Trends in Global Higher Education

Tracking an Academic Revolution

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Today's academic revolution is unprecedented. Mass higher education has become a worldwide phenomenon, with enrollments growing from 100 million to 150 million in just a decade. The implications of massification are immense—greatly increased participation for a more diverse population including women and many traditionally underrepresented socio-economic groups; the rise of private higher education; diversification of academic institutions and systems; and an overall weakening of academic standards at non-elite institutions in many countries. At the same time, higher education is recognized as a key driver of the new knowledge economy. Because of this research universities, at the top of academic systems, have become central institutions in contemporary society.

Trends in Global Higher Education analyses these and other key forces shaping higher education today. Using up-to-date UNESCO statistics, trends defining higher education are placed in a comparative and international framework. Patterns of globalization, the flow of students and scholars across borders, the impact of information technology, and other key forces are critically assessed. This book is a key resource for understanding the present and future of global higher education.
TRENDS IN GLOBAL HIGHER EDUCATION
GLOBAL PERSPECTIVES ON HIGHER EDUCATION

Volume 22

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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Preface

This Trend Report fulfills a simple yet complex purpose—to summarize the main directions in higher education worldwide in the past decade—since the 1998 UNESCO World Conference on Higher Education. The main goal is to provide background analysis and to animate discussion at the 2009 UNESCO World Conference on Higher Education. We, as authors, have no preconceived perspective. Instead, with the contributors who have assisted us in the preparation of this report, we have attempted to provide an objective discussion of central themes. While under no illusion that this report has analyzed everything, we have highlighted what to us seem the most significant forces shaping higher education worldwide. No doubt, some observers will disagree with our choices of themes or points of analysis.

If one retraces higher education back to the time of the 1998 UNESCO conference and reviews the concerns and problems expressed at that meeting, remarkable consistency appears over time. Many of the same challenges remain, but the past decade has intensified the central issues. Higher education has expanded significantly, creating many problems as well as serving much larger numbers of students. At the same time, higher education provides new opportunities for many more students.

Many of the trends examined here have defined higher education over the past half century or more, but our focus is especially on the period since the late 1990s. As shown by the subtitle of this report, Tracking an Academic Revolution, higher education has undergone deep changes that will shape the academic enterprise for decades to come. Perhaps the key engines of change consist of the massification of higher education in almost every country, the impact of information and communications technology and its impact on higher education, the "public good/private good" debate, and the rise of the global knowledge economy and other manifestations of globalization. All of the themes discussed here stem in one way or another from these motivating forces. The
21st century revolution will continue to shape higher education in the coming decades.

This continuing revolution is intensifying. Although issues such as quality, access, and internationalization have preoccupied the higher education community for some time, the discussion has moved beyond awareness to a deeper level of concern with the complexities and implications of these issues. Making higher education more inclusive requires not only moving historically underrepresented groups into higher education but also meeting their unique needs. New mechanisms for cost sharing have appeared and present difficult choices for how the risks and responsibilities will be distributed and whether the programs will reach their intended audience. Quality, instinctively desirable, has proven difficult to define and equally difficult to measure.

This report will not analyze all the forces that influence higher education. Moreover, while we cannot predict all future developments, it can be noted that the trends identified here will likely continue as the main themes in the foreseeable future. For example, the impact of the current global economic crisis on higher education seems at this point unclear, although some appreciable effect is certain to occur.

This report is a collaborative enterprise. The organization and writing was carried out by the three authors, Philip G. Altbach, Liz Reisberg, and Laura E. Rumbley—all members of the Center for International Higher Education at Boston College. This work is derived from text that was commissioned by the UNESCO Division of Higher Education for the World Conference on Higher Education. This book is printed thanks to the permission granted by UNESCO to adapt this work for this publication. The UNESCO Trends in Global Higher Education: Tracking an Academic Revolution is available at: http://unesdoc.unesco.org/images/0018/001832/183219e.pdf.

Our close work with UNESCO staff helped to shape this document and provided important feedback throughout. The UNESCO Institute for Statistics in Montreal, Canada, provided us with all of the statistical information and tables in this report.

We are indebted to Jane Knight, V. Lynn Meek, Marcela Mollis, and Mala Singh, our external evaluators, for careful critiques and constructive suggestions.

We commissioned experts to contribute important substance to many sections of this document. The chapters reflect their ideas as well as our own analysis. Our collaborating authors include:

- Miriam David, professor of sociology of education at the Institute of Education, University of London. She prepared a draft of the section on access and equity.
• D. Bruce Johnstone, Distinguished Professor Emeritus and director of the International Comparative Higher Education Finance and Accessibility Project at the State University of New York at Buffalo. He prepared the section on financing.

• Daniel C. Levy, Distinguished Professor and director of the Program of Research on Private Higher Education at the State University of New York at Albany. He wrote the section on private higher education.

• John Biggs, who has held professorships in Canada, Australia, and Hong Kong and is widely published on teaching and learning in higher education, and Catherine Tang, who was head of educational development at the Hong Kong Institute of Education. They coauthored much of the section on teaching and learning.

• Damtew Teferra, director for Africa and the Middle East at the Ford International Fellowship Program and director of the International Network for Higher Education in Africa. He prepared a draft of the essay on distance education and information and communications technologies.

• Jorge Balán, former senior program officer at the Ford Foundation, is currently a senior researcher at the Center for the Study of State and Society in Buenos Aires. He prepared the section on research.

• Sachi Hatakenaka, formerly on staff at the World Bank, is currently a consultant on higher education. She prepared the essay on university-industry linkages.

Our colleagues at the Center for International Higher Education at Boston College carried out a great deal of work. Kara A. Godwin and Iván F. Pacheco, research assistants at the Center, took part in the research and helped to draft sections of the report. Edith S. Hoshino, the Center’s publications editor, provided editorial assistance. UNESCO’s higher education staff collaborated with us. Stamenka Uvalic-Trumbic, Chief, Section for Reform, Innovation and Quality Assurance, UNESCO, Education Sector, Division of Higher Education provided helpful comments and cooperation throughout the preparation of the report. Lydie Ruas, Zeynep Varoglu, Yung-chul Kim, and Liliana Viorica Simionescu also helped with aspects of our work. The UNESCO Institute for Statistics in Montreal, Canada, provided the statistical material included here. We appreciate the colleagueship and contribution of its director, Albert Montvans, and are especially grateful for the help provided by Chiao-Ling (Claire) Chien and Yanhong Zhang.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AACSB</td>
<td>Association to Advance Collegiate Schools of Business</td>
</tr>
<tr>
<td>ABET</td>
<td>Accreditation Board for Engineering and Technology</td>
</tr>
<tr>
<td>AHELO</td>
<td>Assessment of Higher Education Learning Outcomes</td>
</tr>
<tr>
<td>ANIE</td>
<td>African Network for Information Ethics</td>
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<tr>
<td>ANQAHE</td>
<td>Arab Network for Quality Assurance in Higher Education</td>
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<tr>
<td>APQN</td>
<td>Asia-Pacific Quality Network</td>
</tr>
<tr>
<td>AUQA</td>
<td>Australian Universities Quality Agency</td>
</tr>
<tr>
<td>AUTM</td>
<td>Association of University Technology Managers</td>
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<tr>
<td>AVU</td>
<td>African Virtual University</td>
</tr>
<tr>
<td>CAPES</td>
<td>Coordination for the Improvement of Higher Education Personnel (Coordenação de Aperfeiçoamento de Pessoal de Nível Superior)</td>
</tr>
<tr>
<td>CD-ROM</td>
<td>compact disc-read only memory</td>
</tr>
<tr>
<td>CEPES</td>
<td>European Centre for Higher Education (Centre européen pour l’enseignement supérieur)</td>
</tr>
<tr>
<td>CHEA</td>
<td>Council for Higher Education Accreditation</td>
</tr>
<tr>
<td>CMC</td>
<td>computer-mediated communication</td>
</tr>
<tr>
<td>CNRS</td>
<td>Centre National de la recherche scientifique</td>
</tr>
<tr>
<td>DVD</td>
<td>digital versatile disc</td>
</tr>
<tr>
<td>EHEA</td>
<td>European Higher Education Area</td>
</tr>
<tr>
<td>ENLACES</td>
<td>Latin American and Caribbean Higher Education Area (Espacio de Encuentro Latinoamericano y Caribeño de Educación Superior)</td>
</tr>
<tr>
<td>ENQA</td>
<td>European Network for Quality Assurance</td>
</tr>
<tr>
<td>EQAR</td>
<td>European Quality Assurance Register</td>
</tr>
<tr>
<td>EQUIS</td>
<td>European Quality Improvement System</td>
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<tr>
<td>ERASMUS</td>
<td>European Region Action Scheme for the Mobility of University Students</td>
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<tr>
<td>ESG</td>
<td>European Standards and Guidelines</td>
</tr>
<tr>
<td>GATS</td>
<td>General Agreement on Trade in Services</td>
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GIQAC  Global Initiative for Quality Assurance Capacity  
HEFCE  Higher Education Funding Council for England  
ICT  information and communication technologies  
IGNOU  Indira Gandhi National Open University  
INQAAHE  International Network for Quality Assurance Agencies in Higher Education  
ISCED  International Standard Classification of Education  
MBA  master of business administration  
NAFSA  NAFSA Association of International Educators  
NAFTA  North Atlantic Free Trade Agreement  
NOQA  Nordic Quality Assurance Agency  
ODL  open and distance learning  
OECD  Organization for Economic Cooperation and Development  
OER  Open Educational Resources  
PROPHE  Program of Research on Private Higher Education  
QA  Quality assurance  
QAA  Quality Assurance Agency for Higher Education  
R&D  Research and development  
RIACES  Ibero-American Network for Quality Assessment and Assurance in Higher Education (Red Iberoamericana para la Acreditación de la Calidad de la Educación Superior)  
RSS  Really Simple Syndication  
SEAMEO  Southeast Asian Ministers of Education Organisation—Regional Centre for Higher Education and Development  
UNAM  National Autonomous University of Mexico (Universidad Nacional Autónoma de México)  
UNESCO  United Nations Educational, Scientific and Cultural Organization  
UNESCO-IESALC  UNESCO International Institute for Higher Education in Latin America and the Caribbean (Instituto Internacional de Educación Superior en América Latina y el Caribe)
Introduction: Twenty-First-Century Global Directions

