Responding to Massification
Differentiation in Postsecondary Education Worldwide

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Global massification of postsecondary education, with more than 200 million students studying at an untold number of institutions focusing on every specialization possible, necessitates a differentiated system of postsecondary education in every country. This book provides the first comparative study of how postsecondary education has evolved in 13 countries. The study offers an analysis of current global realities and how different nations have constructed their response. Our research shows that few countries have developed rational and differentiated academic systems to meet new realities. The book provides insights regarding useful approaches for the development of academic systems.

The book reveals similarities and differences in the 13 case studies as different governments have expanded postsecondary education to respond to the massification of enrollment. Postsecondary education has become diversified, but for the most part not adequately differentiated in most countries. Several of the case studies underscore the challenge of sustaining differentiation within the system if credentials from non-university, postsecondary institutions are considered of lesser social status. Too often institutions that successfully address the practical needs of national economies are ultimately merged into the university system.

There is an urgent need for the planning and structuring of coherent systems of postsecondary education to serve the increasingly diverse clientele in need of the skills required by the knowledge economy. This study is the first global analysis aimed at understanding how post-secondary education can be organized to meet society’s requirements and points to the need for designing coherent academic systems.
Responding to Massification
GLOBAL PERSPECTIVES ON HIGHER EDUCATION

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Scope:

Higher education worldwide is in a period of transition, affected by globalization, the advent of mass access, changing relationships between the university and the state, and the new technologies, among others. Global Perspectives on Higher Education provides cogent analysis and comparative perspectives on these and other central issues affecting postsecondary education worldwide.

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FOREWORD

Globalization has not stopped at the gates of education systems nor, in particular, of postsecondary education. The question of sustainable differentiation within postsecondary education is thus becoming ever more urgent. National postsecondary systems are responding to massification, increasing national and international competition, and the emergence of the global knowledge economy in different ways in order to serve a wide range of societal and individual needs. In some cases strategically planned, in others as ad hoc reactions to specific forces, institutions of very different types and profiles have emerged. What processes of horizontal and vertical differentiation can be observed throughout the world and how viable are individual national postsecondary systems? How well equipped are these systems to fulfill their mandate to educate and to promote research and innovation? What role do universities play and what responsibilities do they hold in their respective systems?

With a view to the 2017 Hamburg Transnational University Leaders Council organized by the German Rectors’ Conference (HRK), the Körber Foundation, and Universität Hamburg, the Körber Foundation commissioned Philip G. Altbach and Hans de Wit from the Center for International Higher Education at Boston College to investigate and evaluate concepts and practices of postsecondary education in the various regions of the world. The present study focuses on Australia, Brazil, Chile, China, Egypt, France, Germany, Ghana, Great Britain, India, Japan, Russia, and the United States, and highlights differences and convergences among these national systems.

Under the influence of manifold, simultaneous processes such as massification, normative formalization, privatization, and the social stratification of education, national postsecondary systems have to be developed further in a sustainable manner to meet the needs of academia, as well as those of society, and the economy. At the same time, concepts and practices that have proven to work in the context of the respective national traditions and societal frameworks need to be preserved. On the basis of the present study, fifty university leaders from all over the world will meet in June 2017 for the 2017 Hamburg Transnational University Leaders Council to analyze and evaluate the world’s postsecondary systems. In some regions, excessive differentiation has created new problems and challenges for universities. It is the aim of the Council to initiate a dialog among university leaders about the current key challenges facing universities around the globe and to define concrete steps for further action in order to rise to these challenges. In our view, it is essential for universities to shape ongoing processes actively and to clearly communicate to internal and external stakeholders the conditions for successful interaction between universities and society at large.
FOREWORD

We would like to thank Philip G. Altbach, Liz Reisberg, and Hans de Wit as well as the authors of the individual country studies for their outstanding work and commitment. They have explored a reality that postsecondary institutions are responsible for shaping into the future. Why? For the sake of future generations and the survival of societies whose quality of life is at stake.

Horst Hippler  
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Dieter Lenzen  
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The Study “Responding to Massification: Differentiation in Postsecondary Education Worldwide” was commissioned by the Körber Foundation in preparation for the 2017 Hamburg Transnational University Leaders Council. The Hamburg Transnational University Leaders Council is an initiative of the German Rectors’ Conference, the Körber Foundation and Universität Hamburg.

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The German Rectors’ Conference (HRK) is the association of state and state-recognised universities in Germany. It currently has 268 member institutions at which more than 94 per cent of all students in Germany are enrolled. The HRK is the political and public voice of the universities and the forum for the higher education institutions’ joint opinion-forming process. The HRK cooperates with universities and corresponding organisations all over the world. Its aim is to represent the interest of German universities at an international level and to support German universities in their internationalisation process. www.hrk.de

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Inaugurated in 1959 by the entrepreneur Kurt A. Körber, the foundation is now actively involved in its own national and international projects and events. In particular, the foundation feels a special bond to the city of Hamburg. Furthermore, the Foundation holds a site in the capital of Germany, Berlin. www.koerber-stiftung.de

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The Center promotes dialogue and cooperation among academic institutions throughout the world. We believe that the future depends on effective collaboration and the creation of an international community focused on the improvement of higher education in the public interest.

