

# Roadmap to Become a World-Class University

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## 1 Introduction

Raising the educational and academic status and ranking of universities to that of internationally accepted world-class universities has become the goal of many university higher administrators around the globe in recent years. This trend has been made possible and accelerated by rapid global economic growth and development. Such efforts inevitably involve the progressive evolution of successful strategies dealing with issues concerning academic and educational excellence, funding, support facilities' suitability, academic staff qualifications, and graduates' competencies. Within this global academic context, an initiative for attaining world-class university rank and status was undertaken by King Abdulaziz University (KAU). The aim of this initiative was not primarily to compete with leading internationally recognized universities, but was rather a means of showcasing the academic and educational strengths and potential of KAU, and of creating an appropriate and navigable roadmap to facilitate genuine, academically credible, and enduring improvements in the quality of the higher education provided.

Before discussing KAU's approach to this venture, it is necessary to differentiate between the two concepts "university internationalization" and "world-class university" which are sometimes used interchangeably, although their meanings are dissimilar. KAU has selected to seek the status and ranking of "world-class university".

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## 2 Internationalization in Higher Education

The term “internationalization” covers a broad range of concepts of varying scope and emphasis concerning various aspects of higher education. A number of viewpoints have been adopted concerning university internationalization, and consequently differences in understanding of the term have become apparent. Internationalization can involve international contributions on syllabi, literature in other languages, exchange of professors and students, international studies, international technical collaboration, and academic staff mobility.

Internationalization in terms of activities includes academic and non-academic activities such as the development of curricula, scholar and student exchange, technological assistance, intercultural teaching, and joint research activities. The level of concentration of activities varies, depending on the specific educational and academic situation and geographical location of the concerned universities.

The European Association for International Education (EAIE) defines internationalization as the entire range of procedures by which higher education becomes less national, and more internationally oriented [1]. The Association of Universities and Colleges of Canada (AUCC) (now it is called Universities Canada) defines internationalization as a multitude of activities aimed at providing an educational practice within an environment that integrates a global perspective [2].

Others define internationalization as the integration of international aspects into teaching, research, and community services. This involves the integration of an international/intercultural/global perspective into a university’s major functions whereby the university’s higher education system develops an international orientation [3].

Internationalization can also refer to interactions between cultures through teaching, research, and community service functions, with the aim of attaining understanding, communication, and discussion across cultural and geographical borders.

This explains why internationalization is frequently referred to in relation to cultural integration and conflicts in some countries. In Asia, for example, cultural and ideological implications have been incorporated in the internationalization concept resulting in meanings such as “Westernization,” and “Liberalization”. This is the reason some scholars pose the question: how can a university rooted in its values open itself to thoughts and ethics derived from other knowledge sources [4]?

Internationalization is also sometimes described in terms of the process of learning the languages, social systems, and broader cultures of other countries.

As a result of the above, it is clear that any given understanding of internationalization depends on the particular socio-cultural context.

## 3 World-Class University

World-class universities, usually referred to as the most prominent research universities, are essential in developing competitiveness in the international knowledge economy. These universities play key roles in generating and circulating

knowledge, educating highly skilled personnel for leadership, and serving the needs of society. In recent years, the development of world-class universities has featured prominently in the strategic planning of a range of countries. Various developmental strategies at national and institutional levels have been drawn up and implemented. In this context, Shanghai Jiao Tong University has initiated the International Conference on World-Class Universities, to bring together university administrators and top researchers from around the globe to discuss issues related to world-class universities, in the context of an increasing number of countries and higher educational institutions facing up to the challenge of the achievement of academic excellence. Universities in developing countries are making every effort to improve their ability to boost their research performance to achieve and maintain their worldwide positions and status [5–10].

There are important questions that must be answered:

- How does a university develop its status to become a world-class university?
- Are all universities facing identical issues and challenges?
- Can one university’s successful strategies be transferred to other universities in other countries?

World-class universities are sometimes referred to as global research universities. World-class universities are academic institutions dedicated to creating and spreading knowledge in a range of disciplines and fields, delivering quality higher education at all levels, serving national needs, and furthering international public interest. Scholars and institutional administrators define “world-class” as attaining the standard to be included in the Lists of World University Rankings, which focuses on quality of education, internationalization, research output, status, and impact. Key attributes of world-class universities include qualified faculty, academically gifted and successful students, excellence in research, quality teaching at an international standard, high levels of funding, and well-equipped facilities. A world-class university is able to attract the most academically able students and the most highly qualified professors and researchers. It should also have access to plentiful funding sources and offer a rich learning and research environment, so as to respond flexibly and appropriately to the demands of a changing international market.

## **4 Important Considerations Related to World-Class University Status**

For a university to become world-class, it has to ceaselessly strive for excellence. This has obvious implications for the quality of higher education. The distinction of a university and its academic preeminence is dependent on the maintenance of enduring and prolonged high levels of academic and educational excellence and accomplishment.

Expectations of quality differ from one viewpoint to another depending on factors such as educational situation, processes, input and output, vision and mission, university objectives, teaching and research outcomes, graduates' employment status, and student involvement.

There are other dimensions to definitions of quality such as excellence, consistency with set standards, appropriateness, and stakeholders' satisfaction.

Quality in higher education is not straightforward to define, but the substantial increase in international competition and variation in the higher educational sector, which has created a rich diversity of courses, programs, and degrees, has resulted in an increasingly necessary requirement for quality evaluation and assurance. In fact, quality assurance is a phrase with a wide range of interpretations encompassing a continuous process of assessing, observing, securing, maintaining, and improving the quality of higher educational institutions. Improvement in practice is a result of the persistence of quality assurance. Thus, it is inseparably related to standards in education, which are used to measure outcomes to be used for comparison against indicators. Quality assurance can be assessed by inspection and accreditation. High quality is indicative of high status and high ranking which is a recognized measure of world-class excellence [11–15].