Understanding the changes that have taken place in higher education worldwide in the past half century is a difficult task because of the scope and complexity of those trends. One can, without risk of exaggeration, speak of an academic “revolution”—a series of transformations that have affected most aspects of postsecondary education worldwide. However, comprehending a dynamic process while it is taking place is not an easy task. Arguably, the developments of the recent past are at least as dramatic as those in the 19th century when the research university evolved, first in Germany and then elsewhere, and that fundamentally changed the nature of the university worldwide. The academic changes of the late 20th and early 21st centuries are more extensive in that they are truly global and affect many more institutions and larger populations.

The fundamental forces propelling the contemporary revolution are easy to discern but much more difficult to integrate and comprehend. The central reality of the past half century, or more, involves the massification of higher education. While some systems—for example, in Latin America in the early 20th century—called for mass access and a few countries—mainly the United States and Canada—provided such access in the first half of the 20th century, mass access is a quite recent phenomenon globally. The sociologist Martin Trow (2006) identified three basic stages of higher education development worldwide—elite, mass, and universal access. He argued that most nations, at varying times, will move toward mass or universal participation in postsecondary education, and this is indeed what has
happened. While some developing countries still educate fewer than 10 percent of the age group, almost all countries have dramatically increased their participation rates. The “logic” of massification is inevitable, and includes an overall lowering of academic standards, greater social mobility for a growing segment of the population, new patterns of funding higher education, increasingly diversified higher education systems in most countries, and other tendencies (Altbach, 2007, pp. 3–22).

Like many of the trends addressed in this report, massification is not a new phase, but at the “deeper stage” of the ongoing revolution in higher education it must be considered in different ways. Initially, higher education systems struggled just to cope with demand—the need for expanded infrastructure and a larger teaching corps. During the past decade, systems have begun to wrestle with the implications of diversity and to consider which subgroups are still not being included and appropriately served.

A central reality of the 21st century is the emergence of the knowledge economy. The many manifestations of this economy, including the growing centrality of the service sector, new fields like biotechnology, the importance of information and communications technology, and many others enhance the salience of higher education. Growing segments of the workforce require the advanced education offered in postsecondary institutions. Research, much of it carried out in universities, has expanded in scope and relevance. Further, the knowledge economy enhances global mobility of highly trained professionals, and academe plans a central role in mobility.

Demographics will continue as a driving force for development and reform in the coming decades. The patterns and geographical scope will vary, but the basic thrust will remain. In 2008, the Organisation for Economic Co-operation and Development (OECD) identified several key demographic trends for the period to 2030 (OECD, 2008). While these trends were identified on the basis of the OECD-member states (mainly the developed countries), they seem to prevail globally:

- Student participation will continue to expand, as will higher education systems. Only a few countries will see a contraction in student numbers.
- Women will form the majority of student populations in most developed countries and will substantially expand their participation everywhere.
- The mix of the student population will become more varied, with greater numbers of international students, older students, part-time students, and other types.
• The social base in higher education will continue to broaden, along with uncertainty about how this will affect inequalities of educational opportunities between social groups.
• Attitudes and policies relating to access as well as the consciousness among disadvantaged groups will change and become more central to national debates.
• The academic profession will become more internationally oriented and mobile but will still be structured in accordance with national circumstances.
• The activities and roles of the academic profession will be more diversified and specialized and subject to varied employment contracts.
• For many developing countries, the need for ever-expanding numbers of university teachers will mean that overall qualifications, now rather low, may not improve much, and current reliance on part-time staff in many countries may continue (OECD, 2008, pp. 13–14).

While academic systems have been expanding, several other forces have affected higher education worldwide. These trends are all related in a significant way, thus creating a problem of addressing the variables separately. Globalization is not only shaping the world’s economy and culture but, without question, is influencing higher education as well. The emergence of a global knowledge system in which communication is instantaneous and research and other information are disseminated globally, the use of English, as the world’s main language for scientific communication, and the expansion of information technology are key factors. It may be possible to ameliorate the most negative aspects of globalization, but it is not practical to opt out of the global knowledge system.

Academic mobility is a hallmark of the global age. A truly global market for students and academic staff exists today. At least 2.5 million students study outside of the home country, although reliable statistics are not available for academics teaching abroad.

Information and communications technology composes another global force. The effect on society in general is still unfolding, but without question this aspect of the revolution is one of the more powerful influences on higher education. The impact of technology on science and scholarship, teaching and learning in traditional universities, the possibilities for distance education, and even the internal management of universities has been particularly profound. Without doubt, deep inequalities persist with regard to information and communications technology access, use, and influence.
Dramatic change has occurred in funding higher education and in deliberating how to support mass higher education. In most countries, with the notable exceptions of some East Asian nations, higher education has long been considered a responsibility of the state and thought of as a “public good.” University study would benefit the individual, of course, but also society through greater productivity, contributing to national goals, and other factors. The financial pressures resulting from massification, combined with the neoliberal orientation of international funding agencies during the last decade, have tempered the notion of higher education as strictly a public good. The benefits of tertiary education have been emphasized as a “private good,” with implications for the allocation of the responsibility for costs. It is becoming obvious that the state alone can no longer afford to educate the growing numbers of students in a mass higher education system and that (given the benefit of education to an individual over a lifetime) students and families need to assume a share of the financial burden. These factors have contributed to both the dramatic rise of private higher education worldwide and to the privatization of public universities.

Although higher education is increasingly affected by global trends, institutions with few exceptions still function within national boundaries. Higher education remains an essentially national phenomenon. Universities function within nations and for the most part serve local, regional, and national interests.

The Global Socioeconomic Environment
We live today in the midst of a profound economic crisis that will have repercussions in society at large and within higher education in ways that are not yet obvious. Many countries and universities will experience financial problems with serious consequences in the short and perhaps the medium term. The crisis is likely to have the following implications:

- Research universities are likely to see significant constraints on their budgets as governments will be unable to provide the resources needed for their continued improvement. In many cases, the priority will be to allocate funds to ensure that access to the higher education system is not dramatically cut.
- In countries where student loan programs exist, either in the public or private sectors, severe constraints on their availability to students may be implemented along with increased interest rates.
- The system will face pressure to establish or increase tuition fees for students.
- Cost-cutting practices at many universities will result in a deterio-
ration of quality. More part-time faculty are likely to be hired, class sizes expanded, and additional actions.

- “Freezes” on hiring, construction of new facilities, improving information technology, and purchasing books and journals are likely developments.
- It is possible that the numbers of internationally mobile students may temporarily decline as families in such major sending countries as China and India are unable to afford overseas tuition fees and other expenses.

How deep the crisis will become or how long it will last is unknown. However, most experts are doubtful of a quick recovery. Thus, it is likely that higher education is entering a period of significant cutbacks. There is no doubt that higher education is entering a period of crisis unprecedented since World War II, and the full impact is as yet uncertain. At the same time, economic stimulus efforts in some countries have included funds for research, retraining workers, and other projects that may assist higher education.

The Revolution of Massification

The expansion of higher education has been the core reality of the sector in the last half of the 20th century and in the current era. Responding to mass demand has led to or caused many of the key transformations of the past several decades. Why has higher education expanded so rapidly in the past half century? The answers are multifold and related to social, economic, and political change worldwide. Public demand for access is perhaps the most powerful force. Higher education has come to be seen as a necessity for social mobility and economic success in many countries.