Detailed information about the Center’s activities and programs can be found at: www.bc.edu/cihe
EXECUTIVE SUMMARY

Global massification of postsecondary education, with more than 200 million students studying at an untold number of institutions focusing on every specialization possible, necessitates a differentiated system of postsecondary education in every country. In much of the world, massification continues as emerging economies, including China and India, expand their enrollment rates to 50% or more as is common in the developed world. At the same time, the increasingly sophisticated global knowledge economy requires world-class universities to participate in basic and applied research and to educate students who will participate at the highest levels of science and the economy.

These unprecedented demands on postsecondary education have led to the greatest expansion in postsecondary education in history. At the top of the prestige hierarchy in every country stands the traditional research-intensive university. While these institutions constitute only a small number, perhaps 2-5% of an estimated total of 22,000 universities worldwide, they are of great importance. Currently, the research university sector does not integrate well with the rest of the institutions, a necessity if postsecondary education is to function as a coherent system of programs and institutions that best serves individuals and the labor market. Universities educate the next generation of academics and researchers and help to shape the academic environment of the entire system. Thus, universities are central to the knowledge economy of the 21st century and their responsibility extends far beyond their traditional role.

Postsecondary education has become diversified but for the most part not adequately differentiated in most countries. There is a vast array of institutions, but there is no clear differentiated system of institutions with clearly identified missions and purposes, and that is subject to appropriate and relevant mechanisms for quality assurance. From large research universities and vocationally-oriented universities of applied sciences granting a range of degrees and certificates to small specialized vocational institutes providing additional qualifications in virtually every field, quality varies dramatically. Many of the newer institutions are private (often for-profit entities) and this sector is the fastest growing segment of postsecondary education worldwide. This is evident in the data reported in the case studies included here. It is reasonable to view the current global landscape as postsecondary anarchy incorporating a vast range of institutions of differing foci, quality, and usefulness.
There is an urgent need for the planning and structuring of coherent systems of postsecondary education to serve the ever expanding and increasingly diverse clientele in need of the skills required for the knowledge economy and opportunities for social mobility. Further, the university sector, now a minority of postsecondary institutions and enrollments in almost every country, has a special role and responsibility to provide leadership for the entire sector.

MASSIFICATION

During the last five decades, the higher education landscape has changed dramatically. Once the privilege of an elite social class, gross enrollment ratios (the participation rate for the cohort between 18-24 years of age) in postsecondary education have mushroomed to more than 50% in many countries. From the thirteen countries in the study, seven have achieved universal participation, one (Ghana 14%) is still in the elite phase, and the other five (Brazil 23%, Chile 37%, China 37%, Egypt 30%, and India 27%) are in the stage of mass education. The demand for postsecondary education in the last five countries is still sharply increasing, while in Australia, Japan, France, Germany, Russia, the US and the UK, it has reached a saturation point and demographic factors might even lead to a decrease.

The growing demand for access to higher education has placed tremendous pressure on governments to react. The aspiring population is much more diverse than in the past. These new cohorts enter with wide ranging objectives and purpose and enormous variation in prior preparation, cultural orientation, and economic resources. Today the traditional university model with a strong academic orientation meets the needs and aspirations of only a small segment of the current enrollment.

The countries profiled in this book demonstrate a diverse range of responses. In most cases, governments have backed away from policies that attempted to manage enrollment and educational opportunities and allowed market forces and international trends to rule. A plethora of providers has emerged, many in an exploding private sector and, too often, with insufficient mechanisms to insure the quality or relevance of provision.

DIVERSITY WITHOUT DIFFERENTIATION

As mentioned above, postsecondary education has become diversified but without adequate differentiation in most countries. Research on differentiation emphasizes that there is both horizontal and vertical differentiation within and among institutions, with horizontal differentiation driven by issues of access, and vertical by the labor market. The first relates the student’s choice of postsecondary institution. The second relates to the needs from the labor market for different skills and competences. The Bologna Process has stimulated vertical differentiation in systems that were primarily horizontally differentiated before. Differentiation between public and private higher education,
and within private higher education between not-for-profit and for-profit institutions, is a central manifestation of horizontal differentiation. While systematic diversification is necessary, there is a strong tendency towards mission creep and convergence. Less differentiated systems are more vulnerable to surges and declines in demand, with private universities, particularly for-profit, quickly filling the gaps created by surges in demand. The advent of online education and new technologies including MOOCs, contribute to the further differentiation of postsecondary education models.

Differentiated education impacts employment and can ameliorate or exaggerate socioeconomic status (SES) stratification. Admissions criteria and procedures and tracking mechanisms at the primary or secondary system are important factors, as are issues such as financial aid and tuition fees.

