

Trends in Global Higher Education: Tracking an Academic Revolution

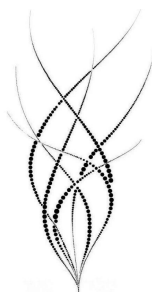
Executive Summary

A Report Prepared for the
UNESCO 2009 World Conference on Higher Education

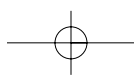
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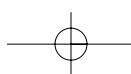


United Nations
Educational, Scientific and
Cultural Organization



World
Conference on
Higher Education 2009





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Published in 2009
by the United Nations Educational,
Scientific and Cultural Organization
7, place de Fontenoy, 75352 Paris 07 SP
Set and printed in the workshops of UNESCO

Graphic design - www.barbara-brink.com

Cover photos

© UNESCO/A. Abbe

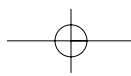
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ED.2009/Conf.402/Inf.6

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Printed in France

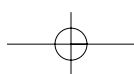


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An academic revolution has taken place in higher education in the past half century marked by transformations unprecedented in scope and diversity. Comprehending this ongoing and dynamic process while being in the midst of it is not an easy task. Arguably, 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 fundamentally redesigned the nature of the university worldwide. The academic changes of the late 20th and early 21st centuries are more extensive due to their global nature and the number of institutions and people they affect.

This report is especially devoted to examining the changes that have taken place since the 1998 UNESCO World Conference on Higher Education. While many trends included in this report were discussed in 1998, they have intensified in the past decade. Here we examine the main engines of change and their impact on higher education.

Much of this report is concerned with the ways in which higher education has responded to the challenge of massification. The "logic" of massification is inevitable and includes greater social mobility for a growing segment of the population, new patterns of funding higher education, increasingly diversified higher education systems in most countries, generally an overall lowering of academic standards, and other tendencies. Like many of the trends addressed in this report, while massification is not a new phase, at this "deeper stage" of ongoing revolution in higher education it must be considered in different ways. At the first stage, 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.

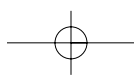
In the early 21st century, higher education has become a competitive enterprise. In many countries students must compete for scarce places in universities and in all countries admission to the top institutions has become more difficult. Universities compete for status and ranking, and generally for funding from governmental or private sources. While competition has always been a force in academe and can help produce excellence, it can also contribute to a decline in a sense of academic community, mission and traditional values.

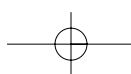
The impact of globalization

Globalization, a key reality in the 21st century, has already profoundly influenced higher education. We define globalization as the reality shaped by an increasingly integrated world economy, new information and communications technology (ICT), the emergence of an international knowledge network, the role of the English language, and other forces beyond the control of academic institutions. Internationalization is defined as the variety of policies and programs that universities and governments implement to respond to globalization. These typically include sending students to study abroad, setting up a branch campus overseas, or engaging in some type of inter-institutional partnership.

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. Yet, 21st century realities have magnified the importance of the global context. The rise of English as the dominant language of scientific communication is unprecedented since 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.

For some the impact of globalization on higher education offers exciting new opportunities for study and research no longer limited by national boundaries. For others the trend represents an assault on national culture and autonomy. It is





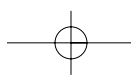
undoubtedly both. At the very least, with 2.5 million students, countless scholars, degrees and universities moving about the globe freely there is a pressing need for international cooperation and agreements. But agreements on, for example, international benchmarks and standards to properly evaluate unfamiliar foreign qualifications are not reached easily.

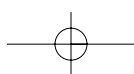
Internationalization has been very prominent at regional and international level. The Bologna Process and Lisbon Strategy in Europe are the clearest examples of international engagement at this level, with the first drawing more than 40 countries into a voluntary process of enabling a European Higher Education Area. This has become a reference for similar efforts elsewhere in the world (ENLACES in Latin America, development of a harmonization strategy in the African Union, Brisbane Communiqué initiative launched by twenty-seven countries in the Asia-Pacific region, discussions by ministers of education in South East Asia).

The last decade has also seen a veritable explosion in numbers of programs and institutions that are operating internationally. Qatar, Singapore and the United Arab Emirates stand out as examples of countries that have boldly promoted internationalization as a matter of national policies: they have recruited prestigious foreign universities to establish local campuses, with the goal of expanding access for the local student population and serving as higher education "hubs" for their regions. But for the world's poorest countries and most resource-deprived institutions, the opportunities to engage internationally can be extremely limited.