The post–World War II period, has witnessed profound economic changes across the globe. Many countries have shifted to postindustrial economies that require more highly educated personnel for many jobs. Even more traditional economies need a larger number of more highly educated workers, given changes in technology. The most highly remunerative and prestigious occupations invariably require postsecondary education qualifications. In the developed countries, the rise of service industries and the knowledge economy, coupled with social change, contributed significantly to the demand for access to higher education.

There has been a general expansion of populations worldwide during much of this period. The “baby boom” in North America and Europe in the immediate postwar period contributed to greater demand for higher education. More recently, population growth has characterized the developing world, as well. Additionally, in most of the world, a demographic
shift has taken place from rural areas to the cities. Urban populations tend to have more education and be more focused on highly skilled jobs.

Important social change has also taken place in much of the world. The era of colonialism came to an end, and in the newly independent nations of Africa and Asia populations were empowered to demand political and social development. These new expectations involved access to education at all levels including higher education, which, however, had been limited to a tiny proportion of the age cohort (usually one percent or less).

Meanwhile, women began to assert their right to pursue higher education and were important beneficiaries of massification, first in the developed countries and later elsewhere. In most countries, women had been dramatically underrepresented in the student population. By the 1980s in much of the world women had achieved parity with men and in some countries outnumbered men.

The United States was the first country to achieve mass higher education. By 1960, 40 percent of the age cohort attended postsecondary education. Massification was achieved in Canada shortly after. In western Europe and Japan rapid growth took place in the 1980s, followed by that trend in the developed countries of East Asia (such as the Republic of Korea, among others) soon thereafter. Latin America experienced dramatic growth during this period, as well. Over the past decade, most of the remaining countries in the developing world have experienced similar expansion. China and India, currently the world’s largest and third-largest academic systems, respectively, have been growing rapidly and will continue to do so. Indeed, perhaps half of the world’s added enrollments will found be in China and India (Altbach, 2009).

Mass higher education has fundamentally transformed the higher education system worldwide. Differentiated academic systems have emerged, with various institutions serving quite different purposes and roles within each country. Historically, only the traditional, research-oriented university, plus a range of nonuniversity postsecondary institutions, existed in most countries. In the past half century, many different kinds of degree-granting institutions have been established to serve diverse populations and purposes. Some countries have borrowed from the experience of the American public university system (Kerr, 2001). Others have pioneered distinctive approaches to differentiation. Most countries now have a small number of research-intensive universities at the pinnacle of the academic system and a much larger number of less-selective universities with more emphasis on teaching than research. A large variety of postsecondary, nonuniversity institutions now serve a mass clientele often emphasizing technical education.
Most countries have also seen the rise of a private higher education sector that is absorbing some of the new demand. Indeed, private institutions enroll a majority of students in a growing number of countries. The challenge of ensuring that the private higher education sector, both nonprofit and the newer for-profit institutions, serves the national interest is significant.

Much of this report is concerned with the ways in which higher education has responded to the challenge of massification (its implications for funding, privatization, access, teaching and learning, etc.) in the past several decades. Without question, the coming period will be dominated by the implications of mass access.

**Globalization and Internationalization**

Globalization, a key reality in the 21st century, has already profoundly affected higher education. In this report, we are concerned with how it affects universities. We define globalization as the reality shaped by an increasingly integrated world economy, new information and communications technology, the emergence of an international knowledge network, the role of the English language, and other forces beyond the control of academic institutions (Altbach, 2007, pp. 23–48). Internationalization is defined as the variety of policies and programs that universities and governments implement to respond to globalization.

Universities have always been affected by international trends and to a certain degree operated within a broader international community of academic institutions, scholars, and research. But 21st-century realities have magnified the importance of the global context. The rise of English as the lingua franca of scientific communication is unprecedented since the period when Latin dominated the academy in medieval Europe. Information and communications technologies have created a universal means of instantaneous contact and simplified scientific communication. At the same time, these changes have helped to concentrate ownership of publishers, databases, and other key resources in the hands of the strongest universities and some multinational companies, located almost exclusively in the developed world.

It is not possible for higher education to opt out of the global environment since its effects are unavoidable. The local realities of wealth, language, academic development, and other factors all affect the extent to which institutions are motivated and able to internationalize.

One of the most visible aspects of globalization is student mobility. More than 2.5 million students are studying outside of their home countries. Estimates predict 8 million international students by 2020. The flow of international students has reflected national and institutional
strategies but also the decisions of individual students worldwide. International students have become “big business,” bringing revenues to host universities through tuition payments and other expenditures. These students also add international diversity to an academic environment.

The mobility of international students involves two main trends. One consists of students from Asia entering the major academic systems of North America, Western Europe, Australia, and Japan. The other trend, within the European Union, involves its various programs to encourage student mobility. Globally, international student mobility largely reflects a South-North phenomenon. Additional flows take place from Africa and Latin America to Europe and North America. Currently, English-speaking countries serve as the primary host countries for international students. While during the first stage of the “revolution” the quantitative aspects of student mobility were given more attention, the deeper qualitative implications are now being reviewed. Half or more of international students study for postgraduate degrees and in many cases do not return to their home countries after completing their studies, depriving their home country of these highly trained individuals.

Less information exists about mobility of academic staff, although the academic labor market has increasingly globalized, with many thousands of scholars crossing borders for appointments at all levels. Again, the largest flow is South-North, with North America especially benefiting from an influx of academics from many countries, including a large number from Europe who are seeking higher salaries. The pattern of “brain drain” from the developing world has changed to some extent. Academics who leave their home countries now maintain more contact with their countries of origin and, from abroad, work collaboratively with home country colleagues. Nonetheless, a number of developing countries are still losing many of their best scholars and scientists.

Student and scholar mobility has become a major factor in higher education worldwide. Students seek access to fields that may be lacking in the home system, as well as high-quality degree programs, especially at the postgraduate level. Some countries, most notably Australia and the United Kingdom, see international students as a source of income for the academic system. Many developed countries, hoping that international graduates will not return home, increasingly work to adjust immigration laws and offer incentives so that they will remain after degree completion. This concentration of talent in the developed world contributes to international academic inequality.

Universities and academic systems have developed many strategies to benefit from the new global environment and to attract nonresident students. Some universities in non-English-speaking countries have
established degree programs in English to attract students from other countries. Universities create partnerships with academic institutions in other countries to offer degree and other academic programs, develop research projects, and collaborate in a variety of ways. Branch campuses, off-shore academic programs, and franchising arrangements for academic degrees represent only a few manifestations of such internationalization strategies (Altbach and Knight, 2007).

The establishment of university branch campuses (usually from a developed country) in another “host” country is a growing phenomenon. Twinning programs, in which universities in two (or more) countries offer joint or dual degrees, is another phenomenon. Most of these programs are taught in English, particularly in such high-demand fields as management studies or information technology. In the Arabian Gulf area a number of foreign universities have been invited by local governments to establish branch campuses. The hosting countries pay most of the costs associated with these arrangements. China only allows foreign institutions to operate within its borders if it has a local partner.

Institutions establishing branches or joint programs are often motivated by a desire for additional revenue, although they are also engaged in raising their international profile and contributing to the internationalization of their home campuses as well. The motivations of the receiving countries are perhaps more complex and include a need for greater capacity at home and a desire to leverage the prestige and resources of a high-quality foreign institution.

A Context of Inequality

The developments discussed in this report also reflect growing inequalities in higher education worldwide, resulting from persistent economic (and other) disparities. This report does not condone such inequalities. It is hoped that a careful analysis of trends and issues will lead to a fuller understanding and contribute to the amelioration of these gaps. Yet, as inequality is part of the global higher education landscape, it must be recognized and examined.

Inequality among national higher education systems as well as within countries has increased in the past several decades. Inequality is seldom the result of foreign policy priorities, foreign assistance programs, or government action. Rather, contemporary inequality is steeped in the wide range of realities facing academic institutions and systems worldwide.

The academic world has always been characterized by centers and peripheries. Some countries have attained stronger universities than others for a variety of reasons—because of their wealth, long academic
traditions, size, language, and other factors. The strongest universities, in developed countries, with research prowess and reputation for excellence, are seen as centers. Institutions dependent on the centers for knowledge and leadership are seen as peripheral.

Tension has grown around the center/periphery dynamic. Developing countries often desire world-class universities on par with the traditional universities at the center. Many people argue that too much emphasis is placed on national and global status and developing countries should be more concerned with serving specific local, national, and regional needs. Yet, the prestige of the centers is strong and unlikely to change in the 21st century; academic inequality will continue to manifest itself in a variety of ways as a result.

