

The challenges of developing blended learning in the first electronic university in the Arab world (Saudi Electronic University)

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Abstract

This article reviews the impact of electronic learning (eLearning) on universities in the Kingdom of Saudi Arabia. eLearning (also known as distance learning) was initially seen as a solution to overcome two major challenges faced by the higher education sector. The first was to ensure there was sufficient provision within the HE sector to match the rapidly growing population of high school graduates; the second was to provide a means for potential students to engage in undergraduate study where travel to university campuses was difficult or impossible. The latter objective was intended to have distinct appeal to women who are not allowed to drive. After much enthusiasm for such provision graduates discovered that distance learning degrees were not being recognised by potential employers or by universities as an entry requirement for postgraduate study. Consequently, the Ministry of Education determined that the newly created electronic university was to lead on all eLearning which was to be a mix of face to face and distance learning – blended learning. The challenges facing SEU for effective implementation of this provision are examined here.

Introduction

Colleges and universities in the Kingdom of Saudi Arabia (KSA) are confronted with challenges during the current century both to improve the quality of education and to make higher education available to a vast and increasing number of students. There are two key issues in that respect: first, there is that the physical size of the country which makes it difficult for all potential students to attend university campuses and virtually impossible for many women who are not allowed to drive under existing national social mores; secondly, there is limited capacity within Saudi public universities to cater for those who are entitled to study in higher education. This led the Ministry of Education to identify distance learning as one possible answer to these challenges, but initial attempts to introduce such programmes were not successful with prospective employers not recognising such degrees as being valid (Chua and Lam, 2007) and research showing students preferring regular face to face contact with

teaching staff (Alenezi, 2014). Subsequently universities were advised by the Deputy Minister for Education Affairs that for the academic year of 2016-17 they were not to accept any further students in and eLearning courses (Alryadh,2014). Instead, the Saudi Electronic University (SEU – established in 2012) is to develop centres for eLearning throughout the Kingdom with the assistance of the other Saudi universities.

Having taken account of the student and instructor feedback emerging from various local studies (e.g. Alebaikan, 2010; Almalki 2011, Alqahtani, 2010; Alshahrani, 2015), SEU intends to launch interactive teaching where live transmission of instructors input and face to face (F2F) teaching will be used jointly to promote learning outcomes and increase access to higher education. Fundamentally, therefore, SEU is reconfiguring its approach to teaching in order to facilitate maximum productivity, inclusion and access to Saudi higher education without losing the direct F2F component that was deemed to be essential by students and instructors. This is referred to as Blended Learning, a combination of online transmission of instructor input combined with F2F teaching, which has been adopted as the central initiative to address the logistical and quality issues faced by universities in Saudi Arabia.

Saudi Arabia and Higher Education

The territorial size of KSA is the largest of any country in the Arabian Peninsula. To the north it borders Jordan; Iraq is on the northeast and to the east, are several countries including Bahrain, Kuwait and Qatar; to the south is Yemen and Oman borders the country to the southeast (Ministry of Economy and Planning, 2014). The number of public institutions of higher education in KSA has rapidly increased from the initial eight in 2004 to the current 25 public and 8 private universities distributed in all regions of the kingdom (Ministry of Education, 2014). The majority of these newly established universities were upgraded from college status.

In 2014, the country's population stood at c31 million with a growth rate at 2.3 per cent every year, one of the highest in the world (Ministry of Economy and Planning 2014). According to these statistics, the country's population is likely to double within the next five decades and this will see an increase in youth demographics whereby 65 per cent of the entire population will be people aged 30 years and younger. Due to the high rate of births and youthful population the country's education system is normally under pressure to meet its development goals with the Ministry of Education trying to find solutions