Inequality among national higher education systems as well as within countries has increased in the past several decades. The academic world has always been characterized by centers and peripheries. The strongest universities, usually because of their research prowess and reputation for excellence, are seen as centers. African universities for example, have found it extremely challenging and complex to find their footing on the global higher education stage - they barely register on world institutional rankings and league tables and produce a tiny percentage of the world's research output.

There is growing tension around the center-periphery dynamic. Developing countries often desire world-class universities on par with the traditional universities at "the center". The rankings of academic institutions and degree programs add to this tension. International rankings favour universities that use English as the main language of instruction and research, have a large array of disciplines and programs and





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substantial research funds from government or other sources. These rankings have methodological problems but they are widely used and influential, and show no signs of disappearing.

The wealth of nations and universities plays a key role in determining the quality and centrality of a university or academic system. This places developing countries at a significant disadvantage, and puts special strains on most academic systems facing the dilemma of expanded enrollment and the need to support top-quality research universities.

The phenomenon of massification

Responding to mass demand has driven many of the key transformations of the past decades. This expansion has been driven by the shift to post-industrial economies, the rise of service industries and the knowledge economy.

The United States was the first country to achieve mass higher education, with 40% of the age cohort attending post-secondary education in 1960. While some developing countries still educate fewer than 10 percent of the age group, almost all countries have dramatically increased their participation rates. Western Europe and Japan experienced rapid growth in the 1980s, followed by the developed countries of East Asia and Latin American countries. China and India, currently the world's largest and third largest academic systems respectively, have been growing rapidly and will continue to do so.

Globally, the percentage of the age cohort enrolled in tertiary education has grown from 19% in 2000 to 26% in 2007, with the most dramatic gains in upper middle and upper income countries. There are some 150.6 million tertiary students globally, roughly a 53% increase over 2000. In low-income countries tertiary-level participation has improved only marginally, from 5% in 2000 to 7% in 2007. Sub-Saharan Africa has the lowest participation rate in the world (5%). In Latin America, enrolment is still less than half that of high-income countries. Attendance entails significant private costs that average 60% of GDP per capita. (Figure 1)

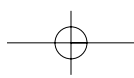
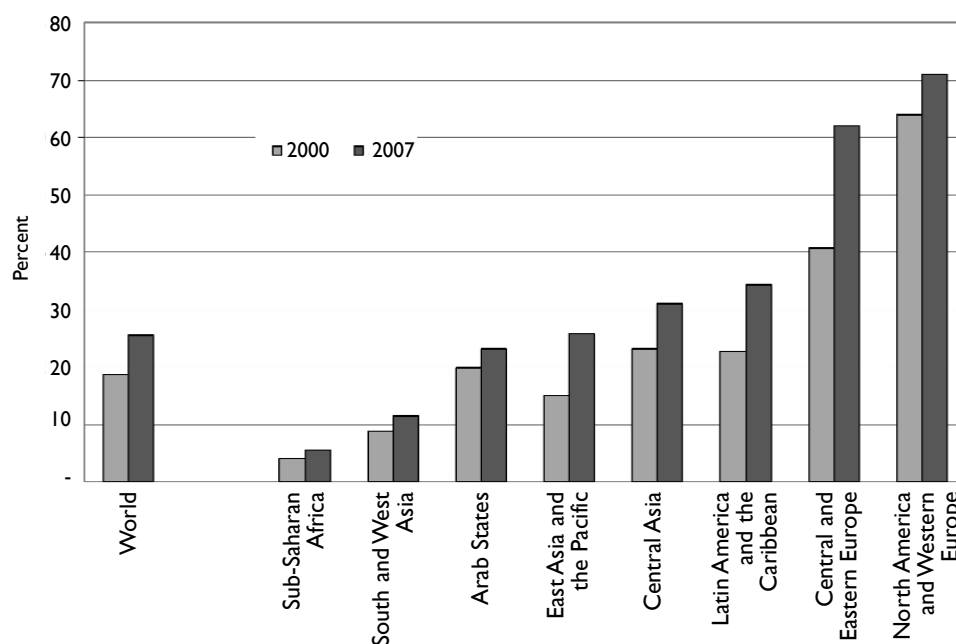


Figure I. Tertiary gross enrolment ratio by geographical region, 2000 and 2007



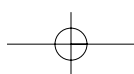
Note: These data include all post-secondary students (ISCED4, 5 and 6)

Inequalities in access

Despite many policy initiatives in recent years broader postsecondary participation has not benefited all sectors of society equally. A recent comparative study of 15 countries shows that despite greater inclusion, the privileged classes have retained their relative advantage in nearly all nations.

