Université, Doha, Qatar  
malkhateeb@lu.edu.qa

Mosa Alokla*  
Community College of Qatar (CCQ), Doha, Qatar  
mosa.okla@ccq.edu.qa

Mohammad Alokla  
Researcher, Mainz, Germany  
tawam2006@yahoo.com

Eisa Alokla  
TU Darmstadt, Mainz, Germany  
alokla.isa@yahoo.de

*Corresponding author

ABSTRACT

Hybrid learning first appeared in the late 1990s as a new way of teaching for distance learning that used computers and the internet to improve students’ learning and encourage teachers to change their teaching techniques, resulting in a shift in learning from a teacher-centered model to a more student-centered model.

This study contributed to theory, practice, empirical and policy. Theoretically, the study considered the investigate the mediating effect of human resource information system on effect of perceived usefulness, perceived enjoyment, hybrid attitude, hedonic motivation, learning experience, and engagement, on satisfaction in Community College of Qatar (CCQ).

Furthermore, as a result of the COVID-19 epidemic, many postsecondary schools have moved to online delivery and learning, forcing many instructors to experiment with online and HL approaches, such as online multimedia and video presentations. In comparison to traditional face-to-face techniques or pure online settings, current research has largely verified that HL is seen to be beneficial (Hill et al., 2017) and has the potential to boost student happiness.

Research Problem. Hybrid learning (HL), an emerging of online and face-to-face training, has also been increasingly adopted to solve the issues linked with the need for a new pedagogy (Allen, et al., 2007), by discussing Qatar Higher Education Institutions, the region in which this research will be conducted, this research will be to conduct the Hybrid Learning Approach (HLA) on the Higher Education Institutions in the State of Qatar, which has seven Community College of Qatar (CCQ).
throughout the country and has been forced to change its teaching methods due to the Covid 19 pandemic.

In hybrid learning, student happiness can impact motivation, student achievement, and completion rate. The course materials, which incorporate multimedia, simulations, hands-on exercises, and games given through the internet with live classroom sessions, may contribute to satisfaction in the mixed setting. Therefore, this study will bridge the gap created by the previous study to investigate the mediating effect of human resource information system on effect of perceived usefulness, perceived enjoyment, hybrid attitude, hedonic motivation, learning experience, and engagement, on satisfaction in CCQ.

The unit of analysis of this study will be CCQ. The students in the CCQ are the respondents of this study. The choice of respondents for the present study was considered in relation to the knowledge required on the issues under investigation.

The purpose of this study is to add to a better understanding of the present status of CCQ. Therefore, the population of this study consisted of all students in the 7 CCQ. Therefore, the populations of this study are 40,687 students.

This study employed probability sampling design using proportional and simple random sampling. As a result, the pilot test questionnaire for this study will be based on existing research.

Keywords: The Technology Acceptance Model (TAM), Hybrid Learning (HL), Community College of Qatar (CCQ), MOH IN Qatar, COVID-19, Square Structural Equation Model (PLS-SEM)

Authors

Dr. Mais Al Khateeb was born on 1979 in Syria. She is a German mathematician, received her Master of Science in Mathematics from the Technical University of Freiberg, Germany, in 2004, and Master of Science in Mathematics and Teaching Methods from Damascus University in 2002. She embarked on graduate studies in Graph theory and received Doctorate of Mathematics in 2012. Dr. Mais contributed to Graph, Code Theory and Discrete Mathematics; she began her career at Damascus University and received many awards and honours in 1999 along her Mathematics research work. More, she moved to a high-profile position, worked as teaching assistant at Damascus University in discrete Mathematics, analysis, and applied Mathematics. Further, she earned a fellowship from Germany DAAD and worked as a lecturer in Applied and Discrete mathematics at Technical University of Freiberg Germany. She was honoured with the German Mathematical Society's C5 Graph Theory-Workshop “Cycles, Colourings, Cliques, Claws and Closures” Kurort Rathen, in 2006. She was a fellow at the “Saxony Ministry Society Foundation” Scholarship in Germany, in 2010. After that she became the head of doctorate student union at Freiberg Germany where she worked to improve the skill of students at this union, as well as being an active member in the volunteering committee at the technical university of Freiberg. Later on, she worked as a visitor Assistant Professor at Qatar University in 2013. Then she joined the Math and science department, at the Community College of Qatar (CCQ), as Assistant Professor in 2016. Currently Dr. Alkhateeb faculty member for statistics as well as mathematics courses at Lusail University Qatar.
Prof. Mosa Al Okla was born on July 1979 in Frankfurt, Germany. He received his Bachelor of Computer Science Engineering from Damascus University, Damascus, in 2005, Exchange Program Engineering from University of Alberta, Edmonton, Canada in 2008, and Master of Network and Computing Engineering (M.E.) from the Technical University of Freiberg (TU Freiberg), Freiberg, in 2010. Currently, he is preparing for an in-depth PhD. In 2017, he joined the Instructional Technology Department, Community College of Qatar (CCQ), in the position of Director of Teaching and Learning Centre (TLC) and the Information Technology department as lecturer. His current position as Teaching and Learning Coordinator at CCQ. In addition, his current work area includes conducting workshops, faculty training and support, faculty technology skills improvement, course development, enhancement of CCQ’s Instructional Technology tools, instructional design, course Management System, and usage of technology in teaching and learning through collaborative curricular innovation, design and development of instructional course content, in addition to maintaining service reliability and consistency. His research interest lies in the area of emerging technologies usage in the academic sector. Prof. Alokla teach as part time professor at the department of computer engineering at Qatar University (QU) as well.

Mohammad Alokla was born on July 10th, 1979 in Frankfurt, Germany. He received his Bachelor of Science in Information and Communication Technology from Damascus University, Syria in 2005. He joined the Syrian Computer Society (SCS) as a technical support and lecturer in 2007 till 2010, where he taught the substance European Computer Driving License (ECDL), MCSE and CCNA Courses. He received his high diploma degree in Network and Computer Information System (CIS) from Damascus University in 2010. His research interest lies in the area of E-Learning as well as distance and Blended learning, Information Technology and Biomedical Engineering, Neural Networks, Systems Analysis, and Medical Computing.

Eisa Alokla is M.Sc. Bio. Med. Eng. Worked as researcher at Locomotion Laboratory, Institute of Sport Science at the Technical University of Darmstadt in Germany. He received his Bachelor of Science in Biomedical Engineering from Faculty of Mechanical and Electrical Engineering at Damascus University in 2007. He received his Master of Science in Biomedical Engineering from Faculty of Mechanical and Electrical Engineering at Damascus University as well. Currently alokla as researcher at Locomotion Laboratory, Institute of Sport Science at the Technical University of Darmstadt in Germany. Alokla Research Interests are Control of Human Locomotion (Running and Hopping), Biomechanics of Human Locomotion, and Rehabilitation and human motor control.