Online instruction in Saudi Arabian universities:
Attitudes and satisfaction towards e-learning systems

A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy

Eiad Abdul-Aziz Altaf
B.Sc. (Computer Science), King Abdulaziz University
G. Dip. Ed., Umm Al-Qura University
M. Ed. (ICT in Education), Monash University

School of Education
Faculty of Education and Arts
The University of Newcastle
Australia

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Statement of Originality

I hereby certify that the work in this thesis is the result of original data and research. To my best of my knowledge and belief, the work in this thesis does not contain any material which has been submitted for the award of other degree in any university or previously published by anyone, except the references have been sited in the text.

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Eiad Altaf
Dedication

I gratefully dedicate this thesis to my father and mother for their boundless care, support and prayers through my studies including my PhD.

To my wife for her devotion, patience, and encouragement during times of my study.

To my children, Layaan, Jannat and Abdulaziz, for their patience, understanding and willingness to adjust family priorities to allow the pursuit of Dad’s PhD to be such a part of our lives.

To my sisters and family members who encouraged me throughout.

To any person supported me.
Acknowledgement

*In the Name of Allah, the Most Beneficent, the Most Merciful*

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>CITC</td>
<td>Communications and Information Technology Commission</td>
</tr>
<tr>
<td>EL</td>
<td>E-learning</td>
</tr>
<tr>
<td>EMES</td>
<td>E-learning Management Electronic System</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>UCLMS</td>
<td>University C Learning Management System</td>
</tr>
<tr>
<td>LMS</td>
<td>Learning Management System</td>
</tr>
<tr>
<td>NCEL</td>
<td>The National Center for E-learning and Distance Learning</td>
</tr>
<tr>
<td>SDL</td>
<td>Saudi Digital Library</td>
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</table>
Abstract

To provide a more flexible learning environment giving greater opportunities for participation in formal education, Saudi Arabian universities were encouraged to develop e-learning from 2003 when the Saudi Arabian National ICT plan was released by King Abdullah Ben Abdulaziz. This study first aimed to investigate e-learning at Saudi Arabian universities by providing background information about the current situation of e-learning at Saudi universities. Secondly, it investigated potential facilitation and opposition to the adoption of e-learning by examining academic staff and student attitudes towards e-learning in general and their satisfaction towards specific platforms and tools. Gender, institutional identification, teaching or study experience and IT experience were also investigated in relation to attitudes and satisfaction.

Data were collected from the university websites and other governmental organisations involved in providing e-learning. These data indicated the need to provide e-learning at Saudi universities in order to increase opportunities for students to attend higher education, provide quality and flexible learning and to cover the shortage of female instructors in higher education. The national ICT plan established the National Center for E-learning and Distance Learning NCEL, The Saudi Digital Library (SDL), the E-learning & Training Resources Center.

Almost all universities in the Kingdom of Saudi Arabia provide e-learning and continue to improve their e-learning services. Universities also provide support for academic staff and students to facilitate their use of e-learning. Different e-learning platforms are provided at each university such as Blackboard, EMES, Jusur, UCLMS and Moodle. Universities also offer face-to-face and online training sessions at different times in the year to assist academic staff and student use of e-learning.

In the light of this information, four major universities were selected for further study. The study sample included academic staff and students and males and females from all four universities, except that participants from University D were all males as the university is for males only.
E-learning attitudes and satisfaction with platforms available for their use were investigated through the application of separate but linked questionnaires for the selected staff and students of these four universities, focusing on their experience, use and attitudes and satisfaction with tools. Six scales were developed to measure e-learning attitudes for staff and students. The scales were: Acceptance, Anxiety, Confidence, Liking, Opportunity and Productivity. Finally a regression analysis model was designed to explore the effects of the demographic variables and experiences (as explanatory variables) on each of the EL attitudes (as outcome variables).

The analyses indicated that, while both academic staff and students had generally positive attitudes towards e-learning, staff had more positive attitudes than students. The study found that gender had significant and different relationships with EL attitudes and satisfaction with e-learning tools for staff and students. Male academic staff clearly had more positive attitudes towards EL (EL Anxiety, EL Confidence, and EL Liking). For students, female students were found to have more positive attitudes towards e-learning (EL Acceptance), than male students.

Higher experience with IT and e-learning was related positively with attitudes and satisfaction for academic staff and only with attitudes for students. Institutional differences indicated that academic staff at University A and students at University C had the highest positive attitudes towards e-learning compared with the other universities. Study experience had a positive relationship with student attitudes and satisfaction with e-learning. Finally, high levels of satisfaction towards the four major EL platforms, namely Blackboard, Jusur, Moodle and WebCT had positive relationships with student attitudes towards e-learning.