PUBLIC-PRIVATE

For most of the countries in this study, enrollment remains concentrated in the public sector but with some variations. The public sector in Egypt accounts for 80% of enrollment while in Japan public institutions enroll less than 35%. In all thirteen countries one can see the growth of private higher education, but there are differences in regard to the size and importance of that sector, as well as the divide between not-for-profit and for-profit providers.

In Germany, France and the United Kingdom, the private sector remains marginal, although it is growing steadily. In Egypt (80% public) and Ghana (70% public), the number of private institutions is higher but enrollment continues to be concentrated in the public sector. Japan and the United States have a longer tradition of private, not-for-profit higher education, and although the participation of for-profits is increasing, postsecondary education is dominated by public and not-for-profit institutions. In Russia, China and India (the latter due to high enrollment in private “unaided” colleges) the public sector still dominates, but at the less competitive end of the spectrum there is a rapid increase in private providers and enrollments.

Overall one can see a trend towards more private, for-profit higher education, although not always defined as such, and an increased privatization of public higher education, with increased tuition fees. Egypt and Russia have blurred the public/private boundary by allowing the public sector to admit “fee-paying” students in addition to fully subsidized enrollment in order to supplement public funding.

Germany is the only country that still maintains a free public higher education policy for nearly all students (Only the marginal number of private institutions charge fees); Scotland is also close to a “free” model. Chile is undertaking the reform of its high tuition policy at both public and private institutions, but has not been able to allocate the necessary resources to make university education free for all students. Instead, Chile will only waive tuition for those from the lower economic strata.
DIFFERENTIATION IN THE TRADITIONAL UNIVERSITY SECTOR

The traditional university sector is not as uniform as might appear at first glance. A trend towards greater autonomy nearly everywhere has allowed for significant differentiation within the sector. Most new institutions have focused on the teaching function of the university. Yet there is differentiation among teaching institutions. While they tend to concentrate on undergraduate programs, there is broad variation in mission and focus whether liberal arts; science and technology; professional; or a combination of these.

Only a small number of universities are truly research universities and the number and quality differ by country. Excellence initiatives in Germany, France, Japan, Russia, and China have created additional national system differentiation by separating a new elite sector of world-class universities from other more nationally and regionally-oriented research universities. The universities being cultivated for world-class status are receiving significant additional government support to “catch up” and compete with the better known, well-established research universities in the United States (Ivy League), the United Kingdom (Russell Group), and Australia (Group of Eight).

BEYOND THE TRADITIONAL UNIVERSITY

The countries in our study have each created alternatives to the traditional university that range from basic vocational institutes to universities of applied science to address specific needs of the labor market and to incorporate individuals without the desire or capacity to pursue more traditional academic study. The variation within this sector and from country to country is considerable, ranging from quite sophisticated and highly-skilled programs at the Fachhochschulen in Germany to low-level vocational programs offered by the industrial training institutes in India. These institutions tend to offer programs that emphasize applied learning in areas such as agriculture, industry, technology, healthcare, tourism, and a myriad of commercial fields. These programs are offered by both public and private providers.

The dilemma for the non-traditional postsecondary sector is that it often enrolls individuals who are not adequately prepared for academic study. While this educational path might be a choice for some, for others it may be the only option. This sector may well meet the needs of individuals who need to enter the labor market quickly, yet many of these programs too often prove to be “dead ends” with limited options for continuing study or for improving employment opportunities. France, Japan, Germany, the US, and the UK have moved to better integrate this sector into the larger postsecondary system, allowing graduates of the more practically-oriented programs to continue their studies in the traditional academic sector.

In several countries, the distinction between the two sectors has blurred considerably. This is particularly notable in Germany where Fachhochschulen now award bachelors
and masters degrees and are considered part of the university sector. In societies where more prestige and social standing is afforded to a university degree than to a non-university qualification, there is also the tendency towards “mission creep” evidenced clearly in the absorption of the polytechnics into the university system in England.

THE CHALLENGES OF DESIGN

In most countries, there is a certain degree of tension between market forces and national policies in response to massification. The limitations of public budgets often result in concessions to market forces that may overpower policy goals. This is reflected in the increasing privatization of the public sector of postsecondary education in developed as well as emerging and developing countries, resulting from decreased public funding to the sector and the subsequent necessity of higher tuition fees and the pursuit of other external sources of funding. Germany is the clearest exception, followed by France, in continuing a level of public subsidies that avoids resorting to tuition fees to sustain public institutions. In the developing and emerging countries, there is a significant differentiation between the free public higher education sector and the private sector in terms of funding, program offerings and quality. Russia and Egypt have created a somewhat unusual dual-track public system that admits fully-funded and fee-paying students separately to public institutions.

