

Excellence in Education

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1 Introduction

The most predictable feature of modern society is its unpredictability. We no longer believe that tomorrow will look much like today. Universities must find ways to sustain the most cherished aspects of their core values, while discovering new ways to respond vigorously to the opportunities of a rapidly evolving world.

James Duderstadt, President Emeritus, University of Michigan [1]

These words of wisdom at the beginning of the seminal work “A University for the twenty-first Century” by one of the most respected American university presidents of one of the world’s best public universities, describe succinctly the mega-trend of change, challenge, modernization and globalization sweeping the world. Whether we reside in Singapore or Saudi Arabia, this mega-trend cannot be avoided. An excellent education system, culminating in the education provided by a major university, must equip our students and graduates to meet this mega-trend head-on and benefit from its ramifications, whether he or she is a Singaporean, a Saudi or one of the foreign students enrolled in our universities.

King Abdulaziz University (KAU), by embarking on strategic planning and convening its International Advisory Board (IAB), seeks to utilize and exploit this mega-trend of challenge, change, modernization and globalization, and harness and exploit the opportunities it provides to develop a university model of excellence. This chapter proposes the philosophy and approach for KAU to develop an educational model of excellence, drawing significantly from the author’s experience in Nanyang Technological University (NTU) in Singapore. The author led the transformation of NTU into a major global research university during his term as President from 2003 to 2011. This required fundamental changes in structure, process, staffing, funding and education. KAU is well on its way towards its own

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transformation, promoted by a dedicated, wise and resourceful leadership and assisted by close engagement with the IAB.

While the changes envisaged by KAU are all encompassing, this particular chapter focuses on undergraduate education and professional education up to the Master's level. Education of Ph.D. level researchers and academics is closely tied to the research enterprise in the university and best left to this book's other authors (see chapter "[Excellence in Research](#)", by Professor Michael Arthur).

2 Internationalization of University Education and Its Application to Saudi Arabia

Each nation among the 193 members of the United Nations has its own particular characteristics resulting in continuous changes in international position and standing. Prominent among them, in contrasting ways, are the special cases of Singapore and Saudi Arabia.

Singapore Skyline at Marina Bay (photo by Guaning Su)

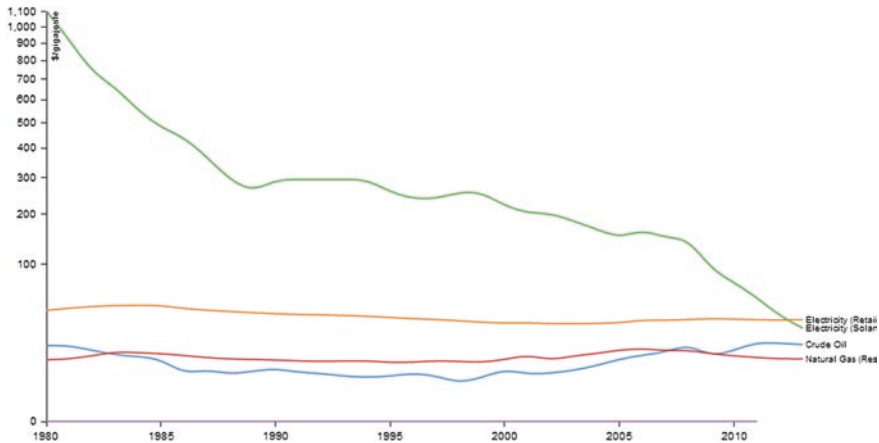


The Singapore story is a “poor boy made good” story of a small tropical island, devoid of natural resources other than its maritime location, striving against the odds to succeed and prosper. There is always a degree of angst in the Singaporean psyche, almost as if we cannot quite believe that we have come thus far. Singaporeans tend to have nagging doubts that it may be all be a mirage that can disappear like Cinderella’s outfit, horses and coach on the stroke of midnight

in the well-known fairy tale. As a result, we are obsessed with planning for the worst-case scenario and are overly cautious when considering possible courses of action that have not already been tried and tested by others. Engineering fundamental change with such a prevailing culture is always a challenge.

