

Book Review

Altbach, Philip G. and Salmi, Jamil. (2011). *The Road to Academic Excellence, the Making of World-Class Research Universities*. Washington D.C.: The World Bank. 363 pages

The Road to Academic Excellence is a very important book for those who would like to know how to develop a research university. I believe this book may help to provide a vision for upgrading on those universities that are moving to a great emphasis on research.

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Jamil Salmi, a Moroccan education economist, is the World Bank's tertiary education co-ordinator. He is the principal author of the Bank's tertiary education strategy titled 'Constructing Knowledge Societies: New Challenges for Tertiary Education.' For the last 17 years, he has provided policy advice on tertiary education reform to the governments of more than 60 countries in Europe, Asia, Africa and South America. He is a member of the governing board of the International Institute for Educational Planning of UNESCO, the International Reference Group of the Leadership Foundation for Higher Education in London and the editorial advisory group of the OECD's Journal of Higher Education Management and Policy.

According to both writers, 'within the tertiary education system, research universities play a critical role in training the professionals, high-level specialist, scientists, and researchers needed by the economy and in generating new knowledge in support of the national innovation system' (2). For this reason, 'research universities are considered among the central institutions of the 21st-century knowledge economies' (Ibid.).

The main chapters of this book comprise nine case studies that illustrate what it takes to establish sustained research universities and help validate the analytical model that includes high concentration of talent, abundant resources to offer a rich learning environment and favourable governance features that encourage leadership, strategic vision, innovation and flexibility (3). Those institutions chosen for the case studies also represent a wide range of results regarding their scientific production and their position in the global university rankings (5).

In chapter one, Altbach gives an overview for the background of what is meant by research university. The chapter entitled 'The Past, Present, and the Future of Research Universities', suggests strategies of the nature and scope of a research university. He suggests that 'research universities stand at the center of the 21st-century global knowledge economy and serve as flagships for postsecondary education worldwide' (11). In that sense 'research universities produce much of the new information and analysis that not only lead to important advances in technology but also contributes, as significantly, to better understanding of the human condition through the social sciences and humanities' (Ibid.). Even with the greater scope of research universities, Altbach recognises that 'research universities serve only a minority of undergraduate students, usually the nation's best and brightest, and employ the best-qualified academics. They are the central universities for educating students at the doctoral level and to produce the bulk of the research output' (11, 12).

According to him, 'a research university is not only an institution, but also an idea' (15). 'At the heart of the research university is its academic staff, which must be committed to the idea of disinterested research—knowledge for its own sake—as well as to more practical elements of research and its use in contemporary society' (16).

It is important to mention that for Altbach research universities are 'elite institutions in the sense that they aspire to be the best—as often reflected in a top ranking—in teaching, research, and participating in the global knowledge network' (16). Together with this view he also suggests that students are very important in the system; they are central element in the spirit of the university. They are committed to the university's goals and to its academic ethos.

He emphasises the idea that English is the language of science and scholarship. He gives a few examples of how universities in China, the Arabic countries and lately in Malaysia they are emphasising English as globally relevant for their academic development. He mentions that 'English is now the global language of science and scholarship and is likely to remain dominant for the foreseeable future' (18).

He stresses that research universities need special kind of professor. Research universities need highly-educated professors to perform their teaching responsibilities at the highest level. It means also the professors are both competent and collaborative, they contribute by far the largest amount of scholarly and scientific research articles and books. 'Indeed, perhaps 90 percent of the articles appearing in the top-ranked academic journals are likely written by professors in the research-intensive universities' (19). He added that research university professors tend to be international in their consciousness and often in their work. They increasingly collaborate with colleagues in different countries and are sometimes internationally mobile, accepting jobs where work conditions, salaries and facilities are best.

He suggests that 'to be successful, universities must include those who teach and do research (the academic community) in the decision making (the governance) of the institution' (20). Also, 'students, although not necessarily involved directly in governance, must also be included as key stakeholders in the academic community' (*Ibid.*).