Another challenge that has hampered the strategic diversification of postsecondary education has been the distributed responsibility for oversight. This is evident in China, India, and Russia where different institutions fall under the jurisdiction of different national agencies, as well as in China, India, Japan and the US where different levels of government (national, state, provincial, municipal) supervise different types of institutions.

In most of the countries studied, governments have ceded greater autonomy to universities in both the public and private sectors, with varied results. While greater institutional autonomy might seem like a good thing in that it allows for a quicker response to social and economic shifts, this also permits opportunistic initiatives that may not be beneficial in the long run.

STRATEGY VERSUS ANARCHY

The case studies documented here underscore the lack of well-planned, well-defined systems of postsecondary education. Each government has attempted to regulate the diversity of enrollment and providers but with diminishing success as international forces (such as the rankings) and market forces (the demand for new knowledge and new skills from the labor market) along with social demand (for greater access) make it nearly impossible to keep pace. More complicated still is the coming wave of non-college learning that will make postsecondary education and skill development

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even more accessible, available from even more providers, without ever approaching a traditional institution.

Most governments have focused on three objectives. The first is developing an elite sector of research intensive institutions, in part to find a place in the rankings, but also to participate in a global knowledge economy. The second objective has been to find a way to provide access to larger numbers of ever more diverse students. This has been done by creating new institutions, expanding enrollment at existing institutions, allowing the expansion of the private sector, and developing national strategies for co-financing the cost of study. Finally, governments have struggled to develop systems to monitor and assure reasonable levels of quality from all providers, as well as control and regulate spending.

Postsecondary education systems everywhere are continuing to expand but without a well-defined strategy to balance competing demands and objectives or to align the growth of a system with the needs of individuals, the labor market, national development or the possibilities of new technologies and new providers.

A WAY FORWARD

The massification of postsecondary education in combination with the needs of the global knowledge economy have resulted in increased diversification. There is no country with a single sector of postsecondary education, although the United Kingdom comes closest. Differentiation in all sectors is necessary but in general not being planned or implemented strategically. Systems grow from historic (German, Napoleonic, British or American influences) roots but with the influence of social, political and economic pressures at the local, national and international levels.

Postsecondary education is passing through a period of anarchy, being diversified by a wide range of purposes and clienteles and seemingly beyond the capacity of any government to manage these changes well. The way forward is to turn that anarchy into a coherent and integrated system of good quality postsecondary institutions but that will take enormous political will, budget and, most importantly, time.
1. THE NECESSITY AND REALITY OF DIFFERENTIATED POSTSECONDARY SYSTEMS

The massification of tertiary education, the emergence of the global knowledge economy and increasing national and international competition in the last part of the 20th century and into the 21st century have created an unprecedented “revolution” in higher education worldwide (Altbach, Reisberg, & Rumbley 2010). This volume investigates and analyzes one key consequence of massification and the global knowledge economy—the imperative for postsecondary education worldwide to create differentiated academic systems with diversified kinds of institutions and programs to serve a range of societal and individual needs, along with appropriate degrees and other qualifications relevant to both the labor market and the workforce, while staying true to traditional academic values. To state the reality most simply—the traditional academic model of the research university as it emerged in Germany and later in the United States in the 19th and 20th centuries—serves only a small part of the complex needs of 21st century postsecondary education (Ben-David & Zloczewer 1962). Almost all countries, either by design or by evolution, now host postsecondary education institutions and arrangements that serve the varied needs of a wider segment of the population. This study is concerned with the key question of how the university sector, the apex of all emerging systems, plays an appropriate role at the top of the academic system.

Surprisingly, there is little careful analysis of how different postsecondary systems have developed or how they function, or in some countries, do not function. The very terms used to describe the phenomenon reflect some degree of confusion: higher education, university education, postsecondary education, tertiary education, and perhaps others. This volume will use the term postsecondary education and will include all education beyond the secondary level, including traditional universities and undergraduate colleges, universities of applied sciences (typically the professional university sector), community (or junior) colleges, postsecondary vocational institutions, and to a lesser extent, specialized schools for music and the arts, theological schools, and others.

This essay is concerned with differentiation in postsecondary education and the development of systems to cope with differentiation (Clark, 1983).
Differentiation here means the increasingly different functions and expanding roles that postsecondary education plays in all countries, and the institutions, systems and organizational structures that are set up to coordinate and govern the expanding and increasingly complex reality (Teichler 2002). All countries experience diversification, but many do not deal effectively with the new realities, often permitting a vast and frequently disorganized array of institutions to haphazardly grow. On the positive side, today’s academic anarchy has produced an immense amount of innovation and change in the organization and delivery of teaching and learning, as well as an incipient revolution in the distance delivery of academic programs along with entirely new forms of postsecondary institutions.