A policy statement, announced in 2003 by the Saudi Minister for Higher Education (Albalawi, 2007), that all high school graduates would be entitled to enrol in any university within Saudi Arabia has caused a logistical problem in that the capacity of Saudi Universities is very limited and cannot include all learners as full-time students. Consequently, due to high demand only 86 per cent of high school graduates enrolled at universities in 2008 (Alshammri, 2008) and the number wishing to enter universities and complete their college degrees continues to outstrip the supply of university places available to them (AlMarzouq, 2013). This is despite the fact that several universities reported that their enrollee totals surpassed their maximum capacity, including Imam University and King Saud University, with capacity rates of 127 per cent and 110 per cent, respectively. The number of Saudi students and those on government scholarships taking further studies in HE has greatly increased in recent years and stands at about 900,000 (Ministry of Education, 2014). This is a huge change since 1970 when the number of students stood at just 7,000. That number excludes about 150,000 students taking undergraduate programmes and postgraduate studies in international institutions of higher learning all over the world, making the total higher education population of just over one million.

The rate of population growth and high school graduates crystallize the very real problem of accommodating all aspiring university students who seek higher education. Thus, public universities in Saudi can be seen to have insufficient capacity to manage the eligible student population (Ministry of Education, 2014).

eLearning in the Saudi university sector

In the 21st century there have been substantial developments in the field of digital technologies, most importantly the Internet, which have had an important effect on education. In KSA, because of the rapid population growth, one of the most important objectives of the implementation of e-learning programmes (including BL) has been to expand access to higher education for those students who, for whatever reason, have been prevented access. It was considered, for example, that eLearning could help to facilitate the education of women who live outside urban centres as they will have difficulty accessing university campuses because they are barred from driving and those without male relatives able or willing to drive them to campus are left without access.

A National Plan for Information Technology was developed by the Ministry of Communication and Information Technology (MOCIT) from which the implementation

of online learning was encouraged through the by establishment of the National Centre for eLearning and Distance Learning (NCEL) in 2006 which was linked directly to the Minister because of the extreme importance attached to this centre (MOCIT, 2012, 2015). The Director of NCEL subsequently stated that Saudi universities have been encouraged by the Ministry of Education to adopt online learning so as to minimise student hours in traditional classes (Almegran, 2008). According to him students would not need to attend class sessions because they could access the lecture materials from the Internet and could also communicate with faculty mentors online. At that stage online learning was seen as a medium which could enhance interaction between lecturers and students and develop more efficient learning processes (Alebaikan, 2010).

Online learning presented an opportunity of solving the challenge of increasing capacity for universities to enrol more students (Mirza and Al-Abdulkareem (2011). In this regard, implementing online learning in Saudi Arabia became one of the major objectives of the Saudi national project - the Future Plan for University Education in the Kingdom of Saudi Arabia (Ministry of Education, 2014). Increased allocation of funds from the MOE was made in order to develop the education system in this way and many universities then began developing and improving their ICT infrastructure to support online learning (Almegren, 2011). Consequently, the number of students that joined online programmes at Saudi universities increased quickly with, for example, 50,000 students in Imam university studying only through distance learning in 2015 (Almadinah, 2015). Moreover, King Faisal University (KFU) had 82,000 distance learners in different locations within the kingdom in 2015. The increase in student numbers in such courses prompted launching new online programmes at several universities, such that 15 out of 25 public Saudi universities were offering distance learning programmes by 2013 (Alkhalifa, 2013).

Students who graduated from such online programmes suffered, however, from the degrees not being accepted as valid in some private sector companies or for teaching in schools with the Arab countries in the Middle East. Al-Sharidah (2011), for example, found that employers in Saudi Arabia in particular were not willing to accept such degrees and gave preference to applicants with conventionally taught degrees. The issue of online degree accreditation also became problematic in many Arab nations with Ministries of Education perceiving such degrees with suspicion and casting doubts on the competencies of the degree holders, regardless of the prominence or status of the institution. In some instances, online graduates could not study at postgraduate level, even with the universities they graduated from and despite receipt

of the accredited certificate having been received (Ministry of Education, 2014; Alryadh, 2014; Sabg, 2015).