With regard to ranking, there are three global university rankings employing different methodologies. These are the Academic Ranking of World Universities (ARWU), which is conducted by Shanghai Jiao Tong University [16], the Times Higher Education (THE) World University Rankings [17], and the Quacquarelli Symonds (QS) World University Rankings [18]. Many organizations and companies believe that the quality of a university is measured by its position in the ranking tables. Uppermost universities in the ranking lists are recognized as being of uppermost quality. This is the reason for ranking being regarded as a means to draw higher educational institutions into the global knowledge market, despite the fact that more weight is put on research output rather than the quality of teaching by most of the rankings. This is due to the fact that research performance can be easily ascertained from international data sources without subjective measures having to be undertaken.

Since educational quality encompasses all three primary functions of higher educational institutions: teaching, research, and community service, KAU has strived for excellence in all three functions. In addition to seeking to be placed in the ranking tables, KAU has also made great efforts to obtain accreditations for all of its academic programs. This is an important stage on the pathway we have elected to follow for the establishment of a world-class university.

## **5 Strategies to Achieve World-Class Status**

World-class university status entails certain essential defining characteristics to be in place. These are a high concentration of talent, plentiful resources, and policies designed to encourage the pursuit of academic and educational excellence.

KAU is a state university and receives abundant budgetary resources and favorable care from the Ministry of Education in Saudi Arabia. The higher administration of KAU has worked with dedication to utilize its available budget to acquire the academic talents commensurate with its bid for excellence. Unlike other excellence programs of universities, such as the German Excellence Initiative, which mainly focuses on excellence in research, KAU has sought to improve quality of all aspects of its higher education encompassing teaching and research. World-class universities play a critical role within the higher educational system in training the professionals, scientists, and researchers required for economic development and for the generation of new knowledge in support of national growth and innovative progress.

KAU's success to date in this regard has been achieved due to unstinting and generous support from the government of the Kingdom, and in particular from the Ministry of Education, which has an ambitious strategic plan for the future of the country's higher educational sector. This support is crucial for a world-class institution. Additionally, KAU has abundant resources which are necessary to maintain a thriving university. Furthermore, KAU has a concentration of talent, a dynamic leadership team, appropriate financial resources and incentives, and a modern and suitable technological infrastructure. The successful combination of these elements has been of critical importance in the creation of the academic and educational environment that has proved so conducive to KAU's progress.

## **6 Infrastructure**

The foundation for the venture toward international recognition and world-class academic status was the establishment of a campus with an excellent and appropriate infrastructure. Great care was attached to the design and construction of facilities to provide the required infrastructural environment to facilitate creation of academic and educational excellence. This is certainly crucial for both students and researchers. Adequate state-of-the-art laboratories are essential for the production of scientific work of a high academic caliber. Although all existing KAU faculties are of a high standard, new buildings are currently under construction for many faculties in order to modernize the infrastructure. Some faculties have already moved to their new locations, which are equipped with state-of-the-art facilities, while other faculties are preparing to do so.

Since innovative pedagogy requires appropriate facilities, KAU is ensuring the provision of facilities for active learning, problem- and project-based learning, and teamwork and peer learning, in addition to conventional lecture halls and classrooms. Computer laboratories and facilities are being made available throughout the university.

## 7 Accreditations

KAU outlined its academically and educationally ambitious forward-looking vision and mission for the future with an established set of objectives based on encompassing, underlying, and deep-seated traditions. KAU has striven to ensure that its academic operations, including curriculum design and development, are tailored to achieve a substantial completion percentage of its strategic plans. The university recognizes that well-designed curricula (in line with the vision, mission, and objectives), along with highly qualified academics, constitute the cornerstone of higher education [19].

Although KAU curricula are of internationally recognized educational and academic standards, they are not imported from foreign universities. KAU undertakes the lengthy process of designing and reviewing its own curricula because it is recognized that this process contributes toward the goal of creating the academic culture required for the achievement of standards of educational and academic excellence. This process assists curriculum designers to also focus on catering for the competencies and skills requirements of the local employment market and that of the Kingdom of Saudi Arabia.

In order to ensure the establishment of an academically and educationally rigorous culture, KAU has ambitiously been expanding quantitative targets. Some fifty years ago, KAU began with a small number of programs and students, whereas currently it has more than 200 undergraduate programs, and approximately 190 graduate programs, all enhanced and supported with high-quality teaching and research. This has been accomplished over time with stable leadership, continuous development, and persistence in the pursuit of academic and educational excellence, that has led to the creation of the vigorous scientific traditions required for the production of cutting-edge research and for the judicious and effective application of educational technology.

The university has witnessed significant development on many fronts and has succeeded in achieving successful academic accreditations for the majority of its academic programs from internationally recognized academic accreditation bodies. This development is a result of carefully staged planning and process management. The first KAU Faculty to obtain accreditation was the Faculty of Engineering. The Accreditation Board for Engineering and Technology (ABET) has to date accredited the 12 Engineering programs on two occasions, 2002 and 2008. Currently the Faculty of Engineering is preparing for its third re-accreditation.

The National Commission for Academic Accreditation and Assessment (NCAAA) has been established by the Higher Council of Education as an independent authority with responsibility for accreditation and quality assurance in post-secondary education in the Kingdom of Saudi Arabia. Its mission is to encourage, support, and evaluate the quality of post-secondary institutions and the programs they offer to ensure that the quality of student learning outcomes, the management and support services provided within institutions, and the