

**BUILDING THE GLOBAL KNOWLEDGE  
SOCIETY: SYSTEMIC AND INSTITUTIONAL CHANGE\***

***1. Introduction***

It is a pleasure for me to take part in this Forum. On behalf of IAU, I thank the three co-organizing countries – Spain, Hungary and Austria for opening a direct window on the construction site of the European Higher Education Area for the outside world. Allow me also to congratulate the architects and craftspeople building the Bologna Process on its 10<sup>th</sup> anniversary and for launching and continuously advancing a truly historical transformation in higher education. May the European Higher Education Area fulfill all of its promise and may its successes and difficulties serve as valuable lessons to others.

I am also grateful to be making these remarks on behalf of the IAU for a second reason. Of course, many of us are always pleased when this unique international association is given an opportunity to share its views at gatherings of policy and decision makers in higher education. To do so in this Forum, though, is especially important since it extends the reality of the multi-stakeholder approach taken throughout the Bologna Process to its dialogue with others. Perhaps more than anything, the process adopted in this regional initiative, must be underlined and applauded for its unique qualities of inclusiveness and consultative nature.

***2. The Forum Themes***

The overarching theme of Building the Global Knowledge Society – systemic and institutional change and the three themes of multiple expectations, competition and cooperation, brain drain or brain circulation - that have been chosen for this second Forum pose a real challenge. Each of them is of great importance but in addition, they are intrinsically interconnected and difficult to unpack.

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I will focus on only a small portion of the vast and rapidly changing canvas that is frequently called the global higher education landscape, highlighting just three aspects that I believe pose major challenges everywhere. I will also sketch out briefly how the regional, international and global dimensions are influencing trends and developments for higher education institutions in vastly different circumstances.

IAU, a global association, has about 40 % of its Members in Europe, which means that 60% come from outside of Europe with approximately 23 % in Asia and 11% in Africa as well as others in North America, the Middle East and in Latin America. As our Members are from the richest as well as the poorest nations in the world, since they use a variety of languages and following various higher education traditions, IAU is particularly sensitive to the implications of the various trends and developments for these culturally, linguistically and economically diverse constituents. In our view this diversity represents the world's greatest resource and history's most important legacy.

*a) Importance of Higher Education and Research*

It can be stated without much doubt that everywhere, countries face the same imperative: to raise higher-level employment skills, to sustain a globally competitive research base and to improve knowledge dissemination to the benefit of society. (OECD, 2009).

Hence, perhaps the most important development in the last couple of decades and a key driver of change is the very importance assigned to higher education as a sector today and the expectation that it can provide solutions or respond to society's challenges. There is general consensus that no state, indeed no society, can afford to ignore how well its higher education and research sector is performing. In an increasingly competitive, globalized economy, nations with the most knowledge-intensive economic base, the greatest capacity for innovation and the most educated population are the most likely to succeed.

It is this link to innovation and knowledge-intensive economic development that explains, at least to some extent, the current love affair with global rankings. They offer simple

answers about research performance of universities, though so far, they generally tend to neglect or fail to measure how well the non-research related mission of higher education is being carried out.

Since 2003, when the first Shanghai Jiao Tong University ranking was first published, the global context has become the reference and research performance the undisputed measure of quality, despite continuous criticism. The failure, so far, for the most frequently used rankings to recognize that higher education fulfills other goals, is a real danger. Such goals as the provision of equitable access to enhance social cohesion, or the institution's commitment in other efforts such as poverty alleviation, conflict prevention, cultural awareness and many other challenges often expressed within the framework of the Millennium Development Goals, cannot be ignored in any dynamic and context-sensitive measures of quality. Yet, that is indeed the case today.

Building the Global Knowledge Society must be synonymous with building a diverse higher education and research system within and between nations. It is imperative that we ask ourselves whether our policies, actions and goals serve to push for ever stronger convergence in the higher education and research sector around the world or whether we are preserving diversity and nurturing alternatives. Can we, given the state of higher education around the world, afford a single reference framework or rather should we not promote the co-development and maintenance of many points of reference in order to do justice to the multiple and varied expectations of HE?

The cost of the race for the world-class university at the top of the shaky ladder may be too high even in the wealthiest of nations, if we forget Martin Trow's statement that the survival of an elite higher education depends on a comprehensive system of non-elite institutions. (Trow, 1979)

### *b) Higher Education Expansion and Growth*

This recognition of the importance of higher education is also reflected in the continuous expansion of the sector – at the national level, regionally and worldwide. HE is not only seen as a key to national or regional competitiveness; it is a key to individual success as well. Making access to higher education available in an equitable and fair manner to all groups in society is an important goal of public policy in many countries, though the capacity to fulfill that goal and even the political will to do so, vary greatly.

In less than a decade – between 1999 and 2006 – the number of students enrolled in higher education increased roughly by 50% - from about 93 million to 144 million (UNESCO, 2009) and the growth trend appears to be stable for a few years to come.

The IAU maintains a world wide database on higher education which, in 1983 included approximately 9,000 universities and other higher education institutions in 153 countries. Today, the database has more than 18, 000 institutions in 183 countries. In one decade, China has doubled the number of HEIs and multiplied by 5 the number of students who are enrolled. In Ethiopia, in 2000 there were 34,000 students enrolled in higher education, in 2007 this number increased to 120,000. (WERN, 2010)

This growth, however, is uneven and the gaps between nations are huge with participation levels in higher education in some parts of the industrialized world reaching +70% while elsewhere, particularly in sub-Saharan Africa and even in South and West Asia they remain around 6 % and 11 %, respectively. (UNESCO, 2009)

The demand for access is unevenly matched by available places in higher education. Demand is by far the greatest in developing nations – for example in Nigeria, the estimated system-wide capacity is for 170,000 students; the National University Commission reports that last year, 1 million candidates applied (WERN, 2010). At the same time in Japan, just last month, two private universities announced they will close their doors due to lack of student applications.