In addition, online learning, although often cost effective and convenient to the provider, can be seen to have challenges which may disaffect learners, particularly in the Kingdom of Saudi Arabia (KSA) where it has often proved unpopular. Al-Mousa (2004: 16), for example, states that “despite these technological advances, the absence of direct contact between the student and teacher is considered to be a major shortcoming in Internet-based learning”, going on to argue that “direct contact is usually vital for students who have not had any experience of Internet-based self-teaching or experience of learning without physical interaction with their teachers”. Al-Taheeh and Marzouk (2004) suggested this is particularly true of Saudi students and concludes that absence of direct contact is among the most negative aspects of online learning, with most Saudi students lacking the requisite skills to make use of such learning methods.

Control measures for eLearning

An executive meeting was held in December, 2012 in SEU headquarters with the Deputy Minister for Education Affairs - Muhammad Al-Ouhali in attendance and attended by officials from 25 public institutions of higher learning to deliberate on methods of implementing the ministry’s decisions. Universities were advised by Al-Ouhali not to accept any further students in eLearning courses for the academic year of 2016-17. Instead, SEU was to utilise this period to develop centres for eLearning throughout the country with the assistance of other universities.

Meanwhile web-based instruction had been evolving and led to the emergence of the term ‘Blended Learning’, which is also called hybrid learning or mixed-mode learning. In the past online and face-to-face learning had remained largely separate due to the differences in their methods and audience needs. With innovations in technologies facilitating human interaction in synchronous and asynchronous learning this has encouraged the integration of F2F learning with the online environment. Consequently, the Ministry of Education adopted ‘Blended Learning’ as the common definition of the integration of face-to-face learning and online learning (Almalki, 2011). Blended learning was considered to provide flexibility as, for example, it enabled access to female students who have many family commitments and inflexible work and to those who could not afford attending regular face-to-face classes. The

development of such learning thus gave female students in particular enhanced interaction opportunities for learning.

The Concept of Blended Learning

According to Littlejohn and Pegler (2007) blended learning refers to teaching a course or programme using a mixture of traditional teaching styles and online learning. Collis and Moonen (2001) argue the concept refers to the incorporation of both online learning methods and physical classroom methods in the learning process. Osguthorpe and Graham (2003) have expanded the definition further and assert that blended learning refers to a situation where the communication between the learner and the educator is mixed so that they interact both through the Internet and in face-to-face classroom sessions. The definition used here, therefore, is that blended learning is a form of teaching and learning which combines modern electronic and Internet-based methods with traditional classroom methods, while minimising time spent in the conventional classroom. Students thus may engage in learning activities such as online educational discussion, carry out and submit assignments over the Internet and receive feedback facilitated by the use of Internet tools and Virtual Learning Environments (VLEs). They must also attend conventional classes, however, so they can interact with their instructors as well as other students.

Blended learning has been considered to be one of the best ways to resolve possible drawbacks other forms of eLearning as it takes place both online and F2F and can thus address problems such as lack of direct contact and cheating (Collis and Moonen, 2001). Typically, with traditional F2F learning there was little or no student-teacher interaction outside the classroom. Blended learning, however, facilitates both direct physical contact between the teachers and students and indirect contact between them through the use of Internet tools and VLEs. Many universities across the world have thus embraced or are actively exploring blended learning “because it merges the traditional methods with modern ICT-based learning to support the needs of the learners amidst the changing education environment characterized by issues such as the increasing number of learners, the needs for flexibility and inclusivity in learning and increasing demand for learning to align with the needs of a future knowledge economy” (Alhajeri, 2005:15). Young (2002) foretold: “nearly 80–90per cent of courses at higher education would become blended in the future” and within two years it was noted that 46 per cent of U.S. undergraduate institutions had blended courses available (Allen and Seaman, 2004). By 2011, it was suggested that the “explosive

growing of BL [made] it possible to become the “new normal” in higher education” (Norberg, Dziuban, and Moskal, 2011: 207–208).