Postsecondary education has become a massive enterprise everywhere. Globally, more than 200 million students are studying in more than 22,000 universities and untold other postsecondary institutions. In most developed countries 60% or more of the age group studies in some kind of postsecondary institution, and many countries have reached 80%. The global tertiary-enrollment ratio went from 14% to 32% during the two decades up to 2012; in that time, the number of countries with access rates of more than half rose from five to 54. Expansion will continue, especially in developing and middle-income countries. Sub-Saharan Africa, that enrolls only 7 to 8%, is on the cusp of massification. China and India, that enroll 37 and 27% respectively, will account for more than half of the student growth in the coming decade. The world has experienced a revolution in higher education access in the 21st century (Altbach, Reisberg, and Rumbley 2010).

At the same time, postsecondary education has assumed a much more central role in the global knowledge economy. Universities continue their central role in educating the professions and others at the top of their societies (Ben-David and Zloczower 1962). Postsecondary education is necessary for the much larger numbers now required for the more sophisticated knowledge-based economy, and even for jobs that at one time needed only lower levels of training. Further, the nature of skilled labor is rapidly changing as well. University-based research is central for economic development. Academic institutions are key points of global communication in the digital age, and are central to the increasingly international scientific and research communities. Postsecondary education qualifications have become key to social mobility in much of the world, placing even greater pressures for expanding access.

Thus, postsecondary education globally has been affected by the two tidal waves of massification and the global knowledge economy. These factors have placed unprecedented pressures on the bottom sector—the mass access institutions—and at the top in the research-intensive universities that are central to the global knowledge economy.

It is fair to say that no countries—with the partial exceptions of the United States and Canada, the first nations to experience massification—have successfully built a coherent and effective academic system to manage 21st century challenges. It is par-
adoxical that the world is dealing with these twin revolutions but has not managed to organize systems to effectively manage them.

Postsecondary education is central to 21st century societies in ways that far exceed earlier periods, when higher education, particularly at the university level, was a preserve of small elites. Indeed, postsecondary education is central to the success of contemporary economies and an unrelenting demand of expanding middle-classes everywhere. It imparts necessary skills, is the central driver of the research on which much of contemporary society depends, and is a basic requirement for social mobility.

THE ROLE OF THE RESEARCH UNIVERSITY

The concern in this essay is to understand the role of research-intensive universities in the complex array of postsecondary institutions. The traditional universities, at one time the only postsecondary institutions, are now only a small proportion of postsecondary institutions in any country. It is important to point out that the university sector itself has diversified with research universities constituting only a minority of universities; most institutions in the sector mainly focus on teaching. There is a need to define roles for different categories of universities as there is for the entire panoply of postsecondary institutions. The top universities retain their prestige and centrality in educating elites and providing a large proportion of post-baccalaureate education. The university, as the oldest, most prestigious, and arguably most important postsecondary institution, has a special place in the expanding firmament of postsecondary education (Kerr 2001). Universities, in every country, sit on the top of the academic hierarchy and provide important services for the entire postsecondary system. They are the primary research institutions, typically are the most selective in terms of both students and academic staff, are generally the largest institutions, and have the biggest budgets.

Universities, and particularly the top research-intensive schools, are the postsecondary institutions that relate most directly to the global knowledge economy. It is important to recognize that the universities that emphasize research are a very small subset, not only of universities, but of all postsecondary institutions. It is these research-intensive universities that might qualify as “world class” institutions in their respective countries and are those most likely to be recognized in international rankings (Altbach & Salmi 2011). It is important to recognize that the universities that emphasize research are a very small subset, not only of universities, but of all postsecondary institutions. For example, there are approximately 250 research-intensive universities in the United States out of a total of more than 4,000 academic institutions. The large proportion of research—80% or more—is produced by the small number of universities that obtain the bulk of funding for research. The 39 Chinese universities that are part of the government-funded Project 985 aimed at strengthening the research university sector
comprise only 2% of all Chinese universities, but produce half of total research output (Wang 2016). Similar realities exist in other countries, although relatively few have clearly identified these research-intensive institutions and funded them appropriately. In Germany and many other countries, all universities by tradition, have a research mission, receive some funds for research and compete for additional research support. And in some nations—France, Russia and to a lesser extent Germany—non-university research institutions, separate from universities, account for a significant proportion of research output. In the global “innovation economy,” universities produce a large proportion of new ideas. And, of course, their basic research leads not only to Nobel prizes but to fundamental breakthroughs in all areas.

These universities are often referred to as “flagship universities,” a term that signifies that they provide leadership to the rest of the academic system (Douglass 2016). This term is especially common in the United States, where most of the state systems of higher education have one or more designated flagships that receive the most research funds and are the most prestigious universities in their respective state systems. Other countries are beginning to designate flagships, often as part of various excellence initiatives (Salmi 2016). In most cases, however, the flagships provide little systematic leadership. Rather, they are at the head of a flotilla in which the other smaller ships are aimlessly sailing, and some even seek to become flagships themselves.