The Road for Excellence mentions cases related to research universities among which the Shanghai Jiao Tong University (SJTU) gives insights and suggestions of how it is possible to organise a research university. So in chapter two, it explores how SJTU has developed in the past ten years in the context of the growing imperatives of the globalised knowledge economy and national policy directives.

One important dimension in such development story is the trajectories of Ten-Year planning to be of what SJTU as it is today. In 2004, the university concentrated on carrying out and modifying its institutional actions. This exercise encourages SJTU to identify its status among universities in China and in the world, to define its developmental goals for the next five years (2005-10). Five articulated strategies to translate the university's mission and goals into a definite process were constructed (39). I believe as educators it will be very important to explore the same goals for those universities that are also moving from good to great. The first concept is to develop the university capacity through improving the quality of the faculty. The second concept is to strengthen the fundamental sciences by putting new approaches into place. Third, the university encourages interdisciplinary research in different subject areas. The fourth concept is to promote the institution's internationalisation, and finally, the university actively collaborates with the government, other Chinese universities, research organisations and industries (39). After 10 years of such practices, SJTU has made progress. To carry out the plan and to enhance the quality of SJTU's profile and academic performance to meet the world standard, the office benchmarked and evaluated the university's performance based on its international counterparts. The performance indicators cover seven aspects: university, school, and department scale, talent capacity building, leading academics, internationalization of teaching and research staff, research funding, research achievements, and disciplinary development (40).

An important outcome has been the improvement of the faculty quality. The recruitment measures have effectively improved the quality of faculty. 'First, the number of faculty members has satisfied the university's needs as it develops. Second, the competency of faculty members has improved. Third, the number of university faculty members with international credentials has significantly increased' (47). Finally, 'the university aims to develop a world-class faculty by 2020, with a group of academicians and talented young people who are in a great demand for national strategic development and who participate in international cutting-edge research of science and technology' (48).

In the area of research, SJTU focuses on research excellence; so it encourages its faculty to conduct research at the international level and offers reward for international publications. In addition, students pursuing a PhD in sciences must publish at least one SCI paper or one paper in English indexed in the Engineering Index before they apply for a doctoral degree (50).

In its concluding remarks the chapter stresses that 'the focus of SJTU's development has shifted from domestic to international standards and from domestic to international competition' (57). The emphasis of SJTU's development has changed from quantity oriented to quality oriented and from infrastructure

building to enhancement of teaching, learning and research (58). The main chapters of this book are nine case studies that illustrate what it takes to establish and sustain research universities and help validate a model previously mentioned above. I believe an important case is also the Hong Kong University of Science and Technology. ‘In Asia just before the turn of this century, the newly established Hong Kong University of Science and Technology (HKUST) took only 10 years to become one of Asia’s top 10 research universities’ (63). ‘HKUST’s most important success factor was the recruitment of outstandingly talented scholars and scientists. All faculty members had doctorates, and 80 percent received doctorates from or were employed at 24 of the top universities in the world’ (66).

Among the basic characteristics of HKUST are its roles, goals and objectives. So among those goals Gerald A. Postiglione suggests that the university ‘offers research programs for a significant number of students in every subject area; and provides scope for academic staff members to undertake consultancy and collaborative projects with industry in areas where they have special expertise’ (71).

On recruitment of students, HKUST ‘adopted a proactive approach focused on bringing the university into direct contact with many sectors of the population. It opened itself to the community by taking advantage of its spectacular campus and facilitating access and visits, especially by potential students and their families’ (72).

Another important element of HKUST is the language of instruction. ‘The university of Hong Kong had always adhered to the principle that all instruction be delivered in English, though the campus life of students reflected the bilingual nature of society’ (78). The language of instruction has implications for HKUST’s aim to internationalise its student recruitment, which already extends far beyond Hong Kong SAR, China—including mainland China and overseas. In fact, HKUST has the highest percentage of nonlocal students among its counterparts’ (79).