Saudi Arabia has gone through changes no less remarkable than Singapore. In a mere two generations the lives of most Saudi citizens have undergone complete transformation, from a predominantly nomadic way of life, struggling against the elements, to being citizens of one of the world’s most prosperous countries [2]. Saudi Arabia today is a modern nation with every conceivable convenience and a high standard of living secured by an enviable position as the nation with some of the world’s largest proven petroleum reserves [3]. Even so, the far-sighted Saudi leadership is already working on a post-petroleum future and embarking on the development of alternative industries. There is also concern among the leadership about the effect of petroleum wealth on the levels of motivation and energy among some Saudi youth. Reliance on foreign workers and its implications for national resilience is yet another concern. Universities such as KAU play leading roles in creating an increasingly diverse, robust, resilient and promising national future by educating its future leaders, professionals and citizens. Universities, as the main instrument in the process of the preparation of young people for high skilled jobs, must also help to overcome the inertia generated by a population accustomed to government largesse.

Alternative energy costs converging with oil and gas [4]



3 The Role of Religion

Religion plays an important part in both nations but in contrasting ways. Singapore is a multi-ethnic, multi-religious nation that has an enviable record of racial and religious harmony over the five decades since independence. One

interesting illustration that is highly symbolic of the Singaporean approach towards multiple religious coexistence is the commissioned military officer corps, which is blessed by leaders of no less than seven different religions.

Saudi Arabia is the guardian of the two holiest places in Islam: Mecca and Medina. The nation hosts millions of pilgrims annually with remarkable levels of efficiency and hospitality. This unique position in Islam, along with the influence consequential to it being one of the world's largest oil producers, bestows on Saudi Arabia a commensurate level of global influence and a stature unmatched in West Asia and in the Arab and Islamic world. An important role of leading universities such as KAU in Saudi Arabia must be to educate the future leaders of such an important nation. This educational process requires KAU to inculcate in all its students a broad education with an international and global outlook, a worldview. Graduates possessing this kind of outlook and who have benefitted from wide-ranging internationally oriented education would be suitably prepared to provide leadership in an enlightened administration in support of the nation's leadership. KAU graduates need practical hands-on experience and need to make active contributions in professions relevant to the needs of Saudi society and its economic structure. In order to fulfil such requirements, KAU is therefore required to educate the nation's youth in a wide range of specializations and for a wide variety of professions. Although particular curricula depend on the expected fields of endeavour of future graduates, it is a well-accepted view among the world's best universities that a broad preparation in the humanities and sciences encompassing a wide range of professions would be of benefit to both the graduates and the nation.

King Faisal Convention Center at King Abdulaziz University (photo by Guanng Su)



Internationalization of the education model in KAU involves creation of opportunities for KAU students to be exposed to international ethnic and religious diversity and international, interdisciplinary and interfaith dialogue. Judicious exploitation of such opportunities will enable KAU graduates to adapt and tailor best international practices to create a uniquely Saudi outlook that takes into account the globalized world's complexities. As the graduates advance in their careers they will be able to assist in the formulation of appropriate effective responses of a modern Islamic country to the pressures and impact of globalization. Successful reconciliation between traditional Islamic values and the impact of rapid economic development and modern technology can in turn serve to accentuate Saudi Arabia's leading position among the world's Muslim nations.

4 Issues Faced by a Mainstream Saudi University in Internationalization

By virtue of its history, Saudi Arabia is by and large a conservative society. Not only was the traditional nomadic way of life common until a couple of generations ago, the special position of the Saudi monarchy and religious establishment as the guardians of the two holiest places in Islam, the cities of Mecca and Medina, confer upon the Saudi population a special status and obligation to be exemplars of the virtues extolled in the Holy Quran. This conservatism is a national strength in that it provides the Saudi population with solid cultural heritage and stamina. This enables them to resist corrosion by unwanted and undesirable aspects and influences of modernization and allows Saudi Arabia to develop societal resilience. This can also be a liability if, as a result, Saudi Arabia concentrates too much of its gaze inwards and shuts out too much of the outside world in an effort to keep corrupting influences at bay. KAU has a key role to play in reconciling the apparent differences between conflicting values.