Providing higher education to all sectors of a nation's population means confronting social inequalities deeply rooted in history, culture and economic structure that influence an individual's ability to compete. Geography, unequal distribution of wealth and resources all contribute to the disadvantage of certain population groups. Participation tends to be below national average for populations living in remote or rural areas and for indigenous groups.

A number of governments have put measures in place to increase access: Mexico's Ministry of Education has invested in the development of additional educational services in disadvantaged areas with some success: 90 percent of students enrolled are first in their family to pursue higher education, 40% live in economically depressed



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areas. Initiatives in Ghana, Kenya, Uganda and the United Republic of Tanzania have lowered admission cut-offs for women to increase female enrollment. The Indian government obliges universities to reserve a set of spaces for "socially and backward classes". There has been modest improvement but participation of lower castes, rural populations and Muslims lags behind the general population and lower castes tend to be clustered in less expensive programs. In Brazil the legislature has mandated universities to reserve space for disabled and Afro-Brazilian students.

Even in countries where enrolment is high, inequalities persist: in the United States, participation rates for minority students continue to lag behind. Community colleges have made tertiary education more accessible but research shows that the likelihood that community college students will continue on to a four-year degree is largely determined by the socioeconomic status of the student's family, regardless of race or ethnicity.

Cost remains an enormous barrier to access. Even where tuition is free, students have to bear indirect costs such as living expenses and often loss of income. Scholarships, grant and/or loan programs are demonstrating some degree of success but cannot by themselves remove economic barriers. Fear of debt tends to be a greater deterrent for students from poorer backgrounds. Income-contingent loan schemes (where repayment plans are tied to post-graduation earnings) have gained popularity in Australia, New Zealand and South Africa but are still more attractive to middle and lower-middle class students. Mexico has introduced loan programs that make the private sector more accessible to a broader spectrum of families. Chile has introduced a new loan program that targets students from low-income families.

Increasing student mobility

More than 2.5 million students are studying outside their home countries. Estimates predict the rise to 7 million international students by 2020. One of the most visible aspects of globalization is student mobility (Figure 2). The flow of international students has been a reflection of national and institutional strategies but also the decisions of individual students worldwide.

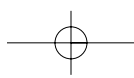
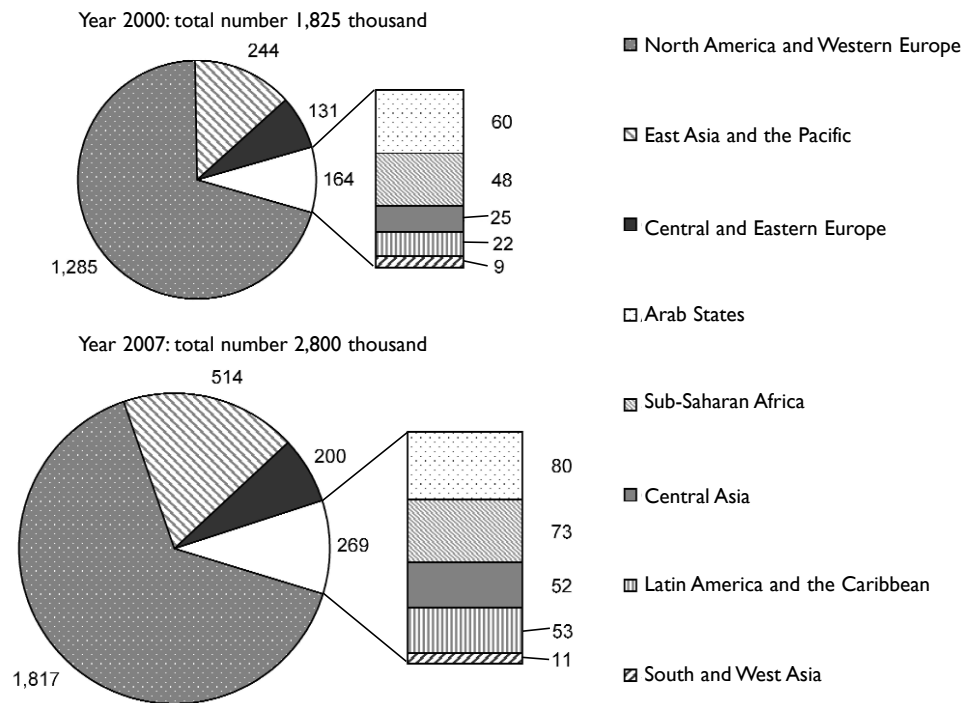
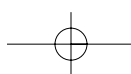