What makes an academic system or institution recognized as a center? It is typically a large, research-intensive university. History is significant. Almost all of the world’s universities are based on the European or North American academic model, and it is not surprising that European and North American universities have certain advantages and influence (Ben-David and Zloczower, 1962). Academic institutions in non-Western societies confront the challenge of adapting this model to different cultural contexts. Some countries—such as Japan, China, and the Republic of Korea—have been quite successful in blending national and international models.

Universities deemed to be academic centers tend to be large universities with many academic fields, professional schools, numerous academic staff, and a sizable and carefully selected student population (Altbach and Balán, 2007). Large economies and extensive academic systems with many big and diverse universities hold an advantage, particularly because they can support so many talented academics. Some highly ranked universities are indeed located in small countries, such as Switzerland and Denmark, but these are exceptional cases.

Research universities tend to benefit from differentiated academic systems (comprised of different academic institutions with various missions and levels of funding). Even Germany, a once highly homogeneous and democratic academic system, has recognized the need to designate a small number of its universities as central research-focused institutions, moving away from its traditional view that all universities were the same and should be equally funded.

As already noted, all of the world’s top-ranked universities are research-intensive institutions, and the academic systems seen as centers are those with strength in research. A university considered to be world class is less likely to stress teaching, public service, providing access to underserved populations, or other important social services.
Language plays a role in the center/periphery relationship. Universities that use one of the primary international languages, most often English, dominate the academic community. English-speaking institutions and academic systems tend to produce the largest amount of research and influence the knowledge-communications system. The Internet in many ways has strengthened the major world languages in higher education. In the past half century, the key scientific and academic journals have come to be published in English. Large multinational publishers tend to print most of their books in English, as well. Other world languages, such as Spanish and French, have also benefited, at the expense of less international local languages. Courses and other academic programs are now often offered in English in non-English-speaking environments. Without question, English is at the center, and other languages are moving increasingly to the periphery.

The wealth of nations and universities plays a key role in determining the quality and centrality of a university or academic system. While other factors are meaningful, without abundant resources neither universities nor academic systems can become global centers. This fact, of course, places developing countries at a significant disadvantage and puts special strains on academic systems facing the dilemma of expanded enrollment and the need to support top-quality research universities.

**Rankings**

A new force in national, regional, and global higher education is created by the many rankings of academic institutions and degree programs. These rankings are criticized but, nonetheless, taken seriously by the public, universities, and at times governments. The classifications are used by individuals to compare places to study and increasingly by governments to make funding decisions. Experts point out common methodological flaws, noting that most ratings rely on highly unreliable reputation surveys, measure only a few variables such as research productivity, analyze internationally noted publications in databases such as the Science Citation Index, which mainly includes only a small number of journals, and others. Rankings compare countries, individual universities, and fields of study, such as management and business administration. In each of these areas, criticism of the rankings is widespread.

International rankings favor universities that use English as the main language of instruction and research, are older, possess a large array of disciplines and programs (e.g., medical faculties), and receive substantial research funds from government or other sources (Sadlak and Liu, 2007). The two primary international rankings—the Academic
Ranking of World Universities of the Shanghai Jiao Tong University and QS/Times Higher Education ranking—practice somewhat different methodologies, but both emphasize research productivity and quality. Additional rankings exist in most countries, and efforts are now underway to produce European academic rankings. While all of the existing rankings contain methodological problems, they are nonetheless widely used, influential, and show no signs of disappearing.

The Tension Between the Public and Private Good
The last several decades have seen a lively debate between different perspectives on the role of higher education in modern society (Task Force on Higher Education and Society, 2000). Higher education has traditionally been seen as a public good—of value to society as well as to individual students—and thus largely a responsibility of society (the state) to support and fund. This concept functioned where higher education was mainly public, the academic enterprise was fairly small and thus not too expensive, and when academe served a small and relatively elite segment of the population.

The idea of higher education as a private good—of benefit primarily to individual graduates and thus to be paid for mainly by the “users” (students)—is a result of several converging ideas and realities. Neoliberal ideas, which increasingly shaped the policy of international funding agencies during the last few decades, argue for limited government involvement in all aspects of society and favor leaving services to markets and private providers. This has affected models for providing higher education, health care, and other services. Neoliberal thinking was driven in part by the exploding cost of higher education due to massification but was also predicated on the primacy of the private sector, regardless of fiscal constraints. Governments no longer had adequate funds to support a mass higher education system, and in many cases lacked the inclination to provide public funding and looked for ways to supplement or even replace state allocations. The growing perception of higher education as a private good justified charging significant tuition fees since the student is seen as the primary beneficiary.

In much of the world, the private-good philosophy, combined with funding shortages due to massification and the global economic crisis, has meant that higher education systems and institutions are increasingly responsible for generating higher percentages of their own revenues. There is no doubt that this trend will continue into the future. The increased salience of the private-good argument and continuing shortages of public funds for higher education tend to benefit some institutions and populations over others. For example, providing access
for disadvantaged groups at one end of the higher education system and
teach and sustain world-class research universities at the other
reflect public-good endeavors and may be more difficult to achieve in
the current climate when universities focus more attention on generating revenue. Similarly, the public-service mission of higher education is
put in jeopardy by the tilt toward a private-good orientation.

The broader societal role and the service function of the university
are called into question when the private-good argument dominates.

More emphasis on cost recovery, higher tuition, and university-industry
links distracts from the traditional social role of higher education. Over
the centuries, universities have become centers not only of teaching
and research but also of intellectual and cultural life. Their libraries
are key repositories of a society’s intellectual traditions. Some univer-
sities sponsor publishing houses and journals. Many universities
house theater groups, noncommercial radio and television stations,
and in general serve as cultural beacons for society. Universities serve
as key intellectual centers, providing a forum for social, cultural, and
often political issues. These functions have historically accompanied
traditional academic responsibilities and are especially important in
environments where there is a dearth of social institutions to provide
these forums. This is particularly important in countries with weak
societal infrastructures or traditions and few institutions fostering free
debate and dialogue.

The Private Revolution and Privatization
The growth of private higher education worldwide has been one of the
most remarkable developments of the past several decades. Private
higher education has existed in many countries and has traditionally
been the dominant force in such East Asia countries as Japan, the
Republic of Korea, and the Philippines. While the private sector rep-
resents a small part of higher education in most countries, private
institutions, many of them for-profit or quasi for-profit, now represent
the fastest-growing sector worldwide. The private sector now educates
more than half the student population in such countries as Mexico,
Brazil, and Chile. Private universities are rapidly expanding in central
and eastern Europe and in the countries of the former Soviet Union,
as well as in Africa. China and India have significant private sectors
as well (Altbach, 2005).

Private higher education has expanded with very little strategic plan-
ning in most of the world. Initially, the private sector was often viewed
as tangential to higher education, but this conception has changed as
private institutions now enroll more students and place more graduates
in the labor market. They are no longer separate from the dominant higher education system and are increasingly mainstream. Private institutions are often the source of innovation in the use of technology for instruction. In some countries they have access to public funds.

In general, the private sector is “demand absorbing”—offering access to students who might not be qualified for the public institutions or who cannot be accommodated in other universities because of overcrowding. While some selective private universities exist, in general the private sector serves a mass clientele and is not seen as prestigious.

A related trend is the privatization of the public universities. In most countries, the proportion of state subsidy for public universities has declined. In much of the world, the state provides half or less of the income for public universities. In some American public universities, state funds account for under 20 percent of the total budget, compelling universities to earn additional funds from other sources. Student tuition fees provide the largest source of revenue. Other income sources include research funds, income from the sale of university-related products, consulting and research services, and university-industry linkages. In some cases, such financial sources create conflicts with the traditional roles of the university and contribute significantly to the commercialization of the institution.

A Global, National, and Internal Competitive Environment

In the early 21st century, higher education has become a more competitive enterprise. In many countries, students must compete for scarce places in universities, and in all countries admission to the top institutions has become more difficult to achieve. Academics compete for jobs and work harder to keep their employment in an environment of higher expectations and increased accountability.

There is a growing need for integration with the private sector. Research products, particularly in the natural and biomedical sciences, are more closely linked to the marketplace, and universities compete for private funding. Research is often tied to corporate interests, with the goal of earning profits for the university and the private partner (Fallis, 2007; Washburn, 2005). Universities, as noted earlier, compete for status and ranking and generally for funding from government or private sources.

Globally, countries contend for academic status, international students, and top scientists and scholars. Rankings and league tables have taken on more weight in national higher education policy formulation. Within countries, rankings contribute to a national hierarchy. In some countries a contest exists between the public and private sector.
Competition within an institution is a growing trend. The pressures of accountability and the desire of university leadership for excellence have in many cases pitted one department or faculty against another as they position themselves to acquire limited resources and academic staff. Competition has always been a force in academe, and in many ways it can help produce excellence and the best performance. But it can also undermine the sense of an academic community, a mission, and traditional values.