A university is positioned as a summit of learning. In today's world, this must include learning in an intellectual and questioning manner, rigorously addressing the complexities abounding in the kaleidoscopic outside world. Among Saudi universities, KAU is unique in the kingdom in terms of historical position and geographic location. Not only is KAU holding the name of the founder of Saudi Arabia, King Abdul Aziz, it is also located in the major Red Sea Port of Jeddah housing one of the country's main airports and is well connected internationally. It is also close to Mecca and Medina, the two most potent symbols of Islamic culture and values. The port and airport open the doors of the world for KAU students so that they can understand and absorb and adapt to influences from the outside world. The proximity of Islam's Holy Shrines is a perpetual reminder to KAU's learning community of Saudi Arabia's unique position and responsibilities. As KAU embarks on its Third Strategic Plan, there is an opportunity of exceptional potential for the university to stand out from the pack, not just in Saudi

Arabia, but also globally, by creating a new model of education—“KAU Education—the Best of Both Worlds: the modern world and the Islamic World”.

Sun sets on Jeddah Seaport (photo by Guaning Su)



5 Importance for Saudi Students to Understand and Tap World Mega-Trends

KAU education can be seen as a bridge between the modern world and the Islamic World. The modern world has witnessed an exponential explosion of knowledge and rapid proliferation of pathways to access knowledge. Such an explosion of knowledge has however brought in its wake untruths, half-truths, unverifiable claims, propaganda and misinformation of every conceivable variety. The world is only now beginning to attempt to sift the gems from the chaff.

Another modern trend is the proliferation of new discoveries at the boundaries between disciplines, the so-called trans-disciplinary research and holistic approach to problem solving. Saudi Arabia itself is an excellent example. Being energy-rich and water-poor gives rise to opportunities for synergy between petroleum, environmental and agricultural disciplines, due to the close link between water availability and food production, as well as the trade-offs between water recovery, desalination and energy consumption. The opportunity to discover and develop solutions at the boundaries of these very divergent fields could result in a leading position for Saudi research, innovation and industry. Saudi Arabia can take a leading role in development of results that optimize the input of energy for agricultural production and clean water output.

On the humanities front, there is the challenge to develop the interface between the traditional Islamic values of the historically mainly nomadic Arabian Peninsula on the one hand, the highly developed infrastructure of modern Saudi Arabia on the other, and the prosperous and well-travelled Saudi populace. This poses important questions concerning Islamic values and culture in a modern context. Results from research on these areas can be readily embedded in undergraduate and professional education programmes at KAU.

Prince Faisal bin Salman, Governor of Madina, (*right*) receives in his office in Feb. 2015 the KAU team who conducted a study on the volcanic regions in Madina as KAU Vice-President for Graduate Studies and Research (*back*) looks on



History tells of the regular rhythm of the rise and fall of great powers and civilizations. Both Asia and the Middle East had glorious periods of pre-eminence historically but it has so happened that modern technology has been mainly led by Western Europe in the last 300 years. The United States only began the progress that led to its present position of prominence some 100 years ago. From the perspective of the time scale of millennia, the dominance of the West in technology might perhaps be seen to be a transient phenomenon.

Asia is already starting to reclaim its past stature, led by China, Japan and Korea, proving that technological progress is not the sole preserve of the West. If we look back at the flowering of Islamic culture during the period the Moors were in Southern Europe and the Caliphate of the successors of Prophet Mohammed (p.b.u.h) spanned the entire Middle East and Southern Europe, it is clear that Islam has historically provided fertile soil beneficial to a society of intellectual excellence. Ideas and inventions with enduring world impact flowered under Islam at that time.

This can reoccur with the Islamic world and with Saudi Arabia. KAU can be an important agent of change, leading the way with an educational model of

excellence. The convergence of Islamic values, modern technology and the internet provides fertile ground for the grooming of KAU students. As a major university with close to 100,000 students, KAU can be the reliable portal to the world for its students in the first instance, and the students themselves can, in their turn, likewise serve as an important portal for Saudi Arabia.

Photo of the 1st KAU International Advisory Board meeting held on KAU Main Campus



Such a role as an internationalization portal has major implications for KAU. This can be seen as one of the driving forces that led the university to establish the IAB. It is also an important driving force behind the establishment of KAU's first two strategic plans and the current preparation of the third strategic plan. Indirectly, it provides part of the impetus that the university leadership has drawn on to enhance KAU's international reputation that has resulted in increasingly higher international rankings.

Preparing such a large university for strategic re-positioning is by no means an easy feat. It starts with an administration open to ideas, open to and able to implement change. It needs highly qualified, active research faculty who are not only international authorities, but who are also knowledgeable about Saudi Arabia and able to apply their expertise to the country's benefit. Many of the strategic plan initiatives are driven by such considerations. Guided by the university leadership and with the support of the IAB, they will be implemented progressively over the course of the next few years.