The potential role of collaborative learning in enhancing e-learning systems: evidence from Saudi Arabia

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Introduction

According to the Communications and Information Technology Commission (CITC), the Kingdom of Saudi Arabia (KSA) is one of the fastest growing countries in the world in terms of e-learning. Internet user growth, 200,000 in 2000 to 4.8 million in 2006 and then the KSA reach up to about 11.4 million users by the end of 2010(CITC 2010).

Saudi Arabia has always been interested in the future of education (Al Saif 2005). Therefore, it is important to provide the technology required by educational institutions and ensure that it is used effectively within these educational institutions.

E-Learning is one of the technologies which may play a role in increasing university enrolment, especially for Saudi Universities (Al Saif 2005).

Background

E-learning technology is very important for Universities because the new teaching and learning structures will be enabled by the next generation of **powerful network and communication technology** (Al-Asmari 2005) .

Interest in eLearning has grown rapidly during the past decade or so in Kingdom of Saudi Arabia, for a number of reasons such as:

First, the demand for higher education has far outstripped supply.

Second, KSA is a large country in terms of geographical area, with a significant number of communities being isolated from major population centres.

Third, for cultural and religious reasons.

Background

Despite this voluminous literature, the number of studies that focused on assessments or feedback from students who have actually used the existing systems has been rather small.

For example, Ali, *et al.* (2003) were more interested in factors which influence students' preferences for online courses vs. conventional classes than in the feedback from students who have taken online courses.

Similarly, Alenezi, *et al.* (2010) focused mainly on the determinants of students' decision to accept or reject e-learning, rather than their experiences once they have decided to accept.

In this paper, we contribute toward addressing this relative gap in the literature by studying the requirements, preferences, as well as experiences of students who have used e-learning systems in KSA.

Methods

The research underlying this paper involved a mixed-methods approach. Informed by the findings of previous studies of e-learning in KSA, a series of interviews were conducted to obtain **qualitative information**. Based on this information, as well as a **review of related studies** involving user satisfaction surveys, a questionnaire instrument was then designed and used to **collect quantitative** ratings.

Finding

Qualitative findings from interviews

This facilitated the development of the questions for the survey instrument.

Quantitative findings from questionnaire survey

For example some finding:

Differences in responses by male and female students

It is evident from the quantitative discussion that in KSA female students have requirements and expectations regarding e-learning that may be quite different from those of male students. Accordingly, this research compares and contrasts the responses from male and female participants. Also, This paper present summary results from applying the non-parametric Mann-Whitney test to corresponding ratings from these two groups.

Finding

Differences in responses by students who were required, and students who were not required, to collaborate

In courses where students were required to collaborate, they felt a greater need to do so (overlapping perhaps with a sense of compulsion), and that they ended up collaborating more than if there had been no such requirement.

Students have better satisfaction with courses when they are forced to collaborate.

Implications: potential role of collaborative learning

A natural implication of the findings in this research would seem to be that e-learning courses in KSA should encourage, or indeed should even **require, students to collaborate**. Thus the collaborative (or cooperative) learning approach may be able to play an important role in enhancing the effectiveness of current e-learning environments. This learning approach has long been the subject of much study by educational researchers and designers (e.g., Slavin 1980, 1983a, 1983b, Hooper 1992, Koschmann 1996, Okamoto 2003, Tomsic & Suthers 2006, Dewiyanti, *et al.* 2007, Liaw & Huang 2007, Cattafi & Metzner 2007).

Collaborative e-learning environments may allow students, especially those who are shy in face-to-face situations, to participate in online discussions and meetings, offer and receive critiques, negotiate, and build consensus. This advantage may be of special significance in KSA, where face-to-face interactions between male and female learners are often not an option.