With recent developments in technology and equipment, therefore, the global use of ICT in learning curricula has become popular and the Saudi government has made a commitment to improving the perceptions of students towards ICT and increasing public acceptance of that technology. Many Saudi universities adopted the concept of blended learning, with King Saud University, the oldest university in KSA, being the first institution to implement such courses, whilst King Khalid University also adopted and rapidly developed such an approach. NCEL started providing a Certificate in BL teaching to lecturers in 2009 and in 2011 SEU began offering a combination of regular (traditional face-to-face education) and online education in both undergraduate and graduate degree programmes. In other Saudi Arabian universities, however, eLearning has not always proved attractive because most universities were deemed to be short of the tools and skills to conduct competent online learning courses (Alenezi, 2012).

Blended learning in the Saudi context

In the past blended learning had rarely been used as a learning strategy in higher education in KSA, with the typical method of learning being a classroom setting with the teacher in front of the students presenting information from notes or using display technology to emphasise key words (Al-Keaid, 2004). Al-Harhi (2005), for example, reported students expecting their teachers to initiate all communication and indicated they preferred one-way communication. With the use of online learning he found that students perceived a sense of anonymity due to the lack of physical contact with other students and teachers. Stafford (2005) described this a sense of social alienation which proved to be a major problem due to the separation of the students from instructors and colleagues. These studies demonstrate that student engagement with online learning opportunities in KSA requires strong social motivations for Internet use. Consequently, it has been suggested that there is a need in Saudi Arabia for there to be a culturally diverse online environment for learning that offers respect to cultural sensitivities and responds to differences (Nieto and Bode 2012).

Research studies within have examined practices in some Saudi universities have highlighted some successes as well as key challenges which need to be resolved if blended learning is to be successful in meeting the need to enhance the quality and quantity of study opportunities in higher education in KSA. In terms of successful

practice Asiri (2009) conducted a study of how male postgraduates who had registered for online Arabic language course at King Khalid University showed they had a positive mindset regarding the course which they considered was more flexible and offered a better learning experience. The participants also showed improved outcomes and praised the quality and attractiveness of the course content. In this case, however, blended learning was preferred over traditional classroom practice to a greater extent by those students who had some computer skills. A separate study in King Saud University looked into how the future of blended learning was perceived by 12 female postgraduate students and 7 female lecturers (Alebaikan, 2010). The student participants had registered for a course where one week of classroom-based lectures was followed by two weeks of online lectures. Qualitative data were collected through observations, diaries and reflective essays, interviews and focus groups and concluded that blended learning offered a successful experience for students. The study revealed that both lecturers and students had positive mindsets regarding because it had been designed to be in harmony with the unique nature of Saudi culture, particularly in matters regarding the education of women. A larger study undertaken by Almalki (2011) in Umm al Qura University included 504 students and 9 instructors and concluded that lecture time could be used more effectively by those instructors who had built and supervised corresponding websites. In these instances all materials of the course were distributed via such websites with most students considering the flexibility of access to be the most useful advantage of instructors' websites as they supplemented the instructional resources.

The Saudi Electronic University (SEU)

As a way of controlling the development of eLearning the government set up the Saudi Electronic University (SEU) in 2012, a wholly electronic institution of higher education. It was also the first in the Arab world and offered specific prerequisite courses as demanded by the labour market. (Al-Mousa, 2012).