The Research University and the Research Environment
Research universities are at the pinnacle of the academic system and enjoy the highest prestige. Their stature is reflected in the world rankings. Research universities produce knowledge, offer advanced academic degrees, and employ the highest-qualified professors (Salmi, 2009). They represent the universities most directly involved in the global knowledge network. Research universities require major expenditures to establish and are expensive to sustain; they must obtain consistent funding over long periods of time. Their facilities—including laboratories, libraries, and information and communications technology infrastructures—should be maintained at the highest international standards.

Research universities typically educate the elites of their societies and provide advanced education for the academic profession and other fields, such as medicine and law. Research universities are, therefore, conceived as special institutions separate from the rest of a mass higher education system. Their goals and missions, international as well as national in character, are linked to both the local academic community and the international knowledge network. While research and teaching form central responsibilities in the university, the research function inevitably serves as the primary role of the top research universities. These key institutions, the only universities in any countries that might be called “world class,” require appropriate autonomy, academic freedom, and sustained financial support from national authorities, while they are at the same time part of national higher education systems. While research universities require a special status in national systems, they are also the link to the global knowledge network.

Research universities meet the needs not only of developed countries but also of developing and middle-income nations—for internationally focused institutions that participate in the global knowledge network. Funding for research is more available in developed (compared to developing) countries but is a constant challenge everywhere. Funding has become increasingly competitive. Researchers are often obliged to
compete for awards, and not all projects are selected. Support for basic research has become especially difficult to obtain because the cost is high and it is less likely to be supported by industry; state funding is not always available.

Private industry has become more active in supporting applied university-based research although it imposes conditions on the work. Privately sponsored research is generally applied and aimed at producing knowledge relevant to the needs of the funder (Washburn, 2005). University-industry linkages sometimes create tensions between the partners but are often the only way to enable certain kinds of research to be supported.

Ongoing tensions exist between basic and applied research in this complex contemporary research environment. Basic research is in many ways at the heart of the research university and is essential for the advancement of science and scholarship. It is also the foundation for new knowledge and at the heart of doctoral training programs.

Intellectual property is a growing challenge in higher education today and especially in research universities. The fundamental questions of who owns knowledge and who benefits from research are central to this discussion. Universities, seeking to maximize revenues, want to protect intellectual property—research output that leads to patents, licenses, and income—and work produced for the Internet or for publishers. The topic is contentious because it often brings into focus the potential conflicts between the producers of research and knowledge and sponsors who may wish to control the knowledge and its benefits.

The Internet has increased attention on intellectual property issues. Distance education courses, particularly, are a source of income for universities and professors. The question of who “owns” these courses and who may benefit financially from them is a topic of considerable controversy. Similarly, income from knowledge distributed electronically raises issues as well.

The contested ownership of intellectual property reflects the public-good/private-good debate. Many people argue that university-produced knowledge should be available without restriction. Most policymakers, however, believe that the results of research can (and should) provide important income for universities. These issues are hotly debated in academic and policy circles. University-industry linkages have created additional tensions in regard to intellectual property since these agreements—especially in emerging fields like biotechnology—often create problems relating to patents and licenses.

Intellectual property has emerged as an extremely important yet complicated issue. Sophisticated, university-based research is being
conducted in an environment filled with pressure to commercialize knowledge. However, at the same time opposing pressure exists to treat knowledge production and dissemination as a public good.

Research universities are the most visible and the most expensive institutions in the academic system. As “flagships,” they bring prestige and international visibility to their host country. These universities create and disseminate knowledge and serve industry and commerce.

**Students and the Curriculum**

Universities ultimately serve students, as institutions primarily devoted to teaching and learning. The role of the university has itself become more complex, and in some cases teaching and learning have moved from the center of academic life toward the margin. Prior to the creation of the German research university in the early 19th century, universities were mainly seen as teaching institutions (Ben-David and Zloczower, 1962). Students constitute a much more diverse population today. In the era of massification, students from a spectrum of socioeconomic backgrounds with a range of intellectual abilities now participate in higher education, complicating the tasks of teaching and curriculum development.

During the past several decades greater societal demands for accountability have prevailed. This has obliged universities to demonstrate that learning is taking place. A greater emphasis is placed on measuring learning outcomes; it is no longer sufficient to measure the “inputs”—what is being taught and how the curriculum is delivered to the students.

Assessing student learning has become one of several important elements of providing greater accountability to an increasingly demanding public worldwide. The National Survey of Student Engagement in the United States is one aspect of the effort to measure the impact of higher education on students. The Organization for Economic Cooperation and Development now seeks to develop ways of measuring what is learned in specific academic disciplines. The assessment of learning is a difficult task, and measuring learning cross-culturally is even more complicated.

The curriculum has also been affected by the dramatic changes in higher education. A more diverse student population with varied interests and goals has raised pressure to differentiate the curriculum and at least to offer qualifications in a wider array of fields and disciplines.

The curriculum has always to some extent been international in character. The most powerful academic systems, such as those of Germany and France in the 19th century and the United States at present, have
traditionally pioneered academic thinking and curricular trends (including producing widely used textbooks). The Internet has exerted a strong internationalizing effect in the past several decades. In newer programs, like management studies, the curriculum worldwide has come to be largely American, since the fields were developed in the United States.

In the second half of the 20th century, the rise of English as the main language of scientific communication and the growing number of degree programs offered in English in non-English-speaking countries have also led to curriculum internationalization. While this trend has taken place at all levels of higher education, it is probably the case that postgraduate degrees and certificates are most affected. Not surprisingly, the ideas and practices of the major academic powers, especially those in the English-speaking sphere, tend to be most influential.

The Contradictions of Isomorphism
The need for differentiated academic systems with diverse institutional missions is universally accepted as a response to massification. Yet, the pressure for academic institutions to copy one another—the tendency toward isomorphism—and to rise in the academic hierarchy is very strong (D. C. Levy, 2006). While this trend has a long history, it has intensified in the era of rankings and global competition. It is an artifact of the continuing prestige of the research university, as well as of the expansion in the numbers of universities worldwide. Sixty years ago, sociologist David Riesman criticized the “academic procession” led by the research universities, in which other kinds of universities and colleges sought to emulate these institutions in the United States, at the time the most diversified system in the world (Riesman, 1958).

In the 21st century, the trend toward isomorphism can still be observed and tends to restrict the development of differentiated academic systems. Public authorities need to ensure diverse academic models to serve varied societal needs, while many academic institutions still tend to emulate the research universities at the top of the system. Academic staff often press the university to emphasize research as its key mission, knowing that a research orientation and productivity in this area promise the highest prestige and (often) the best salaries for academics.

If the universities remain the sole decision makers, many more academic institutions would seek to improve their status by becoming research intensive. In most cases, this strategy does not serve the interests of academe in general nor is it widely achievable. Often, it takes governmental “steering” to keep the academic system diversified and institutions within the system serving larger national goals.
In the United States, the well-known California master plan ensures that public higher education meets state’s broader interests by legislating the roles and priorities of the universities and colleges (Douglass, 2004).

The essential problem of isomorphism involves unbridled competition among academic institutions pursuing the same goals. This trend may undermine efforts to develop a system of institutions that is appropriately differentiated, based on the specific needs of a given system—with different goals and responsibilities, patterns of funding, admissions policies, and other characteristics.

**The Academic Profession**

The professoriate is at the center of the university. Without an effective, well-educated and committed academic profession, universities cannot succeed. Yet, the academic profession is under stress as never before (Altbach, 2003). Responding to the demands of massification with the fast deployment of greater numbers of teachers has resulted in a decline of the average qualification for academics in many countries. Many university teachers in developing countries have only a bachelor’s degree. The numbers of part-time academics have increased in many countries, as well. The predominance of part-timers continues in Latin America, where only a small minority of professors has full-time appointments, much to the detriment of higher education in the region.

Many academics are now appointed to full-time “contract” positions that do not offer the promise of a career at their university. In the United States, only half of the new appointments are traditional tenure-track academic positions. Academics are subject to more bureaucratic controls, and their autonomy has decreased. Increased demands for accountability have also meant a great deal of stress for academics in many countries.

Academic salaries rarely compare favorably with compensation for similarly educated professions outside of universities. For many countries, especially in the developing world, salaries barely support a middle-class lifestyle, and in some countries, not at all. The variations in salary among countries are quite significant, contributing to a brain migration to countries that pay more. As an example of the range, average academic salaries in Canada are more than six times higher than in China (Rumbley, Pacheco, and Altbach, 2008).

The global mobility of the professoriate is growing and becoming yet another important trend. Made easier by the growth of English as the international academic language, the Internet, and the relative ease of air transportation, large numbers of academics work outside of their
own countries. The many impulses include better salaries and working conditions, academic freedom, stability in academic careers, the lack of high-quality universities at home, a poor domestic academic job market, and other factors. Some countries—including Singapore, the Arabian Gulf nations, some western European countries, Canada, and the United States—have policies in place to lure scholars and researchers from abroad. Not surprisingly, flows tend to be from the developing countries toward more advanced economies.

