

## Chapter 17

# Web-Based Instructions: An Assessment of Preparedness of Conventional Universities in Saudi Arabia

**Mohammed Saleh Al Balawi**  
*King Fahd Naval Academy, Saudi Arabia*

### ABSTRACT

*Factors affecting faculty decisions in the conventional university setup in Saudi Arabia for participating or not participating in Web-based instruction (WBI) were investigated in this study. Incentives and barriers to WBI, faculty attitudes, and participants' demographic information were also explored. The study was aimed to investigate the attitudes of the faculty members at three Saudi universities toward WBI in an effort to describe the current status of WBI in the Saudi higher education system. In addition, results of the study could also provide the Saudi universities and the faculty with insight into factors affecting adoption of WBI. Finally, since there have been few implementations of WBI across the country, it was important to explore how WBI is currently used in Saudi universities and to determine critical factors that could affect the implementation of WBI.*

### ORGANIZATION BACKGROUND

Three Saudi Arabian universities were selected for this study, King Saud University in Riyadh, King Abdul Aziz University in Jeddah and King Fahd University of Petroleum and Minerals in Dhahran. The first being one of the oldest universities in Saudi Arabia established in 1957 in the central region of the country. By 2007-08 the university had a total of 4886 faculty members out of which 1456 were

international faculty. A total of 40010 students were enrolled in the different academic programs of the university by 2007-08. The second university in this study was established in 1967 and situated in the prominent commercial city, i.e. Jeddah on the west coast of Saudi Arabia. The third university of this study was established as a university in 1975 and situated in the eastern region of the country. All the three universities of this case study are relatively old compared to other Saudi universities, and each has recently started to implement distance learning.

DOI: 10.4018/978-1-61520-749-7.ch017

## **SETTING THE STAGE**

Saudi Arabia is a large country with many of its communities isolated from major cities and established colleges and universities. It was determined that providing higher-education programs through distance education would greatly benefit the people and the nation (Abahussain, 1998). Through the use of distance learning and the integration of Web-based training and technology, information and knowledge can be made available to students in the Kingdom of Saudi Arabia anytime and anywhere. The introduction of additional Web based educational opportunities will help Saudi universities move from formal classroom training and education to a new way of teaching and learning that does not require classrooms.. In addition, new methodologies of teaching and learning can be integrated into practical instruction.

The WWW has provided a new and interesting teaching and learning environment (McCormack & Jones, 1998), which has, in turn, affected higher education. Individual faculty, academic institutions, research centres, colleges, universities, and institutions of all kinds began to develop an Internet presence early in the emergence of the Web in the 1990s. The WWW became a popular teaching and learning tool during this time as well (Christianson, 2001; Crossman, 1997). The development of online or Web-based curricula accessed via the student's computer connected to a college network and the Internet has permitted students to learn from the comfort of their own homes (Cherepski, 2000). Additionally, WBI courses can be convenient for students, instructors, and institutions. With the rapid increase in the number of students in Saudi Arabia graduating from high schools, there is a growing strain on higher-education resources (Al-Mogbel, 2002). Institutes of higher education do not have the necessary resources to provide all of these students with a good education (Al-Mogbel, 2002). In the past decades, many institutions of higher learning in Saudi Arabia were able to respond to the

continuing pressure of the growth of the student population by expanding existing colleges and universities or by building new ones (Al-Arfaj, 2001). Although the price of oil is high and the government has a surplus, and universities are being built as fast as possible, resources still are not available to educate all potential students. Some administrators believe that creating education programs that make use of modern technology, such as video and television broadcasting and the Internet, address the financial constraints and limited resources being experienced in the Kingdom (Al-Mogbel, 2002; Al-Rashoud & Al-Abdul-Kareem, 2001).

WBI can also offer opportunities for men and women who, inhibited by cultural and social barriers, desire to pursue higher education. For cultural and religious reasons, the higher-education system in Saudi Arabia is separated by gender, compounding the lack of necessary resources to fulfil the student demands (Abanmie, 2002; Al-Erieni, 1999). In response, Al-Arfaj (2001) stated, "Female students in Saudi Arabia were very interested in distance WBI" (p. 6). The use of WBI could be one method to solve the problem of a lack of access to higher education in Saudi Arabia (Al-Erieni; Al-Mogbel, 2002; Al-Rashoud & Al-Abdul-Kareem, 2001). Several Saudi universities have already realized the significance of this possible solution (Abahussain, 1998; Al-Arfaj, 2001). Understanding the perceptions and attitudes of administrators, faculty, and students (who are the major players) on the subject of distance education in Saudi Arabia is vital because there have been few WBI courses implemented in Saudi Arabia. There is also a need to understand how WBI is currently used (Al-Mogbel, 2002). With the modernization of the higher-education system, Saudi universities have placed a high priority on providing Saudi citizens with the opportunity to obtain a quality education. Around the world, the number of the courses on the WWW has increased; Web-based education has progressed rapidly. The integra-

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/web-based-instructions/42173](http://www.igi-global.com/chapter/web-based-instructions/42173)

## Related Content

---

### Statistical Metadata Modeling and Transformations

Maria Vardaki (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1841-1847).  
[www.irma-international.org/chapter/statistical-metadata-modeling-transformations/11069](http://www.irma-international.org/chapter/statistical-metadata-modeling-transformations/11069)

### Integrative Data Analysis for Biological Discovery

Sai Moturu (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1058-1065).  
[www.irma-international.org/chapter/integrative-data-analysis-biological-discovery/10952](http://www.irma-international.org/chapter/integrative-data-analysis-biological-discovery/10952)

### Using Prior Knowledge in Data Mining

Francesca A. Lisi (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 2019-2023).  
[www.irma-international.org/chapter/using-prior-knowledge-data-mining/11096](http://www.irma-international.org/chapter/using-prior-knowledge-data-mining/11096)

### Privacy-Preserving Data Mining

Stanley R.M. Oliveira (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1582-1588).  
[www.irma-international.org/chapter/privacy-preserving-data-mining/11030](http://www.irma-international.org/chapter/privacy-preserving-data-mining/11030)

### Symbiotic Data Miner

Kuriakose Athappilly (2009). *Encyclopedia of Data Warehousing and Mining, Second Edition* (pp. 1903-1908).  
[www.irma-international.org/chapter/symbiotic-data-miner/11079](http://www.irma-international.org/chapter/symbiotic-data-miner/11079)