SEU's chancellor, Abdullah Al-Moussa, announced a five-phase programme to be followed by SEU for the intake of students. The first stage was to monitor the trends of students along with the requirements of the job market. A compatible learning atmosphere was to be developed in the second stage before admission of students was started. The remaining stages will concentrate mainly on review and modification. Al-Moussa emphasised the role of the university in the development of the economy in the Kingdom based on knowledge and has further asserted that the needs and requirements of the labour market and the development of Kingdom will be satisfied

by SEU. According to him, the university will be able to increase its student intake with the help of the ministry's decision on eLearning courses which many Saudi students now want to join. Al-Moussa has further stated that the aim of the decision is to unify the national policies concerning e-learning and to improve the service quality and various academic fields of specialisation in Saudi universities. (SEU, 2012b). The objectives of SEU are:

1. To acquire national representation and enhance expertise in the qualified field;
2. To offer higher education in a flexible yet unique structure, encourage self-learning while providing advanced technological skills, and promote general development coupled with responsible labour through a virtual environment;
3. Use eLearning to give technically structured higher education, transfer knowledge acquired from other universities and international institutions through world-class faculty members, offer refined studies originating from international sources and finally develop the students according to Saudi society's needs;
4. Promote the eLearning concepts and link the education acquired with the needs of Saudi's society (SEU, 2012b).

Blended learning has been chosen as the preferred approach with SEU following a unified educational style. 25 per cent of the total course time is meant for face-to-face classroom learning with the remaining 75 per cent online, whereby students interact with virtual classroom-book contents, participate in educational forums or make use of Learning Management System (LMS).

Such an approach to student learning appears, therefore, to be sympathetic to the cultural norms traditionally associated with higher education in Saudi Arabia in that it is based on a relationship between instructor and student thus allowing for a requisite amount of F2F interaction. In this way the SEU strategy seeks to address the potential issues of isolation and alienation found within previous research studies undertaken in the country. In addition, core aspects of the teaching programmes are to be 'live', rather than asynchronous, in order to encourage the sense of student community that can evolve in learning cohorts. SEU programmes are thus intended to blend sophisticated techniques into the student's learning with the aim that they will become skilled enough to practically solve specific workforce needs up to the international level (MOCIT, 2012). For undergraduate degree students, there will normally be one class every week while the Master's degree students have a class every three weeks. The students normally agree on these classes and virtual classes are attended through the

internet as scheduled by the same students. Additionally, these students schedule interactive classes on a weekly basis, where they meet their lecturers physically or online (SEU, 2012b).

SEU has entered into partnerships with a number of universities from other countries to ensure that not only is provision flexible and unique, but also to ensure quality and support for the skills acquired by students to be relevant to the global job market. The partnerships foster the exchange of knowledge through collaboration, sourcing of information from multiple sources and transfer of information accordingly by ensuring it is compatible with the Saudi society.

Challenges still remain, however, according to a report which showed more than 90 per cent of students who enrolled in SEU foundation year at Al Medina city have failed to continue study (Alharbi , 2014). The report refers to a number of difficulties experienced by those students during their study and accused the university of failing to solve the difficulties, especially with regard to the lack of communication, as well as frequent changes in some curriculum. Although SEU argued that the high rate of dropout from the foundation year was to be expected since the university accepts all high school graduates unconditionally and new students may be deficient in a number of disciplines such as mathematics, English and computer science, it is evident that some challenges remain. Lee and Tsai (2011) indicate, for example, there is a belief by faculty and students that online activities and tasks need more effort and time. Consequently, time management that complies with the blended learning curriculum is an issue since the online activities and instructions are supplemental to the traditional learning mode.

It becomes evident, therefore, that with the introduction of online learning to blend with the classroom learning, there will need to be changes in behaviours and understanding. Successful implementation of blended learning, the chosen mode of enhancing provision of higher education, thus moves beyond policy statements and the provision of equipment to meet the needs of those involved in the changed learning process – the instructors and students - who lack experience (and ambition in some instances) to embrace this contemporary response to expanding and enhancing student learning in the universities of Saudi Arabia.

References

Al-Harhi, A. (2005). Distance higher education experiences of Arab Gulf students in the United States: A cultural perspective. *The International Review of Research in*

Open and DL, 6(3).

