

**The World-Class University as Part of
a New Higher Education Paradigm:
From Institutional Qualities
to Systemic Excellence**

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Introduction to the Topic

"World-Class": Aspirations and Reality Checks

Jan SADLAK and LIU Nian Cai

Reasoning behind Excellence and Quality Differentiation

To begin, the present-day level of mass development of higher education inadvertently makes it clearer than ever the need to look anew to “academic excellence” and “quality differentiation” at global, national and local levels. While the term that has recently gained some notoriety, i.e., “world-class university”, represents an institutional setting for this development, its definition still fosters ongoing debate.

The very term “excellence” reflects and is an issue of scarcity, that is, not everyone can reach it but everyone can aspire to it. For whatever has been the reason for seeking or claiming “excellence” and “world-class” status, it has become such a broad phenomenon over the last few years – ranging from “tongue-in-cheek” sarcastic observations of a questionable value of such claims to exaggerated statements about the “battle for world-class excellence”, and then to a much-preferred serious analyses of this phenomenon and relevant policy decisions at the institutional and national level. However, it should be pointed out that any categorization is quite arbitrary and carries with it only a limited, brittle notion of “superior performance” which does not fit well in particular regard to a highly complex organization as the modern university.

It needs to be accepted that only a limited number of higher education establishments have already or can realistically aspire to world-class status with regard to their teaching and research performance. Many other universities may be well aware of the international concept of world-class standards, but this knowledge alone does not make them globally competitive. In fact, the majority of universities in the world are not directly

concerned or affected by the world-class global competition yet there should be no doubt that such higher educational institutions remain vital as they serve a majority of students and communities present in any tertiary system. It is them who are performing these essential functions (such as serving the national needs of economic and social development by training qualified citizens and workers) among other functions. But as will be discovered in specific chapters of this volume, the world-class university is now part of a new higher education paradigm.

Global Competition for Talent and Universities

At the global level, the best institutional “players” are aiming at international standards and expressions of excellence. This is the reason why the “world-class universities (WCUs) are actively involved in attracting the “best” undergraduate and graduate students, a significant proportion of which are international students, and providing them with world-class education programmes. This is why the number of international students and trends in this area are being studied as they represent a surrogate for competitiveness. There is vast evidence that there is a global competition for talent. A recent study by the OECD shows that virtually any country that is trying to retain its competitive edge has in place various policies and economic incentives facilitating acquisition of such “knowledge workers” by fellowships, grants and project funding, scholarships and allowances, as well as tax benefits and subsidies (OECD, 2008). By such means they are attracting top professors and researchers in order to produce cutting-edge research output across all academic fields and consequently are creating world-class academic departments.

Simultaneously, they are also making great efforts to serve both national needs and provide international public goods (or are, at least, aware of such responsibilities). They have a culture of pursuing excellence in the global context, supported by necessary national regulations and policies; possessing a world-class leadership team with long-term strategic visions, supported by practical implementation plans; with abundant financial resources from diversified sources to support its staff and students, and adequate facilities of international standard to support their varied education, research and service missions. Yet, it needs to be admitted

forthrightly that academically excelling institutions are also places where future national and global elites are groomed for exercising influence (Rothkopf, 2008). It is being presently recognized that top-level intellectuals, entrepreneurs, researchers and artists are important players on the global stage, in that they represent tremendous “soft power” sectors active in the practice of globally interdependent relations.

Universities, particularly those considered as “world-class”, hold a special place in the chain of innovation. To some, they are the special places where new ideas and discoveries originate from the fundamental investment in knowledge and people. And when combined with “academic excellence”, they are viewed as the key to realizing significant economic returns on venture capital and public investment. To this end, universities are increasingly becoming focal points of targeted funding which real scope is not support of academic research *per se*, but to serve as a catalyst for generating technical innovations. Of course, there are several examples of failure in such research parks internationally, but there are also often-cited counter-examples such as the success of Cambridge University in so doing. Real-life efforts reveal the difficulty in turning excellent research into marketable products or services. But there is mounting evidence that economic developments are increasingly relying on talented and highly qualified workers, particularly those holding the necessary scientific and engineering skills.

Countries are therefore keen to have enough world-class experts working for them to attract outsiders who might have brilliant ideas or are ready to invest in new projects. Competition for such an elite workforce is a global one and companies (as well as countries) are now casting wide nets in search of such highly qualified people. Consequently, countries and regions are trying to provide more attractive legal and social conditions to woo such migrants. For example, the European Commission recently launched a plan to provide a “blue card” resident permit valid in member states to help would-be highly skilled migrants both to obtain suitable job offers and to ease their (and their families) legal access into the European Union. Universities are also similarly in pursuit of the best minds. Employment of top scientists is thus considered as “strategic hires” by many aspiring universities in order to assure their institution’s participation in “world-class” science activities.

Governmental Initiatives for Building WCUs

More and more countries are joining the race of building up WCUs by establishing special initiatives, such as granting additional funding to selected universities. Here are some examples of recent initiatives that are analysed in greater detail in this volume. Let us mention only few of them.

With its “Twenty-first Century Centre of Excellence Programme” operating between 2002 and 2006, the “Global Centre of Excellence Programme” starting from 2007 and the “World Premier International Research Centre Initiative” functioning since 2008, Japan is determined to have a good number of institutions to perform at world-class level. China too has several excellence initiatives, the most influential one being the “985 Project” starting from 1999, which has concentrated funding in 39 top performing universities, particularly the top nine universities, with the specific aim of building WCUs. South Korea has also aimed to foster WCUs through its “Brain Korea 21” Programme, in three phases - Phase I (1999-2005), Phase II (2006-2012), and a WCU Programme starting from 2008. In addition, Singapore has been concentrating investment to build the National University of Singapore and the Nanyang University of Technology into world-class institutions. Elsewhere, the “Accelerated Programme for Excellence” (APEX) in Malaysia aims to have at least one university in the top 100 of world-class universities in the near future, and other Asian countries such as India and Vietnam as well as Latin America also have special initiatives aiming to build such highly performing higher education institutions (Altbach and Balan, 2007).