**Information and Communications Technology**

It is obvious that academia is influenced (some would argue transformed) by the information and communications technology revolution. It has been said that the traditional university will be rendered obsolete by information technology, distance education, and other technology-induced innovation. The demise of the traditional university will, in our view, not take place any time soon. But major change is under way, and it is one of the key parts of the academic transformation of the 21st century.

A few caveats are in order. For more than a decade, many people have argued that Internet-based distance higher education would become a central part of the delivery of knowledge and degree programs. While distance education has become significant, it has moved ahead more slowly than anticipated. Many students, and faculty as well, have been slow to accept it. Providers, nonprofit and for-profit, have had problems developing a successful economic model for distance education, although distance-education-based public universities, such as the Indira Gandhi National Open University in India, have achieved considerable success. Somehow, the distance education revolution always seems to be just around the corner, while it is growing in strength.

In some fields, such as management studies and information technology itself, distance education has become a significant player. The open educational resources movement, ostensibly launched by the Massachusetts Institute of Technology’s highly regarded “open courseware” initiative (which has placed many of the materials from its own academic courses on the Internet without charge), is also a significant development.

The Internet has truly transformed how knowledge is communicated. E-mail has become an ubiquitous form of academic communication. Electronic journals have become widespread and in some fields quite prestigious. Traditional publishers of books and journals have turned to the Internet to distribute their publications. Such trends have exacerbated the division between “haves” and “have-nots.” Some parts of the
world, particularly Africa, remain relatively underserved by high-speed Internet access. The Republic of Korea and Singapore are at the forefront of countries providing access to high-speed Internet service. The traditional “knowledge powers,” especially those that use English, have largely maintained their influence.

**Conclusion**

The goal in this trend report is to examine a sense of the central issues, as well as the contextual factors that have shaped higher education in the past decade, and to present prospects for the immediate future. This introduction has provided the context and overview for these issues. Although many of these trends are not new, the implications of these developments must now be confronted. The remainder of this report discusses these issues in more detail.

The role of higher education as a public good continues to be a fundamental goal and must be supported. This position is emphasized throughout the trend report, given that this aspect of higher education is easily neglected in the rush for income and prestige.

The multiple and diverse responsibilities of higher education are ultimately key to the well-being of modern society, but this expanded function adds considerable complexity and many new challenges. Understanding these factors and the broader role of higher education in a globalized world is the first step to dealing constructively with the challenges that will inevitably loom on the horizon.
Globalization and Internationalization

The historically international nature of universities is playing out in new and dynamic ways, while the trend is extending broadly and rapidly across the higher education sector. Pushed and pulled along by the forces of globalization, internationalization presents many exciting opportunities to higher education institutions and systems. At the same time, real risks and challenges are inherent in this complex and fluid environment. At stake are issues of competitiveness and relevance, requiring new kinds of strategic thinking, and acting with regard to the international dimension by all types of higher education actors.

Concepts and Definitions
Although closely related and frequently used interchangeably, the terms globalization and internationalization in higher education refer to two distinct phenomena. Globalization typically makes reference to “the broad economic, technological, and scientific trends that directly affect higher education and are largely inevitable in the contemporary world.” Internationalization, on the other hand, has more to do with the “specific policies and programs undertaken by governments, academic systems and institutions, and even individual departments to deal with globalization” (Altbach, 2006, p. 123).

A give and take between globalization and internationalization has been evident to many higher education observers, but one of the key distinctions between the two concepts is the notion of control. Globalization and its effects are beyond the control of any one actor or set of actors. Internationalization, however, can be seen as a strategy for societies and institutions to respond to the many demands placed upon
them by globalization and as a way for higher education to prepare individuals for engagement in a globalized world. Indeed, internationalization has been conceived in many quarters as a necessary “process of integrating an international, intercultural, or global dimension in the purpose, functions, or delivery of postsecondary education” (Knight, 2003, p. 2). This process consists largely of two main spheres of action, commonly characterized as “internationalization at home” and “internationalization abroad” (Knight, 2004a).

Internationalization at home typically consists of strategies and approaches designed to inject an international dimension into the home campus experience—for example, by including global and comparative perspectives in the curriculum or recruiting international students, scholars, and faculty and leveraging their presence on campus. Internationalization abroad, on the other hand, calls for an institution to project itself and its stakeholders out in the world. Key examples include sending students to study abroad, setting up a branch campus overseas, or engaging in an interinstitutional partnership.

Beyond the umbrella concepts of internationalization and globalization, a variety of other terms are used—such as, the international dimension, international education, international programming, international and/or interinstitutional cooperation, international partnerships, cross-border education, borderless education, and regionalization. The varied terminology refers to the breadth of experiences in this area and to the distinctive approaches to internationalization taken by different higher education systems and institutions around the world.

**Key Manifestations of Globalization and Internationalization**

The internationalization of higher education is notable for the multiple ways in which it has manifested itself around the world. Although each local, national, and regional context presents unique characteristics, several broad trends can be identified globally. These developments include mobility of people, programs, and institutions; the rising prominence of collaborative research; evolving curricula as well as approaches to teaching and learning; an increasingly heightened sense of the interconnectedness of the higher education enterprise across the globe; and the growing pervasiveness of the phenomenon of internationalization across institutions and broader systems of higher education.

The mobility of students and scholars has characterized the university since its earliest days in medieval Europe. In the last decade, however, the numbers of students studying outside their home countries have increased exponentially. Although data are difficult to obtain and verify, UNESCO estimates that in 2007 there were more than 2.8 million
internationally mobile students, an increase of some 53 percent over the estimated figure of 1.8 million in 2000. By 2025, research undertaken for IDP Pty Ltd in Australia suggests that roughly 7.2 million students may be pursuing some higher education internationally, an increase of 188 percent over the 2006 UNESCO estimate (Böhm, et al., 2002). In some parts of the world, international student mobility has become a central issue in higher education. For example, a recent study on the impact of the ERASMUS student-mobility program, launched in 1987, indicates that the initiative “has had a leading role in internationalisation policies in higher education at national, European and international level[s]” (European Commission, 2008a, p. 4), and affected a wide range of other policies and practices in European higher education.

No less important but harder to track and comprehend are the mobility trends of academics—researchers, scholars, and teaching staff—who spend some period of time working outside of their home countries. The burgeoning number of international agreements between tertiary institutions often includes long- and short-term faculty exchange components. International scholarship and fellowship programs, along with other collaborative projects, move countless numbers of scholars around the globe each year to conduct research abroad, while professional and scholarly meetings and conferences keep many academics on the move abroad. In some cases, academic superstars have been actively recruited from one country to another in an attempt to shore up prestige and academic output in the receiving institutions, while severe human-resource crises have resulted from the large-scale flight of academics (commonly known as “brain drain”) from poorer and less-stable countries (notably in sub-Saharan Africa) to more welcoming and resource-rich environments in the North.

International mobility has not been limited to people; the last decade has seen a veritable explosion in numbers of programs and institutions that are operating internationally. It is extremely difficult to gauge the exact number of overseas operations, given the many different manifestations of cross-border provision. These include fully fledged “sister” institutions of existing universities (such as New York University in Abu Dhabi), branch campuses of parent institutions (a common model for many of the foreign players setting up shop in the regional hubs in such places as Dubai, Qatar, and Singapore), and collaborative arrangements (such as the one between the University of Nottingham and Zhejiang Wanli Education Group-University, which allows for the operation of the University of Nottingham Ningbo, China). Also prevalent are single programs or narrow fields of study being offered overseas by one institution or jointly by two or more. This area of activity has
also seen significant growth in numbers of new kinds of providers, notably for-profit companies and those operating actively in the online environment. There is also a notable degree of fluidity and uncertainty in this area. A sense of opportunity and also of urgency has been felt by many institutions keen to engage internationally, but the fact that cross-border arrangements come and go with some frequency speaks to the many complexities and challenges inherent in moving programs and other institutional activities abroad. It is also critical to acknowledge that the international flow of educational programming is highly unequal, moving largely in a North-South direction. However, there are exceptions to this rule, including the presence of Pakistani and Indian institutions in Dubai’s “Knowledge Village,” for example.

The effects of internationalization on higher education can also be seen in the way that the core activities of universities, specifically teaching and research, have been shifting in recent years. The demands of the global knowledge society have placed pressure on higher education to focus more heavily on particular kinds of activities, approaches, and outcomes. Research production in key areas—such as information technology and the life sciences—has risen on national development agendas and for the prestige of individual institutions and has, therefore, become a very high priority for many universities around the world. Much of the world’s best research can only be carried out through international collaborative efforts, given the size and complexity of the issues and/or the cost of materials and the investments of time and personnel needed to carry studies through to completion.