Universities, of course, are also teaching institutions. Even the most distinguished research universities offer instruction at all levels to students. The research universities produce the bulk of doctoral degrees in most countries and are thus responsible for training the next generation of the academic profession as well as research cadres for industry and government. They also, with few exceptions, teach undergraduates. The fact is that most universities, except for the top research institutions, are mainly teaching institutions, and this must be recognized by both governments and the universities themselves.

Because universities are at the top of the hierarchy of any academic system, they must provide leadership for the rest of postsecondary institutions. Generally, universities have no direct or even peripheral relationships with other segments of postsecondary system, although in a few countries, such as the Netherlands, there have been largely unsuccessful efforts to link the research universities with other postsecondary institutions. Universities need to recognize the important roles of other postsecondary institutions and work with them to provide system-wide legitimacy, training for academic cadres for the entire academic community, and innovative ideas concerning teaching and learning. In short, universities must recognize that they are part of a linked system that provides a range of educational experiences and certification in a wide range of fields and for many aspects of a modern economy and society.
NECESSITY AND REALITY

A KEY CHALLENGE: DIVERSIFICATION IN THE 21ST CENTURY

A key challenge of the 21st century is how to organize the increasingly complex set of postsecondary institutions and to ensure that the ever more diversified needs of postsecondary education are satisfied (Task Force on Higher Education and Society 2000; Teichler 2002). Traditionally, when postsecondary education was largely a preserve of the elite with only a small percentage of the age group attending universities and a larger but still modest number participating in postsecondary vocational schools, there was little need for a complex “system” of postsecondary institutions. Universities, in most countries, were public and funded mainly by governments. Most had considerable autonomy and most, following the Humboldtian idea, focused at least to some extent on research. Vocationally-oriented institutions did not offer academic degrees but rather certificates of various kinds. In a few countries, such as Germany, the vocational sector was well integrated with industry and an integral part of the postsecondary landscape. Similarly, community colleges in the United States and polytechnics in the United Kingdom had a clear but subordinate role in postsecondary education yet the polytechnics were abolished in the UK in 1992 and American community colleges are increasingly taking on a more academic orientation. Similarly the universities of applied sciences in Germany, the Netherlands, Scandinavia, and elsewhere, are taking on increasingly academic roles. In these cases, there has been a blurring of the distinctions between different segments of postsecondary education. In much of the world, however, vocational institutions were either quite weak or nonexistent and seldom integrated into any kind of system.

With the advent of massification, enrollments and academic institutions of all kinds expanded rapidly. In much of the world, a significant part of that expansion was in the private sector. There is, in postsecondary education, immense and largely uncharted diversity with many different kinds of institutions serving many needs. But there is little coordination or rational organization of these diverse institutions to rationally meet the needs either of massification, the economy, or the requirements and goals of the millions of students investing their time and money in postsecondary education. Indeed, it is possible to argue that postsecondary education has become less well organized than in the past. The incorporation of the vocationally-focused polytechnics into the British university sector, and the end of what the British referred to as the “binary divide,” actually replaced rational organization with ambiguity about the roles and missions of different postsecondary institutions.

In much of the world, expansion of postsecondary education occurred without any serious planning or concern for the development of a logical or integrated “system” of postsecondary education. The jumble of institutions with different funding patterns, different goals and purposes, varying curricular and pedagogical approaches, and other aspects created postsecondary education anarchy, a situation that continues in many countries and does not serve either individual students or society well. Most governments are trying to catch up with expansion with quality assurance schemes, testing programs, and new regulations.
In fact, it is by now quite difficult to even categorize the various elements of post-secondary institutions—and that dilemma is becoming more problematical with the expansion of online and distance providers. Traditional universities are increasingly offering distance programs and degrees. For-profit universities are active as well. High-profile online initiatives, such as edX and Coursera, offer many courses in the MOOC (Massive Open Online Course) format, often sponsored by traditional universities. While the MOOC revolution, predicted by many, has been slow to take off, MOOCs and other online programs have expanded rapidly. New actors have emerged that seek to package online and other educational experiences into degrees or certificates that provide credentials for the job market, often bypassing traditional academic institutions. Universities delivering instruction and providing certification and degrees mainly or exclusively through distance education, such as the Open University in the UK, the University of South Africa, Indira Gandhi Open University in India, and many others, are now teaching millions of students throughout the world. Yet, the distance providers are seldom fully integrated into national higher education arrangements.

THE REVOLUTION OF THE PRIVATE SECTOR

The private sector is now the fastest growing segment of postsecondary education worldwide. This is not the case in western Europe or North America, but is the case in many parts of the world. For example, in Latin America, public higher education along with a small number of elite denominational private universities dominated most countries for much of the 20th century. Now, in most of the region, private sector enrollments are close to half of the total and in some cases more than half. In Japan, South Korea, Taiwan, the Philippines, and several others, private institutions enroll 80% of students. Private institutions are expanding rapidly in Africa and have become a significant part of the higher education sector in Europe, particularly Central and Eastern Europe.