Figure 2. Number of internationally mobile students by region of destination, 2000 and 2007



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, and Australia. Countries like the United Kingdom, Australia and Canada have adjusted visa and immigration requirements to attract foreign students, motivated to a significant degree by the desire to maintain economic competitiveness and realize financial gains by enrolling large numbers of full fee-paying internationals. The other is within the European Union as part of its various programs to encourage student mobility. Globally, international student mobility largely reflects a South-North phenomenon.

Universities and academic systems themselves have developed many strategies to benefit from the new global environment and attract nonresident students. Some universities in non-English-speaking countries have established degree programs in English to attract students from other countries. Universities have established partnerships with academic institutions in other countries in order to offer degree and different academic programs, develop research projects, and collaborate in a variety



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of ways. Branch campuses, off-shore academic programs, and franchising arrangements for academic degrees represent only a few manifestations of such internationalization strategies.

The enormous challenge confronting higher education is how to make international opportunities available to all equitably. 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. If current trends of internationalization continue, the distribution of the world's wealth and talent will be further skewed.

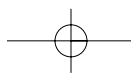
Teaching, learning and curricula

Access is more than 'getting through the door'. True progress depends on levels of completion for all population groups. Here data is scarce. But what is clear is that an increasingly diverse student body also creates pressure to put in place new systems for academic support and innovative approaches to pedagogy. Research shows how university teaching influences student engagement in the classroom. Mexico has created new "intercultural universities" grounded in indigenous philosophies, cultures, languages and histories. Student diversity has also contributed to an increase in the popularity of many professionally oriented programs and institutions, notably in the business and ICT fields.

While it is difficult to generalize globally, the mission of most institutions in most countries today is to teach less of the basic disciplines and offer more in the way of professional programs to a far wider range of students than in the past. Questions about curriculum and higher education's purpose are particularly salient in developing regions where emerging economies require both specialists trained for science and technical professions as well as strong leaders with generalist knowledge who are creative, adaptable, and able to give broad ethical consideration to social advances.

Quality assurance, accountability and qualifications frameworks

Quality assurance in higher education has risen to the top of the policy agenda in many nations. Postsecondary education has to prepare graduates with new skills, a broad knowledge base and a range of competencies to enter a more complex and interdependent world. Agencies throughout the world are struggling to define these goals in terms that can be understood and shared across borders and cultures.

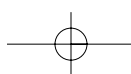


Globalization, regional integration, and the ever-increasing mobility of students and scholars have made the need for internationally recognized standards among and between nations more urgent. The explosive growth of both traditional institutions and new providers raises new questions in regard to standards of quality. Quite naturally, "consumers" of education (students, parents, employers) are demanding some kind of certification of institutions and the qualifications they award. Mechanisms for establishing international comparability are still new and largely untested.

Although quality is a multi-dimensional concept, a pattern for evaluating higher education has been established in most of the world. In a break from the past, this new pattern tends to rely on peers rather than government authorities. Institutions are more often evaluated against their own self-defined mission than against an institutional model defined by a regulatory agency. In many cases, the regulatory function of many government and para-statal agencies has shifted to a validating role. An increasing emphasis is also being put on "outcomes" of higher education - evaluators are looking for new data and indicators that demonstrate that students have mastered specific objectives as a result of their education. OECD's Assessment of Higher Education Learning Outcomes project, launched in 2006, focuses for example on interaction between student and faculty, career expectations, completion and success in finding a job.

With students and programs moving across borders with increasing ease, the comparability of educational qualifications has become a key issue in international discussions. UNESCO has facilitated the elaboration of conventions that commit signatories to common policy and practice to ease the mobility of students within each region. The Bologna Process reflects enormous progress in regard to the integration of higher education in Europe by creating a common degree structure and qualifications frameworks. It aims to bring uniformity and quality assurance across Europe while promoting transparency, mobility, employability and student-centered learning. The European Association for Quality Assurance in Higher Education in 2000 brought together many of the national quality assurance agencies in the region and created an important forum to engage member countries in transnational quality assurance projects.