Al-Keaid, A. (2004). *Choice of practice: Teaching in Saudi Arabian universities*. Unpublished doctoral dissertation, The Pennsylvania State University, University Park, PA.

Al-Madinah news, (2015, April 29). *More than 60 thousand students are doing tests for distance learning after at Imam university*.

Al-Mousa, (2004) *E-learning conception .. Its benefits .. Its advantages .. Its deterrents*. Working paper presented to the Future School Symposium. King Saud University, College of Education, Last accessed 18th May 2015. Available at: <http://ksu.edu.sa/ar>

Al-Mousa, (2013). *Saudi Electronic University is a different model in e-learning and distance education*. (Video File). Last accessed 18th April 2015. Available at: <https://www.youtube.com/watch?v=6QQ73hQBvNQ>

Al-Mousa (2012). *First electronic public university in the Arab world*. Available at: from <http://www.alarabiya.net/articles/2012/06/15/220871.html> -accessed 18th April 2015

Al-Taheeh and Marzouk, S. (2004). *DL and E-learning: Concepts and experiences*. Kuwait: Al-Kitab Company.

Alebaikan, R. (2010). *Perceptions of BL in Saudi Universities*. Unpublished PhD Thesis, University of Exeter, UK.

Alebaikan, R. and Troudi, S. (2010). BL in Saudi Universities: Challenges and perspectives. *Research in Learning Technology*, 18(1), 49-59.

Alenezi, A. (2012). *Faculty members' perception of E-learning in higher education in the Kingdom of Saudi Arabia (KSA)*. Unpublished doctoral dissertation, Texas Tech University, Lubbock, TX.

Alhajeri, A. (2005). *Internet history in Saudi*. Saudi Arabia: Riyadh

Alharbi, (2014). *Students drop out of the Foundation Year at SEU by a large margin naturally*. Available at: http://alwatan.com.sa/Local/News_Detail.aspx?ArticleID=193511andCategoryID=5 - accessed 18th April 2015.

Allen, I. and Seaman, J. (2004). *Sizing the opportunity: The quality and extent of online education in the United States, 2002, 2003*. Needham, MA: SCOPE. Available at: <http://www.sloan-c.org/resources/survey.asp> - accessed 18th April 2015.

Almegran, A. (2008). *Most Saudi universities switch to e-learning by next year*. *National Centre for E-learning and distance Learning*. Last accessed 18th April 2015 Available at: <http://www.elc.edu.sa/portal/index.php?mod=newsandapage=3andannID=382>

Almalki, M. (2011). *BL in higher education in Saudi Arabia: A Study of Umm Al-Qura University*. Unpublished PhD thesis, RMIT University.

AlMarzouq (2013). *Eight public universities accept students by more than the maximum of available seats*, Available at:
<http://www.alsharq.net.sa/2013/04/21/811083> - accessed 18th May 2015.

Alzamil, Z. (2006). Students' perception towards the E-learning at the GOTEVOT and the Arab Open University. *Educational Science and Islamic Study Journal*, King Saud University, 18(2), 655-698.

Asiri, A. (2009). *Attitudes of students toward E-learning in Arabic language courses: A case study at King Khalid University in Saudi Arabia*. MSc dissertation, LaTrobe University.

Alriyadh (2014). *Saudi Electronic University is betting on technology to teach «future generation»* Available at: <http://www.alriyadh.com/942228> - accessed 25th May 2016.

Chou, C. (2004). A model of learner-centered computer-mediated interaction for collaborative DL. *International journal on E-learning*, 3(1), 11-18.

Collis, B. and Moonen, J. (2001). *Flexible learning in a digital world: Experiences and expectations*. Kogan Page, London.

Garnham, C. and Kaleta, R. (2002). Introduction to hybrid courses. *Teaching with Technology Today*, 8(6). Available at: <http://www.uwsa.edu/ttt/articles/garnham.htm> - accessed 11th March 2015.