Meanwhile, global business trends have put a premium on producing young professionals with particular kinds of credentials and skills. The best example of this may be the American-style MBA (master of business administration) degree, which is now offered in countless countries around the world. At the same time, an arguably global interest in developing students who are skilled communicators, effective critical thinkers, dynamic problem solvers, and productive team members in diverse (increasingly international and intercultural) environments is changing the way that teachers teach and students learn in many contexts, as well as the specific content to which students are exposed. Recent debates on the role of humanities and the liberal arts in East Asia, for example, provide a good example of shifting or expanding curricular considerations in light of globalization and internationalization (Rumbley, 2008).

The last 10 years have clearly witnessed a profound and deepening sense of interconnectedness within the higher education enterprise across the globe. Universities, the knowledge they produce, the aca-
demics they employ, and the students they graduate are directly and intimately connected to the global knowledge economy. What happens in institutions and systems in one part of the world has effects far beyond the immediate environment. The international ranking exercises that have taken on such prominence in the last decade are a prime example of how universities no longer operate in a vacuum or even simply in a local or national context but instead sit to a great degree on a world stage.

Ultimately, one of the most critically important characteristics of internationalization to emerge over the last decade is its pervasiveness. The phenomenon is apparent at all levels of the higher education enterprise around the world, affecting individual institutions, regions within countries, and national systems of higher education.

At the institutional level, internationalization can be perceived in the way that large numbers of universities have adopted expanded missions, in many cases embracing service to a community that extends beyond local and national boundaries and aiming to produce “global citizens” with “global competencies.” The establishment of international program and support offices and the designation of staff time for these kinds of activities has also become extremely commonplace in tertiary institutions across the globe.

In some countries, internationalization seems quite prominent at a regional level. In Spain, for example, universities in the various autonomous communities—such as Catalunya and Andalucía, to cite just two cases—have banded together to promote their respective regions as destinations for internationally mobile students. In the United States, more than 20 individual states—from California to Oklahoma, Indiana to Massachusetts—have adopted state-level resolutions in support of international education. Although the state-level initiatives in the United States are largely symbolic actions with little to no substantial impact in practice, the symbolism itself is notable evidence of the rising importance of the international dimension.

Meanwhile, internationalization of higher education has reached the national agenda in a wide range of countries. Qatar, Singapore, and the United Arab Emirates stand out as examples of countries taking rather dramatic steps to promote internationalization as a matter of national policy. Their strategies have focused on the recruitment of prestigious foreign universities to establish local campuses, with the goal of expanding access to the local student population and serving as higher education “hubs” for their regions. Economic development and prestige enhancement are often key motivating factors there. Other countries, like the United Kingdom, Australia, and Canada, have
adjusted visa and immigration requirements to attract foreign students to their higher education systems, motivated significantly by the desire to maintain economic competitiveness and realize substantial financial gains by enrolling large numbers of full-fee-paying internationals. In the United States, for example, it is estimated that international students and their families contributed nearly $15.5 billion to the US economy during the academic year 2007/08 (NAFSA, 2008). Globally, one estimate indicates that the world’s international students represent a $45 billion “industry” (Barrow, 2008).

In addition to income generation, educational, political, and cultural motivations have also become relevant. Many countries in Europe have pursued foreign policy agendas focused on capacity building. These agendas include cooperative activities within the higher education sector, particularly in the developing world and frequently in partnerships that include countries with which there are former colonial ties (notably in Africa and Latin America).

Internationalization has also reached prominence at regional and international levels. The Bologna process and Lisbon strategy in Europe are the clearest examples of international engagement at this level, with the Bologna process drawing more than 40 countries into a “European higher education area” (EHEA). It is hoped that the EHEA will achieve a common, Europe-wide framework of understanding around tertiary education and lifelong learning, with significant cross-border intelligibility of degrees and qualifications, and a high level of quality, attractiveness, and competitiveness on a global scale (Bologna Declaration, 1999). Indeed, the regional focus in Europe appears to have served as the key point of reference for regionalization efforts elsewhere in the world. For example, the Latin American and the Caribbean area for higher education (ENLACES) initiative aims to strengthen cooperation in the region in order to achieve objectives such as

1. the harmonization of curricula and institutional reforms, interdisciplinarity, mobility and academic exchange (intra-regional mobility of students, researchers and teachers), the implementation of joint agendas for the generation of research with social relevance and priority in the framework of the training needs of human resources at the highest level of scientific and technological innovation, dissemination of knowledge and culture, and offering an increasing range of services to government and productive sectors of our nations. (UNESCO-IESALC, 2008)

A focus on regionalization can also be seen in the establishment of such entities as the African Network for Internationalisation of Edu-
cation (ANIE) (Teferra and Knight, 2008), and in the development of the African Union Harmonisation Strategy. Similar concepts are being explored in Asia—for example, in November 2008, at the International Conference on Raising Awareness: Exploring the Ideas of Creating Higher Education Common Space in Southeast Asia, organized by the Southeast Asian Ministers of Education Organization-Regional Centre for Higher Education and Development (SEAMEO-RIHED). Furthermore, the 2006 Catania Declaration—signed by education ministers from Algeria, Egypt, France, Jordan, Greece, Italy, Malta, Morocco, Portugal, Slovenia, Spain, Tunisia, and Turkey—puts forth an agenda designed to “activate a structured cooperation in order to promote the comparability and readability of higher education systems” across much of the Mediterranean region (Catania Declaration, 2006, p. 2). The inclusion of higher education in the World Trade Organization’s General Agreement on Trade in Services (GATS) regime is another clear reflection of the way in which the international dimension of higher education has achieved a global profile.

Opportunities, Challenges, and Risks

For some analysts, the impact of globalization on higher education offers exciting new opportunities for study and research, no longer limited by national boundaries, while others see the trend representing an assault on national culture and autonomy. It is undoubtedly both. At the very least, with 2.8 million students, countless scholars, degrees, and universities moving about the globe freely there is a pressing need for international cooperation and agreements.

Perhaps the “healthier” consequence of economic globalization and the subsequent pressure on higher education to function internationally has been the necessity for effective (and more transparent) systems of accountability, shared benchmarks, and standards for ethics and quality. Nations can no longer penalize students and scholars who have earned credentials and experience from another country. When individuals cannot enjoy the benefits of education outside of the country where it was acquired, the resulting waste of talent is unacceptable. Yet multiple stakeholders need internationally recognizable benchmarks and standards to properly evaluate unfamiliar foreign qualifications, and these agreements are not reached easily.

At the same time, it is critically important to recognize that some of the forces that currently influence internationalization in higher education are not necessarily compatible with local needs for development and modernization, and opening borders puts diverse motivations for educational development into conflict.
Opportunities

During the last decade, international engagement has risen visibly on institutional and national agendas around the world, even in the face of competing priorities (Rumbley, 2007). There are political, logistical, and educational dimensions to this momentum. The growing ease of international travel and a rapidly expanding information technology infrastructure have opened many new possibilities to higher education. New models for online learning make education and resources more readily available to individuals who reside in locations physically distant from universities. Information technology provides researchers with a broader reach for scholarly collaboration. These expanded opportunities for collegial engagement across borders—whether mediated through technology or not—hold the promise of much-needed capacity-building in research in contexts where this is lacking (Rumbley, 2007). Joint-degree programs, “twinning” efforts, and other approaches to cross-border education—to the extent that these operate in environments with appropriate regulatory and quality assurance oversight—extend the resources of individual universities without significant additional investment, again providing the promise of expanded capacity-building for underresourced institutions and systems.

Stakeholders in a variety of regions across the globe are moving toward a shared language and framework that facilitate the mobility of more and more students during their studies and after graduation. International exposure and experience are commonly understood as mechanisms to provide more graduates and scholars with perspective and insight that will increase their capacity to function in a globalized society.

Internationalization in many contexts has moved from being a marginal, occasional, or ad hoc activity to a more centrally administered, carefully organized, and thoughtful component of institutional action. Indeed, in recent years, there has been real movement in universities around the world from reactive to proactive stances in relation to internationalization. An opportunity now exists for many higher education systems and institutions to move to implement more strategic lines of action in regard to the international dimension. These trends are likely to include very targeted efforts to fashion institutional agreements with strategic partners, leverage the resources of new or existing networks, or develop new approaches to international engagement at more regional rather than global levels. Student mobility is expected to continue as an area of significant dynamism, while growth and innovation in international collaborative research activities also show important potential (Rumbley, 2007).
A widespread focus on internationalization—at individual, institutional, and governmental levels—does present real opportunities for stakeholders to move from rhetoric to action in ways that were not conceivable just a decade ago.

Challenges
The necessity of internationalizing higher education—to keep pace with both economic and academic globalization—presents many challenges at institutional and policy levels.