Private universities and other institutions can be found among all segments of post-secondary providers in many countries, but only a few have a significant number of private non-profit research universities. In almost all countries, the bulk of the private sector is “demand absorbing,” existing at the bottom of postsecondary systems and educating students who cannot gain access to more competitive and prestigious public institutions. Private institutions tend to offer programs, such as management, information technology, and many others that link directly to the labor market and that are in demand from students.

Many new private postsecondary institutions are for-profit, either officially or de facto in countries that may not permit for-profit schools legally. The for-profit sector has been especially problematical by often offering low quality programs or not providing adequate services to students at a fair cost. Ethical scandals, low quality and other problems are common in the for-profit higher education sphere. In a large
number of developing countries, private “garage universities,” as they often called in Latin America, offer substandard qualifications of little value in the employment market. In the United States, some private for-profit providers have been closed down by the government for low standards, financial abuses, and other malfeasance. Yet, the sector continues to expand—in the US, 11% of graduate students are enrolled in the for-profit sector, up from 3% fifteen years ago as the result, in part, of lower entrance requirements and standards.

Private postsecondary education often faces fewer restrictions in offering specific specializations, providing qualifications, or establishing institutions than is the case for public universities and colleges. However, in some countries, including Argentina, Japan, and South Korea, regulations are strong and supervision tight. Private institutions must participate in local quality assurance schemes, but in many places these agencies have limited resources and authority to address problems in this sector, often finding themselves confronting powerful lobbies with political clout.

The challenge in most countries is how the private sector might contribute to the demand for higher education but regulated in a way that the public interest is protected.

THE CRISIS OF QUALITY ASSURANCE AND ACCREDITATION

Most countries today have mechanisms for quality assurance or accreditation to provide some measure of supervision to postsecondary education. It is, however, fair to say that in the context of mass enrollments and a wide range of institutions serving so many different needs that these arrangements are in almost all cases inadequate. These programs reflect the global demand for accountability—originally to measure the efficiency and appropriateness of budgetary expenditures, but recently also to assess learning outcomes by students and other academic “outputs” to demonstrate impact and effectiveness.

Accreditation and quality assurance are, of course, quite different. The former provides certification and approval for academic institutions or faculties/programs to operate, usually, but not always, granted by governmental authorities. Quality assurance monitors and evaluates academic performance with the purpose of assuring students, government, and the larger society that institutions are providing value.

Few, accreditation schemes operating today operate without criticism or controversy. Massification and the resulting number, complexity, and diversification of academic institutions has made quality assurance mechanisms progressively difficult to create. Worse still, the definition of quality amid so much diversity is increasingly elusive. As a result, there are few widely accepted criteria for measuring quality or effectiveness, either nationally or internationally.
Few countries have designed effective systems of postsecondary education that provide a coherent strategy to serve the complex academic needs of the 21st century. In 1960, California developed a plan to organize the state’s public system of public postsecondary education known as the California Master Plan (Ryan 2016).

For the purpose of this discussion, there are several salient elements concerning the California Master Plan.

- The Master Plan is part of state regulations for public higher education—passed by the legislature—and has the force of law.

- It does not affect private higher education—that sector retains full autonomy.

- The Plan created three distinct public higher education sectors in California. At the base is the community college system, largely vocational in focus, but also offer academic programs aimed at preparing students for transfer to the university sector. In the middle is the California State University System (CSU), consisting of 23 campuses educating 460,000 students, offering baccalaureate and masters degrees. At the top is the University of California system, with 10 campuses and 238,000 students. The UC institutions are all research universities that offer undergraduate and all graduate and professional degrees.

- There is student mobility among the three systems. A student entering a community college may, assuming appropriate grades, easily transfer to a four-year CSU or a University of California campus.

The California Master Plan is, an example of how one jurisdiction has managed to organize public postsecondary education with reasonable success that served the state for a significant period of time.

California, of course, is not alone in attempting to develop policy to address the diversification and massification. A common pattern in continental Europe has been to divide public postsecondary education between the traditional universities and a sector focusing more on vocationally-oriented postsecondary education, commonly referred to as universities of applied sciences. In most cases, these universities are authorized to award the same degrees as traditional universities, although in some cases with restrictions. In Germany, this sector is dominated by the highly-regarded Fachhochschulen (Wolter & Kerst 2015). This distinction between sectors existed in the United Kingdom until 1992, when all vocationally-oriented polytechnics were upgraded to university status, blurring distinctions and creating an ambiguous postsecondary sector. Throughout Europe, it remains a challenge to differentiate among different kinds of universities where missions, programs and degrees overlap.
NECESSITY AND REALITY

In much of the rest of the world, there is little coherence in the organization of postsecondary institutions or sectors, as the case studies in the volume illustrate. A few countries, such as Australia, have reasonably well differentiated arrangements for organizing postsecondary education. For most other countries, an unwieldy combination of private, state, and national institutions with a range of purposes and functions and with little coordination or regulation among them, remains the norm. Even countries such as China and Japan, that have fairly strict control over academic institutions, have not implemented much coordination among them.