Proposed measures to enhance existing e-learning environments
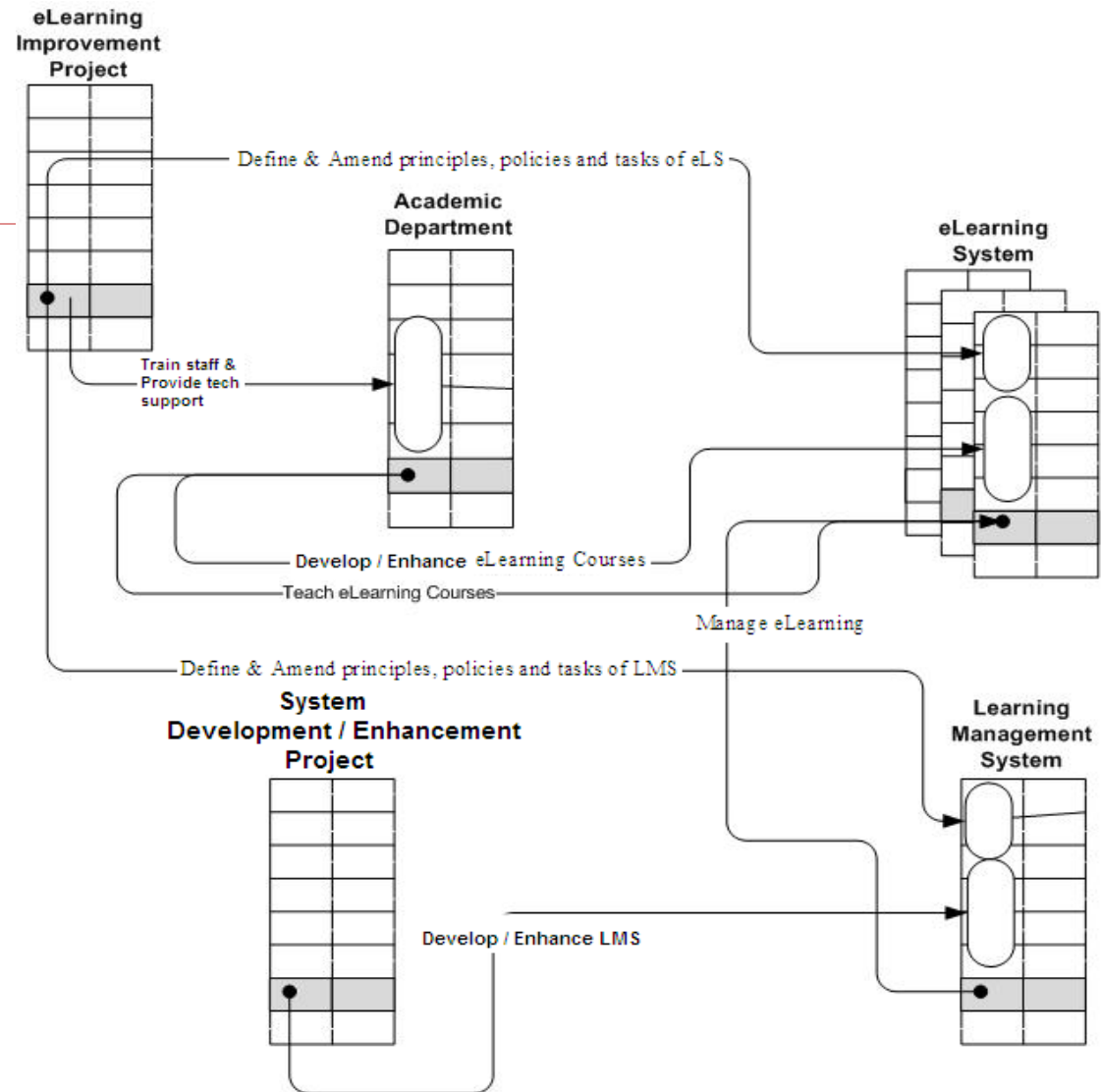
Conclusion

Responses from students at two major Saudi Arabian universities suggest that; Existing e-learning systems in the country are rated rather unfavourably by student users. There are reasons to believe that student satisfaction levels may be increased if they are encouraged (or indeed required) to interact more with their classmates and colleagues while using e-learning systems.

At present student dissatisfaction does not stem from a lack of available technology: indeed, students are satisfied with the design of available collaboration tools (e.g. chatrooms and discussion boards). However, it appears that course designs have not made sufficient use of such collaboration tools.

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Thank you ..!

Any question ?

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