In Europe, Germany has taken a major change in policy direction through its “Excellence Initiative”, supporting 37 universities for the period of 2006-2012 in three categories: 39 Graduate Schools, 37 Clusters of Excellence and 9 Institutional Strategies (Elite Universities). France is investing in competitive clusters, with 10 “super campuses” to form centers of excellence to rank among the world’s top universities. Some other European countries, such as the Russian Federation, also have special initiatives of excellence. Finally, there are many other excellence initiatives in Canada, the United Kingdom and the United States. The establishment of such various national initiatives has resulted in the increased recognition of the strategic importance of WCUs, both for developing national innovation

systems and knowledge-based economies, and to foster the international competitiveness of all countries, including those described as “developing” ones.

Challenges of and Strategies for Building WCUs

Not every nation needs to have a WCU, at least not while more fundamental higher education needs are not met (which is the case of some developing countries). For many countries, a WCU is beyond the ability of the nation to support; this is particularly true for some small and/or developing countries. Even a country of large economic scale needs both a limited number of WCUs and a larger diversified quality higher education system to be healthy.

According to Jamil Salmi of the World Bank, there are three general models for building a WCU, including upgrading existing institutions, merging existing institutions, and creating new institutions. Upgrading existing institutions is the less-expensive option, but difficult to reform and transform. Merging existing institutions can provide opportunities to change organizational culture, but are difficult to manage. Creating new institutions from scratch provide the most opportunities to create a culture of excellence and select the best staff, but are also the most expensive policy option. Because of this, a combination option of upgrading and merging existing institutions may also be pursued. In sum, there is no universal model for building up WCUs, just as there is no one ideal model for a WCU. Each country must choose a strategy that is most suitable for itself.

Whatever option is selected, building up WCUs is an immensely expensive exercise that could easily cost a billion US dollars per year for operation. Building up WCUs is also an extremely competitive process, due to the fact that there can be only a limited number of WCUs in a country or region and other universities are also aiming “for the gold”. Building up a WCU does not mean making every department or school in it will be world-class, even in a “top” institution. (Even in the best universities such as Harvard and MIT, not all departments or research groups are the best in research and teaching.)

In the latter context we would like to highlight, and welcome, a renewed attention to teaching excellence, based on principles of helping students

become “intentional learners” who advance across various level of study programmes and are achieving the expected learning outcomes (AACU, 2009).

Despite these *caveats*, more and more universities from various countries are joining the race of building up WCUs by establishing long-term strategic plans and exercising relevant policy reforms. Adequate attention must thus be paid to balance international competition and national development, prioritization and diversification, autonomy and accountability at the system level, and to also balance long-term strategies and short-term needs, education and research, strength and comprehensiveness of disciplines at the institutional level.

The Structure of the Book and its Contributions

The present volume reflects and is organized according to the editorial remit noted above. It contains fifteen essays, most of which originated from papers presented at the “2nd International Conference on World-Class Universities (WCU-2)”, held in November 2007 in Shanghai, China, and organized by the Graduate School of Education of the Shanghai Jiao Tong University. The book is structured into three inter-related parts:

- International Perspective for Building WCUs;
- National Strategies for Building WCUs;
- Institutional Practices for Building WCUs.

Part One of the book contains five chapters, including “The Challenge of Establishing World-Class Universities” by Jamil Salmi, “Peripheries and Centers: Research Universities in Developing Countries” by Philip Altbach, “What World-Class Universities Should *Not* Adopt from the American Higher Education Model” by Kathryn Mohrman, “Elite Scientists and Global Academic Competition” by Nicola Owen and her colleagues, and “The Evaluation of World-Class Universities: Differences between Nations in the Definition of Evaluation Criteria” by Monique Canto-Sperber.

There are five chapters in Part Two: “Implications of World University Rankings for the National and Institutional Research Strategy of Small Developed Nations” by Tony Sheil, “The New Direction of Japanese Higher Education Policy: Tensions between Global and Domestic Objectives” by

Akiyoshi Yonezawa, “Strategic Principles of Building World-Class Universities in the Russian Federation” by Irina Artyushina and Vladimir Troyan, “The Restructuring of the French National System of Research *vis-à-vis* the World-Class Universities” by Bertrand Bellon, and “Strategies Fostering World-Class Universities among Thai Higher Education Institutions” by Kampechara Puriparinya.

Part Three has also five chapters, including “Quality Assurance and Promotion of Excellence in the Swiss University System” by Hans Weder, “Strategies for Developing a World-Class University in a Complex Context: the Case of the Valencia University of Technology” by José-Gines Mora and his colleagues, “Combining Vision, Mission and Action: Tsinghua’s Experience in Building a World-Class University” by Jing Huan Shi, “Korean Initiatives Promoting World-Class Universities and the Performance of Seoul National University (SNU)” by Gilsun Song, and “The Pursuit of ‘Scale and Focus’ at the University of Adelaide” by Richard Russell and his colleagues.

To some extent, this book not only represents a contribution to the ongoing discussion on the topic of WCUs but could be seen as a continuation of the editors’ first volume on this topic, *World-Class Universities and Ranking: Aiming beyond Status* (Sadlak and Liu, 2007).

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