Garrison, D. and Vaughan, N. (2008). *BL in higher education: Framework, principles and guidelines*. San Francisco: John Wiley and Sons.

Graham, C. (2006). 'BL systems: Definition, current trends and future directions'. In C. Bonk and C. Graham (Eds.), *Handbook of BL: Global perspectives, Local designs*. San Francisco, CA: Pfeiffer, 3-21.

Higgins, R., Hartley, P, and Skelton, A, (2002). The conscientious consumer: Reconsidering the role of assessment feedback. *Student Learning Studies in Higher Education*, 27(1), 53-64.

Jones, N., and Lau, A. (2009). E-learning-A change agent for education? *Journal of Applied Research in Higher Education*, 1(1), 39-48.

Kim, S., and N. Malhotra (2005). A longitudinal model of continued IS use: An integrative view of four mechanisms underlying postadoption phenomena. *Management Science*, 51(5), 741-755.

Lee, S. and Tsai, C. (2011). Students' perceptions of collaboration, self-regulated learning and information seeking in the context of Internet-based learning and traditional learning. *Computers in Human Behavior* 27(2): 905-914.

Littlejohn, A., and Pegler, C. (2007). *Preparing for Blended E-learning*. London:

Routledge.

Ministry of Communications and Information Technology (MOCIT) (2012). *Briefing document*.

Ministry of Communication and Information Technology (MOCIT) (2015). *National plan for information communication technology*. Riyadh: MOCIT Press.

Ministry of Economy and Planning (2014). *General aims and strategic basics of the 8th development plan*. Available at: <http://www.mep.gov.sa/> - accessed 20th March 2015.

Ministry of Education (MOE) (2014). *Education in Saudi Arabia: Report of statistics and numbers*. Riyadh, KSA: Ministry of Education.

Mohandes, M., Dawoud, M., Amoudi, S. and Abul-Hussain, A. (2006). Online development of digital logic design course. *Information and Communication Technologies*, 1, 42-47.

Nieto, S. and Bode, P. (2012). *Affirmity diversity: The socio-political context of multicultural education*. Boston, MA: Pearson/ Allyn and Bacon.

Norberg, A., Dziuban, C. and Moskal, P. (2011). A time-based BL model. *On the Horizon*, 19(3), 207–216.

Osguthorpe, R. and Graham, C. (2003). BL environments. *Quarterly Review of Distance Education*, 4 (3), 227-233.

Owston, R., Garrison, D., and Cook K. (2006). 'BL at Canadian universities'. In Bonk, C. and Graham, C. (Eds.) *The handbook of Blended Learning: Global perspectives, local designs*. San Francisco: Pfeiffer, 338-350.

Picciano, A. (2006). BL: Implications for growth and access. *Journal of Asynchronous Learning Networks*, 10(3). Available at: http://www.sloan-c.org/publications/jaln/v10n3/index_member.asp - accessed 29th March 2015.

Ross, B., and K. Gage. (2006.) 'Global perspectives on BL: Insight from WebCT and our customers in higher education'. In C. Bonk and C. Graham (Eds.) *The handbook of BL: Global perspectives, local designs*. San Francisco, CA: Pfeiffer, 155–68.

SEU (2012a). *Saudi Electronic University: Colleges*. Available at: <https://www.seu.edu.sa/sites/ar/Pages/main.aspx> - accessed 11th March 2015.

SEU (2012b). *SEU report: About the university*. Available at: <https://www.seu.edu.sa/sites/ar/Pages/main.aspx> - accessed 11th May 2015.

Stafford R. (2005). Understanding motivations for Internet use in distance education. *IEEE Transactions on Education*, 49, 301–306.

Young, J. R. (2002). "Hybrid" teaching seeks to end the divide between traditional and online instruction. *Chronicle of Higher Education*, 48(28).