To be meaningful and sustainable, internationalization requires access to some amount of resources (human and financial) as well as their effective deployment and management. For the world’s poorest countries and most resource-deprived institutions, the opportunities to engage internationally can be extremely limited or fraught with worrisome trade-offs. In Africa, for example, the reliance on massive amounts of foreign funding for research and other activities has long placed African universities at a disadvantage on several levels, not the least of which is having to cope with a foreign donor’s unpredictable and shifting priorities, as well as serious disconnects between non-local-funder priorities and local needs and interests (Teferra, 2008). The financial dimension of internationalization is also an issue for higher education actors, rich and poor, in the current global financial crisis. Finding and leveraging appropriate resources is a major task moving forward, particularly in contexts where the international dimension is viewed as an optional action area, rather than as an integral component of the academic enterprise and administrative apparatus.

The mobility of higher education programming presents other serious challenges. New providers are crossing national borders with great ease. Some of these initiatives are done at the invitation of the host government, as in the cases of Singapore and Qatar; others are driven (primarily) by the interests of the provider. These new cross-border programs typically follow the structure of the provider’s home country and may or may not be compatible with the education system, cultural norms, or labor-market requirements of the host country. It is often the case that neither the host nor home country has the capacity to monitor the quality, ethics, or conditions of the education being provided. These circumstances increase the urgency of international standards, oversight, and qualification frameworks.

Perhaps the most disconcerting characteristic of globalized higher education is that it is currently highly unequal. Philip Altbach’s (2004) observation that “existing inequalities are reinforced while new barriers are erected” (p. 7) aptly describes a world in which the influence
of Northern, and largely English-speaking paradigms for producing knowledge and setting scientific and scholarly agendas, dominate. The elite universities in the world’s wealthiest countries hold a disproportionate influence over the development of international standards for scholarship, models for managing institutions, and approaches to teaching and learning. These universities have the comparative advantage of budget, resources, and talent sustaining a historic pattern that leaves other universities (particularly in lesser-developed countries) at a distinct disadvantage (Altbach, 2004). African universities, for example, have found it extremely challenging and complex to enter the global higher education stage; they barely register on world institutional rankings and league tables (Teferra, 2008), produce a tiny percentage of the world’s research output (Gaillard, Hassan, and Waast, 2005), and were long undermined by a powerful global policy discourse that downplayed the role of higher education in development for the world’s poorest countries (Teferra, 2008).

The dominance of a specific language or languages for scholarship represents yet another challenge in a globalized world. There is a distinct advantage in using a common language (currently English); learning this one language provides access to most of the world’s research and teaching materials. Yet, the use of a single language has inevitably limited access to knowledge and also hinders the pursuit of scholarship in other languages (Altbach, 2004). In places like Africa, the use of nonnative languages also carries with it the heavy history of colonialism and has the potential to affect quality in contexts where faculty, students, and researchers are generally unable to operate with high levels of fluency (Teferra, 2008).

Finally, the students and scholars most likely to take advantage of the range of new opportunities in a globalized higher education environment are typically the wealthiest or otherwise socially privileged. The enormous challenge confronting higher education involves making international opportunities available to all equitably. It is also an urgent necessity to collect and analyze more accurate data on international student and scholar mobility, particularly concerning the developing world. For example, in Africa, “countries are hampered by a crippling lack of data in developing an effective strategy with a clear direction for identifying and supporting international education as an important component of higher education in the current global context” (Mulumba, et al., 2008, p. 509). An open and honest assessment of the dark side of the international student and scholar experience—particularly as concerns racism and xenophobia (Mulumba, et al., 2008)—is also an enormous challenge.
Risks
In terms of a global perspective, “commercialization of higher education,” “foreign degree mills,” and “brain drain” (Knight, 2006b, p. 63) stand out as key risks of internationalization. Cross-border education, specifically, presents particular kinds of threats, including an increase in low quality or rogue providers; a decrease in public funding if foreign providers are providing increased access; non-sustainable foreign provision of higher education if profit margins are low; foreign qualifications not recognized by domestic employers or education institutions; elitism in terms of those who can afford cross-border education; overuse of English as the language of instruction; and national higher education policy objectives not being met. (Knight, 2006a, p. 65)

However, risk assessment does vary by region of the world and according to the relative strength and standing of specific higher education institutions and systems. Research suggests that the overall perception of risk associated with internationalization is higher in the developing world and that different regions of the world are concerned with different aspects of the phenomenon. For example, Latin America, the Caribbean, and the Middle East have been identified as parts of the world that are more sensitive to the possible “loss of cultural identity” through international engagement, while problems associated with “elitism” as a side effect of internationalization are more present for developing and middle-income countries than for more developed economies (Knight, 2006b, p. 66).

It is clear, however, that if current trends of globalization and internationalization continue, the distribution of the world’s wealth and talent will be further skewed. The global migration of talent makes it possible for wealthier nations and institutions to attract and retain human capital desperately needed elsewhere. Philip Altbach (2004) observes that 80 percent of the students from China and India who go abroad do not return home immediately after obtaining their degree, while 30 percent of highly educated Ghanaians and Sierra Leoneans live abroad. A flow of talent South to North and North to North has continued to dominate in the last decade. However, exceptions to this rule have also emerged in recent years. The rising numbers of foreign students opting to study in places like China, Singapore, Qatar, and Abu Dhabi represent notable variations on the traditional paradigms of international student mobility. Furthermore, Pawan Agarwal, et al. (2008) note “a growing South-South movement which indicates the emergence of regional hubs.” This kind of role is clearly played, for example, by South Africa,
which hosted some 52,579 international students in 2004, of which approximately 68 percent “came from the Southern African region,” and a total of 86.6 percent “came from the South or from the developing world” (p. 247). New manifestations of South-South flow among academics must also be acknowledged. A primary example here is the recent recruitment of a large number of Nigerian academics to Ethiopia to help staff a rapidly expanding Ethiopian higher education sector (Semela and Ayalew, 2008).

Still, wealth and power continue to exert powerful influence. We are now in a new era of power and influence. Politics and ideology have taken a subordinate role to profits and market-driven policies . . . As in the Cold War era, countries and universities are not compelled to yield to the terms of those providing aid, fostering exchanges, or offering Internet products, but the pressures in favor of participation tend to prevail. Involvement in the larger world of science and scholarship and obtaining perceived benefits not otherwise available present considerable inducements. The result is the same—the loss of intellectual and cultural autonomy by those who are less powerful. (Altbach, 2004, pp. 11–12)

The success of the most prestigious universities in attracting the world’s talent cannot be blamed entirely on the influence these universities possess. There are “push factors” as well. Limited access to resources and political constraints may drive scholars from their home country. Governments wishing to retain talent will have to confront the dilemma that results from allowing political expedience to inhibit scholarly activity (Altbach, 2004).

National autonomy in regard to education is certainly at risk and closely related to the concerns about the increasing commodification of higher education. The failure of the most recent round of the General Agreement on Trade in Services (GATS) to sign a treaty that would liberalize “trade” in higher education is most likely only temporary. It is perhaps most clear in the context of GATS that the principles of free trade and the social needs of nations come into conflict. Should a GATS treaty be signed, or regional trade agreements take hold in more substantive ways, it would most likely contribute to the influence of for-profit providers of education and educational services whose products are rarely adapted to local priorities or need and undermine the ability of individual countries to regulate these entities (Altbach, 2004). Given the complexity of issues involved in international trade discussions relevant to higher education—and the myriad stakeholders pursuing
different agendas with regard to these matters—an urgent need arises for “the higher education sector [to] be informed and vigilant about the risks and benefits and, more importantly, about the need for appropriate policies and regulations to guide and monitor current and future developments” (Knight, 2006a, p. 65). Failure to develop capacity at a national level to understand and effectively deal with these developments is a serious risk, particularly for less-developed countries.

Nontrade initiatives for international cooperation also present complex side effects, leaving smaller and/or poorer nations potentially more vulnerable in these arrangements. The birth of “a new class of deterritorialized trans-national policy actors” (Rinne, 2008, p. 675) has been noted to create tension with the long-held paradigm of higher education as an enterprise at the service of national interests.

Conclusion
The forces of globalization have exerted an enormous influence over higher education in the last decade, and internationalization has emerged as the primary response to this phenomenon. Barring major unforeseen developments that would derail current trends, the international dimension in higher education appears to be here to stay and will likely continue to rise in prominence on the agendas of individual institutions and national and regional systems of tertiary education around the world. Internationalization presents many new and exciting opportunities for cooperation within the academic enterprise and can be a powerful tool for the enhancement of quality and the insertion of innovation across many dimensions. At the same time, many significant risks and challenges must be faced in a costly, fast-paced, competitive global higher education environment. As with many other aspects of higher education, the phenomenon is playing out against a backdrop of inherent inequity around the world. The need to understand and harness the benefits of internationalization, while minimizing the risks and costs, is of central importance moving forward.