# Chapter 5.27
# Educational Technology in the Middle East

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## INTRODUCTION

The countries of the Middle East are undergoing rapid change in many areas, and the field of education is illustrative. This is particularly the case for the members of the Gulf Cooperation Council (GCC): Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE). The governments of the GCC are actively striving to lessen their dependence on both their petroleum-based economies as well as the large expatriate populations that make up the majority of human resources in the workplace. One of the solutions to greater independence is through upgrading the national educational systems. Educational technology plays a key role, both as a tool used in education as well as being a conduit toward embedding technological facility into every aspect of their economic development, and thus is an end in itself.

This review of the economic and social background driving educational reform in the GCC examines current and planned future uses of educational technology at the postsecondary level, both as a tool and as a goal, as well as highlights several innovative technological projects ongoing in higher education: Zayed University, a "laptop" university in the United Arab Emirates; the forthcoming Internet City in Dubai; using closed-circuit TV (CCTV) to bring education to university women in Saudi Arabia; and the Arab Open University (AOU), a distance learning university based on the UK Open University (UKOU) with branches currently in six Middle Eastern countries.

## ECONOMIC BACKGROUND

Although the Middle Eastern countries described herein have histories of civilization stretching back for 1,000s of years, their modern guise is fairly new, being a consequence of the discovery and exploitation of the prolific oil and natural gas reserves, beginning only in the early 20th century. These natural resources have provided enormous wealth to the GCC countries, which in turn has fueled a combination of rapidly rising standards

of living with an unprecedented modernization drive in all areas of the economy and society.

During the oil boom of the 1970s and 80s, the GCC countries imported huge quantities of expatriate labor. This was a necessity as to successfully exploit the oil and gas, the GCC countries needed technologies and skills that the local populations did not possess. As a result, expatriates are the principal supply of labor in most sectors of the economy, including within governmental organizations (Kapiszewski, 2001). Indeed, as an aggregate, the expatriate population in the GCC makes up over 70% of the total population (Al-Sulayti, 1999; Kapiszewski).

One significant part of the generous welfare systems provided to the national populations of the GCC states has been the guarantee of employment for nationals in the public sector. This employment scheme, coupled with high birth rates in the GCC countries, has brought about a near saturation of available government jobs for nationals. As a consequence, unemployment among nationals is steadily rising. This situation has brought a sense of urgency to the attempts to nationalize the workforce or replace expatriate labor with nationals, particularly in the private sector. However, many employers are reluctant to hire nationals for positions currently held by expatriates, citing concerns regarding the lack of appropriate training and skills among them, as well as demands for compensation that are not market driven (Kapiszewski, 2001).

This unique population dynamic brings about many concerns for the GCC governments, including security issues and cultural threats. Thus, the GCC countries are pushing for the nationalization of their workforces in order to lessen their dependence on expatriate labor and minimize these concerns, while reducing unemployment conditions for nationals. Concomitantly, the GCC is also attempting to lessen the dependence of their economies on oil and related products. The GCC leadership has publicly called for their countries to become vital players in the new technologically driven global economy, often called the Information Age. To succeed at both of these issues requires a well-educated human-resource pool drawn from the national population of the GCC countries.

Castells (1999) points out that education, science, technology, and information are critical determinants for a country's successful entry into the Information Age. Therefore, it is crucial that all members of a society are educated not only in subject matter but also in critical thinking and analysis skills. This philosophy of human capital as the driver of economic success is at the forefront of the calls for greater quantity and quality of technological education in the GCC to ensure that the national workforce will play a vital role in the desired economic diversification of the region (Al-Ali, 1999; El Tell & Al-Maaitah, 2000; Vandewalle, 2000).

## SOCIAL AND CULTURAL BACKGROUND

The cities and countries that make up the GCC are more varied and diverse than is usually imagined. Some are very conservative, socially and culturally, such as Saudi Arabia, while others are far more liberal with population centers that could easily be compared to most major European cities, such as the emirate of Dubai in the United Arab Emirates. The other areas of the GCC fall somewhere along a continuum in between these two extremes. However, underlying the entire region are the religious values of Islam, which permeate all levels of society. Indeed, shariah, or Islamic law, is the foundation for all national laws and constitutions. Islam is a religion that is greatly intertwined within the social and cultural fabrics of the GCC. It is ever present and will therefore always play a key role in planning the future roles of the GCC states.

One of the most problematic areas of potential social and cultural conflict with regards to