In addition, HKUST’s collaborations and partnerships have contributed to its success. The university has taken specific measures to address one of its major goals, to collaborate closely with business and industry in promoting technology innovation and economic development. Its major innovation in this respect was to establish a wholly owned company known as the Research and Development Corporation (RDC), a unit that serves as the business arm of the university to commercialise research (89).

The chapter ends with a summary of factors that we may also hold such as vision—share vision, clear mission, zeal. Goals—regional preference, national positioning, global impact in selected specialties. Focus—selection of fields and specialties focusing of resources. Governance—organisation and system. Adaptation—internationalisation without an assault on the dual traditions. Heart—brains, muscles, spirit, mind, strength. Soul—faculty as the soul of the university shared purpose, and relentless drive.

As a conclusion of the book, Jamil Salmi synthesises the road to academic excellence based on those case studies and lessons of experience. ‘In this book, the nine case-study chapters—covering 11 universities—illustrate the systematic efforts and multiple challenges faced by institutions trying to pursue the road to academic excellence’ (325). In this synthesis Salmi attempts to identify common themes and preliminary lessons achieved from the stories of these relatively young universities, which have achieved outstanding results, shown promising signs of success, or faced reversals of fortune (325).

Therefore, among the common themes it is possible to suggest a model for successful and research universities. First of all, Samil suggests talent. ‘As all the case studies systematically illustrate, a key success factor in building a top research university is the ability to attract, recruit and retain leading academics. Notably, what truly distinguishes the East Asian universities from the rest of the world is the marked emphasis on internationalisation’ (326). Second, he emphasises resources. ‘As expected, the finding of the case studies confirms that emerging research universities need to be well resourced to progress rapidly. This fact emerged appeared clearly from East Asian cases, as well as from the University of Malaya’ (329). ‘Abundant funding is indispensable not only for setting up first-rate facilities and appropriate physical infrastructure but also for attracting and retaining high-level academics’ (*Ibid.*). ‘Most of the universities showcased in this book have successfully diversified their funding sources by managing to mobilize significant additional resources beyond the direct subsidies they received from government’ (330). The availability of competitive research funding is indeed an important factor.

On governance, the case studies ‘shows that an appropriate regulatory framework, strong and inspiring leadership, and adequate management significantly influence the ability of Research University to prosper’ (331). ‘One of the ways in which purposeful leadership manifest itself is through the talent of articulating an enticing vision for the future of the institution to all its stakeholders. Good salaries are not enough to attract and motivate high-performing academics; faculty members must feel that they are part of significant project

to ensure their full commitment toward the construction or renewal of the institution (332). On the path of development, the case studies explored in this book include established universities, 'which have made or are making deliberate efforts to upgrade their quality and effectiveness, and new institutions created from scratch with the ambitious vision of achieving world-class status' (333).

Finally, the case studies also brought out a number of 'accelerating factors' that can play a positive role in the quest for excellence. The first factor is relying extensively on the diaspora, especially when establishing a new institution. The second factor, using English as the main language of an institution, greatly enhances its ability to attract highly qualified foreign academics. The third is to concentrate on niche areas. The four approaches use benchmarking as a guide to orient the institution in its upgrading efforts. The fifth factor is to introduce significant curriculum and pedagogical innovations. And finally, regarding the 'road to excellence' is the need for successful institutions to remain vigilant and to maintain a sense of urgency to avoid complacency. This factor implies continuous monitoring and self-assessment to identify tensions or treats and to act quickly to address them (334, 5).

The trajectories of the 11 institutions analyzed in this book offer valuable insights into the complex transformation process that institutions striving to become world-class research universities are undergoing, whether they chose 'upgrading' or 'start anew' path to academic excellence. With proper leadership and vision, existing research universities can drastically improve the quality of their teaching and research (340). This book will be helpful to all who want to understand the 'road to excellence' in academic institutions and enhance research.

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