Other organizations are attempting to coordinate quality assurance activities on an international level, many with support from the World Bank. Schemes for quality assurance are now accepted as a fundamental part of higher education but there is a need to integrate national, regional and international efforts. To promote this



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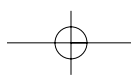
dialogue, UNESCO has partnered with the World Bank to create the Global Initiative for Quality Assurance Capacity that will include members of many regional and international networks.

With many new providers offering options for postsecondary study, it is sometimes difficult to distinguish legitimate institutions from diploma or degree mills that make credentials available for purchase. This further increases the urgency of international mechanisms for quality assurance. UNESCO has launched an online portal to guide individuals to sources of information that will help them distinguish legitimate from bogus documents and institutions.

Financing higher education and the public good-private good debate

Higher education is increasingly viewed as a major engine of economic development. Government tax revenues are not keeping pace with rapidly rising costs of higher education. The expansion of student numbers has presented a major challenge for systems where the tradition has been to provide access to free or highly subsidized tertiary education. In financial terms, this has become an unsustainable model, placing pressure on systems to fundamentally restructure the 'social contract' between higher education and society at large. Parents and/or students are increasingly responsible for tuition and other fees. Tuition fees are emerging even in Europe, long the bastion of free public higher education.

Traditionally, postsecondary education has been seen as a *public good*, contributing to society through educating citizens, improving human capital, encouraging civil involvement and boosting economic development. In the past several decades, higher education has increasingly been seen as a *private good*, largely benefiting individuals, with the implication that academic institutions, and their students, should pay a significant part of the cost of postsecondary education. Funding shortages due to massification have also meant that higher education systems and institutions are increasingly responsible for generating larger percentages of their own revenue. This debate has intensified due not only to the financial challenges of massification but also to a more widespread political inclination toward greater privatization of services once provided by the state. The growing emphasis on cost recovery, higher tuition and university-industry links distracts from the traditional social role and service function of higher education that are central to contemporary society. Some universities sponsor publishing houses, journals, house theater groups, noncommercial radio and television stations, and serve as key intellectual centers. These roles are



particularly important in countries with weak social and cultural outlets and few institutions fostering free debate and dialogue.

The worldwide surge in private higher education and the financing models for this sector have important implications for students and society. These trends have generally led to increasing austerity in universities and other postsecondary institutions (overcrowded lecture halls; outdated library holdings, less support for faculty research, deterioration of buildings, loss of secure faculty positions, faculty brain drain as the most talented faculty move abroad). The austerity has been most crippling in Sub-Saharan Africa but it is serious throughout developing countries and in countries in transition.

In response to these financial pressures, universities and national systems have sought solutions on the cost and demand side. The first - increasing class sizes and teaching loads, substituting lower cost part-time faculty for higher cost full-time academic staff - are difficult, academically problematic and heavily contested.

Policy solutions on the revenue side include cost-sharing - generally associated with tuition fees and 'user charges' for room and board. Tuition fees have been introduced in countries where higher education was formerly free or nearly so (China in 1997, United Kingdom in 1998, Austria in 2001). Many countries most notably in Sub-Saharan Africa, have significantly increased charges for student living. Student grants and scholarships have been reduced in transition countries as well as in Asia and in many countries in Africa. A number of countries - notably Japan, the Republic of Korea, the Philippines, Indonesia, Brazil and other countries in Latin America and East Asia have kept the public sector small, elite and selective. Much of the costs of expanded participation is shifted to parents and students through the encouragement of a growing private higher education sector.

Finding ways to sustain quality provision of higher education, with appropriate access for qualified students, will require careful planning that attends to both short- and long-term needs.

The private revolution

The growth of private higher education worldwide has been one of the most remarkable developments of the past several decades. Today some 30% of global higher education enrollment is private. While private higher education has existed in

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many countries - and has traditionally been the dominant force in such East Asia countries as Japan, the Republic of Korea, and the Philippines - it has formed a small part of higher education in most countries. Now, private higher education institutions, many of them for-profit or quasi for-profit, represent the fastest-growing sector worldwide. Countries with over 70% private enrollment include Indonesia, Japan, the Philippines and the Republic of Korea (Figure 3). 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. The private sector is growing and garnering more attention in Africa. The Middle East and North Africa are also registering private education enrollment, with 'American universities' dotting the horizon in Egypt, Jordan, Lebanon and elsewhere.