CLASSIFICATION OR RANKING?

How might different kinds of postsecondary institutions be classified so that this sector might be better understood? Some turn to rankings, global, national, and categorical, as a proxy for institutional types, prestige, quality and impact (Yudkevich, Altbach and Rumbley 2015; Hazelkorn 2017). This is a mistake for many reasons: rankings create a hierarchy of institutions or programs according to specific and limited criteria. There are a wide variety of rankings. The three most influential are: Academic Rankings of World University (the Shanghai rankings), QS, and Times Higher Education Rankings. There are also numerous national rankings.

No ranking attempts to incorporate different kinds of postsecondary institutions. Indeed the most influential ones deal only with the small number of research-intensive universities and largely measure research output and related themes. It would, in fact, be impossible for any ranking to deal with all categories of postsecondary education, not only because of the variations involved but because of the absence of common measurements.

Much more useful would be a classification system for postsecondary institutions, that provided a logical typology of different kinds of institutions based on their missions, profile and principle activities. Such classifications would be most relevant at national levels, but they may be applied to states and provinces, and might be applied globally. A classification is not designed to rank an institution, but simply provides useful categories and places an institution in the appropriate group. One such classification, perhaps the only one attempted on a national scale, is the Classification of Institutions of Higher Education, first prepared by the Carnegie Foundation for the Advancement of Teaching in the United States. Developed by Clark Kerr in 1970, the original classification had the advantage of simplicity, placing institutions into a few categories. More recent versions have added categories and subcategories, trying to capture greater levels of complexity, but also making it more complicated to understand and perhaps less useful.

The classification of different kinds of postsecondary institutions that could carefully place each institution in an appropriate category relevant to its mission and func-
tion would provide governments and the public with information to make sense out of the current and expansive range of postsecondary institutions and also offer a basis for creating, and appropriately funding, a system of postsecondary education. The challenges of developing a classification are considerable, and include problems of definitions, obtaining accurate data, and coordination. But some system of classification is needed to make sense of the complexity of 21st century postsecondary education.

**DIVERSIFICATION VERSUS DIFFERENTIATION**

Postsecondary education everywhere is diversified—institutions and schools serve a wide range of purposes and clienteles. The institutions range from world-class research universities offering a wide-range of disciplines to specialized vocational schools offering certificates in specific trades. Together, these institutions constitute contemporary postsecondary education. They have in many cases emerged to meet the needs of mass enrollments and changing economies and societies worldwide. In few cases was careful planning part of the process of expansion. Thus, postsecondary education is diversified, but with an anarchy of institutions.

Differentiation is a concept that implies a strategy and coordination with useful distinctions made between institutions based on their purpose. In short, differentiation is necessary and would add logic to the diversification that has taken place. It implies that elements of a system are linked in some way, or at least coordinated. Creating a map of differentiation is not easy, but at the same time possible by developing a typology of different types of institutions and carefully and objectively placing them into the appropriate categories.

Once a logical mapping of institutions is accomplished, it will be possible to develop ways of managing the categories of institutions, and eventually creating systems that will allow for better planning, permit linkages among institutions and students, and facilitate more effective relationships between postsecondary institutions and societal actors.

**BLUEPRINTS FOR THE FUTURE**

The early 21st century reflects a period of postsecondary education anarchy, at least considering the degree of expansion without effective organization and the struggle to safeguard quality for the large and growing numbers of students who pursue education at this level. Yet postsecondary education is of vital importance for modern economies and societies and strategies to organize these systems is desperately needed.

The following initiatives may help to ensure that today’s academic anarchy becomes tomorrow’s differentiated postsecondary environment to better serve societal
needs and support continued innovation and reform. Not all of these recommendations will be practical everywhere as the organization of academic differentiation will vary according to national circumstance.

- As a first step, a classification of all postsecondary institutions based on their missions and functions is needed.

- The role of the university, as the apex institution in any academic system, must be defined and articulated. At the same time, the key role of some number of research-intensive universities as key producers of knowledge and personnel must be protected and enhanced.

- The burgeoning and often problematical private postsecondary sector needs to be categorized and regulations put into place to ensure that the private sector can serve the broader public interest.

- Quality assurance is necessary for a differentiated academic environment to ensure that students are adequately served. Quality assurance must, on the one hand, be simple and practical to implement, and on the other, cognizant that criteria must accommodate all types of institutions.

- Distance education institutions will inevitably be part of a mass postsecondary environment and must be effective integrated.

These are important first steps to manage the new realities of postsecondary massification. Each country, as illustrated by the case studies in this volume, reflects different needs and challenges, varying historical and political circumstances, and a range of economic realities. What all have in common is the need to create postsecondary systems that can serve complex 21st century challenges.

REFERENCES