	0-10%	>10<35%	>35<60%	>60%
Developing countries	Cuba, South Africa	Egypt, Kenya	India, Malaysia	Brazil, Indonesia
Developed countries	Germany, New Zealand	Hungary, United States	(none)	Japan, Republic of Korea

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. Legally for-profit institutions constitute a small higher education sub-sector but there is notable growth in all developing regions. The sector is run mostly on a business model, with power and authority concentrated in boards and chief executives, faculty hold little authority or influence and students are seen as consumers.

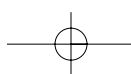
A related trend is the privatization of public universities. Countries such as Australia and China have been explicit in asking universities to earn more of their operating expenses by generating their own revenue. Besides tuition fees, public universities see income from research funds, income from the sale of university-related products, consulting and research services and university-industry linkages. In some cases, such financial sources contribute to the commercialization of the institution and conflicts with the traditional roles of the university.

The academic profession

The academic profession is under stress as never before. The need to respond to the demands of massification has caused the average qualification for academics in many countries to decline. It is possible that up to half of the world's university teachers have only earned a bachelor's degree (in China only 9 % of the academic profession has doctorates, 35% in India). Many university teachers in developing countries have only a bachelor's degree, the number of part-time academics has also increased in many countries - notably in Latin America, where up to 80% of the professoriate is employed part time. In many countries universities now employ part-time professors who have full-time appointments at other institutions (China, Vietnam, Uganda). It is also the case that professors at state universities in much of the world help to staff the burgeoning private higher education sector by 'moonlighting'. The variation in salaries among countries is quite significant, contributing to a brain migration to countries that pay more. A recent study of academic salaries in 15 countries show that full-time academic staff can survive on their salaries but they do not earn much more than the average salary in their country. The expansion of graduate programs has been identified as a top priority worldwide but expansion has been slow because demand for basic access is so great.

The academic labor market has increasingly globalized, with many thousands of academics 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 many 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, patterns of academic migration continue to work to the disadvantage of developing countries. Some countries, including Singapore, the Arabian Gulf nations, and some western European countries, Canada and the United States have policies in place to lure scholars and researchers from abroad.

In terms of accountability and assessment, the professoriate has lost much of its autonomy. The pendulum of authority in higher education has swung from the academics to managers and bureaucrats, with significant impact on the university.



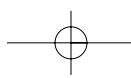
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The research environment

The three missions of the modern university - teaching, research and public service - live in constant tension with each other at different levels. Universities, to the extent that they enjoy autonomy to develop their own plans and programs, must make hard choices in setting priorities and allocating resources.

Research universities are at the pinnacle of the academic system and directly involved in the global knowledge network. They require major expenditures to build and are expensive to sustain. Their facilities - including laboratories, libraries and information and technology infrastructures - must be maintained to the highest international standards. Research production in key areas - such as information technology and the life sciences - has become extremely important to national development agendas and for the prestige of individual institutions. Government support to university-based research has increased in recent years to order to encourage research in such fields as biotechnology and information science. In the European Union, the share of higher education expenditure on R and D spending has increased consistently over the last few years. The government sector funds directly or indirectly 72 percent of all academic research in OECD countries. The shift from block grant funding of public universities to cover teaching and research to competition for project-specific awards that also provide for investment in equipment, laboratories and libraries, has contributed to the emergence of the modern research university. The so-called triple-helix of university-government-industry linkages has resulted in important organizational changes within the university. Special offices have grown and prospered and helped to generate new income streams for the university. These changes have encouraged further differentiation between institutions (research only, teaching only or both).

Intellectual property is a growing challenge in higher education but especially in research universities. Who owns knowledge? Who benefits from research? Universities, seeking to maximize revenues, want to protect intellectual property - research results that promise patents, licenses, and income. The topic often brings into focus the potential conflicts between those who produce research and knowledge and sponsors who may wish to control the knowledge and benefits that come from it. Sophisticated, university-based research is being conducted in an environment where there is pressure and need to commercialize knowledge, but at the same time opposing pressure exists to treat knowledge production and dissemination as a public good.



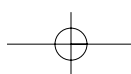
In the developing world scientific and technological research after World War II was largely a state-supported enterprise concentrated in government research institutes. This has changed quite radically since the 1990s with the downfall of the Soviet Union. The most revealing change, however, has taken place in China where the trend to fund university-based research is now more in line with the West. A number of other developing countries are pushing forward ambitious agendas to raise the amount and quality of their research activities. In the Republic of Korea, the Brain Korea 21 plan of 1998 promoted the principle of selection and concentration of research efforts within the traditional top universities. In Latin America university-based research continues to be concentrated in a few large-scale institutions. The Brazilian system awards some 10,000 PhDs and 30,000 MA degrees each year, a 300 % growth in ten years. Graduate programs are ranked in terms of their research productivity and financed accordingly.

Information and communications technology

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. There has been a profound and pervasive disconnect between employing new ICTs and leveraging them to enhance quality. But major change is taking place, and it is one of the key parts of the academic transformation of the 21st century.

The Internet has truly revolutionized how knowledge is communicated. In the world's most developed economies, the presence of ICTs has expanded exponentially and touched virtually all dimensions of the higher education enterprise. E-mail and online social networking spaces provide avenues for academic collaboration and joint research. Electronic journals have become widespread and in some fields quite substantive. Traditional publishers of books and journals have increasingly turned to the Internet to distribute their publications. The open educational resources movement has picked up significant momentum, providing free access to courses, curricula and pedagogical approaches not available locally.

Examining the deeper implications of this trend reveals that it has exacerbated the division between "haves" and "have-nots". In many developing countries new technologies are often considered the key for increasing access to higher education.



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Yet there are enormous costs and difficulties embedded in the reliance on ICTs in terms of hardware, software, technical support, training and continual upgrades. Some parts of the world, particularly Africa, remain relatively underserved by high-speed Internet access. The world's poorest countries are increasingly left behind as information production and dissemination move down technological pathways to which they have limited or no access.

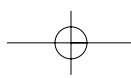
Distance education represents an area of enormous potential for higher education systems around the world struggling to meet the needs of growing and changing student populations. The distance learning landscape has been transformed by ICTs, allowing for real growth in numbers and types of providers, curriculum developers, modes of delivery and pedagogical innovations. It is extremely difficult to calculate the numbers of students engaged in distance education worldwide but the existence of nearly 24 mega-universities, a number of which boast over one million students, speaks to a quantitatively significant phenomenon.

For several decades the sector has been dominated by large-scale 'open' universities (Indira Gandhi National Open University in India counts 1.8 million students). The University of South Africa (UNISA) claims to be the continent's premier distance learning institutions with approximately 250,000 students. The African Virtual University works across borders and language groups in over 27 countries. Much of the appeal of distance education is attributed to its ability to accommodate the needs of a wide variety of learners (students located far from educational centers, employed adults, women who are attempting to balance family and school commitments) and even the incarcerated. Risks and challenges accompany this mode of education delivery, the most difficult challenge relates to quality assurance.

Looking forward: demographics and the impact of the economic crisis

Our goal in this trend report is to provide a sense of the central issues and the contextual factors that have shaped higher education in the past decade, as well as present prospects for the immediate future. We hope to underscore the fact that although many of these trends are not new, we are now confronting implications of these courses of action that we did not recognize when they began.

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 Organization for Economic Cooperation and Development

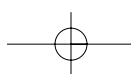


identified several key demographic trends for the period to 2030. Some of the key elements are:

- 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 in 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; and
- 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.

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 clear. Many countries and universities will experience financial problems with serious consequences in the short and perhaps the medium term, although the impact will vary worldwide, with some countries less affected than others. Current estimates indicate that certain of the least developed countries will be most affected. 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.



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- 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 deterioration of quality. More part-time faculty are likely to be hired, class sizes increased, and additional actions taken.
- "Freezes" on hiring, construction of new facilities, improving information technology, and purchasing books and journals are likely developments.

No one knows how deep the crisis will become or how long it will last. 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 unclear.

We are convinced of the centrality of the higher education enterprise globally and the need for strong, vibrant postsecondary institutions to support the knowledge economy as well as to provide the knowledge necessary for the social mobility and economic progress essential to societies across the globe.

The role of higher education as a public good continues to be fundamentally important and must be supported. We emphasize this in the trend report because 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 role adds considerable complexity and many new challenges. Understanding 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. The enormous challenge ahead is the uneven distribution of human capital and funds that will allow some nations to take full advantage of new opportunities while other nations risk drifting further behind.