New delivery modes using Information Technologies, international mobility and cross border education, private provision and institutional mergers, networks and partnerships as well as other mechanisms provide some of the answers to these diverse and complex challenges. However, they bring their own specific difficulties, unless they are developed in real partnerships, respecting the immediate and longer term needs and interests of each partner.

*c) Funding of Higher Education*

Without a doubt, funding and investment is a universal key and constraint in the search for solutions.

The quantitative expansion, albeit uneven, that we have witnessed everywhere, is not easy to achieve if quality is to be retained and if the sector is to continue to perform well in both education and research. Thus, funding is, not surprisingly, the third factor that exerts pressure and sets the direction for change in most systems and for each institution of higher education. Of course, adequate funding is the main, but not the only requirement for successfully expanding the system while maintaining high quality.

In general terms, funding has not kept pace with expansion in OECD countries and even less so in developing nations. The public support as a proportion of all HE funding has dropped. All over the world new schemes and funding approaches, as well as new sources of financial support for higher education and research, are being introduced or called for. The average proportion of public funding of total tertiary education funding fell by 6% between 1995 and 2004, in OECD countries decreasing in 22 out of 28 members for which data was available. (Salmi, in OECD, 2009) Other reductions are most likely in the future, given the current levels of public spending deficits. The recent UK announcement that public funding per student for teaching will drop a further 4.6% when two waves of efficiency savings were already announced, does not bode well. (UUK, 2010).

In many developing nations, the share of their overall wealth spent on higher education is similar to that of industrialized nations because the costs per student, in comparison to other levels of education are so much higher. When this is already the case with low participation rates, the likelihood that public spending can finance the needed expansion, is small. Yet, just to remind ourselves of the distinct realities in the global context, even if nations in sub-Saharan Africa spend between 4-11 times more per student than they do on secondary students, expenditure per student in U.S. dollars converted using purchasing power parities (PPPs) is situated somewhere between \$1,000 and \$3,000 per student in these same countries, while it can be as high as \$15,500 in Austria and Denmark or up to \$18,000 in Kuwait. (UNESCO, 2009)

The growth of the private higher education sector is one of the responses, especially in the developing world, bringing with it new challenges of quality, equity of access, range of disciplines, etc. Today 30% of global higher education enrollment is in the private sector and it is the fastest growing part of the sector worldwide. (Altbach in UNESCO, 2009). But keeping track of these developments is rather challenging since it is becoming next to impossible to draw clear lines between public and private institutions as public universities privatize. Just one example of this: when student contribution covers 47% of the overall cost, can we still speak of public education? This is now the case of many public universities in the USA (Rhodes, 2010). IAU has just launched a Research Essay competition on this theme, calling on scholars to investigate the privatizing trend in the public sector.

These funding figures relate to the educational mission of higher education, as does the growth of the private sector, but research is an even more prized and a more expensive aspect of the sector. The mechanisms being adopted to fund research also bring about systemic and institutional transformation and appear of the greatest strategic importance. The economic development value placed on research and innovation is huge, as are the investments required to stay on top of the competition.

In most parts of the world where investment in research is being made – and this is by no means everywhere – Competitive Funds of one type or another are the most popular mechanism used.

However, given the simultaneous and opposing trends of expansion/massification on the one hand and the decrease in available funding on the other, research funding schemes also serve to concentrate research capacity and steer systems towards institutional differentiation. Examples are too numerous to cite but they include the Excellence Initiative in Germany, the Apex University initiative in Malaysia, the highly competitive Research Centers of Excellence Program in Singapore, or the Campus Excellence program in Spain among many others.

These are, for the most part, national instruments. They, perhaps more than any others, are creating a new landscape, reinforcing hierarchies within systems and helping to structure networks both regionally and globally. How such research capacity concentration (already high in a global context) will impact on other HEIs within the national systems and between countries needs to be considered, especially given the knowledge based economies that most nations are striving to build. If the teaching and research nexus is what creates high quality universities, can we, in a mass higher education system concentrate research in only a few institutions, a few nations, or only in some regions? How will the various parts that make up the global landscape, benefit or not, from this movement?

### ***3. Regionalization, Internationalization and Globalization***

This brings me to the last part of my comments and, against the background of IAU's slogan 'Building a worldwide higher education community', I would like pose a few questions to see whether current trends of regionalization, internationalization and globalization are bringing us closer or further away from this ideal or from the Global Knowledge Society.

The mere fact that this second global forum is taking place demonstrates that even regional efforts such as the Bologna Process are developing in a context of a global or a worldwide referential system of knowledge creation and dissemination. HEIs are central actors in regionalization, internationalization and globalization. They are subjects of regional or international developments but they are also shaping them through their own regional or global strategies.

How institutions, countries and even regions, insert themselves into the global system depends on many factors including the choices made with regard to the cooperation-competition continuum, one of the themes to be addressed in this Forum.

Competition can be a path towards strength and excellence. It can, however, be a path towards exclusion. The cost of exclusion from the global system is very high indeed and for that reason we must ensure that the conditions required for competition to be a positive force not only exist but prevail.

The few indicators I mentioned earlier clearly demonstrate that in terms of capacities – human, financial, scientific, linguistic etc. the playing field is definitely uneven and the starting blocks for the competition are clearly not aligned.

IAU's international policy statements always call attention to this reality, and exhort cooperation and partnerships that respect the different conditions and urgencies that drive policy development and institutional strategies around the world. We argue that ethical considerations of fairness and justice are also essential, but often absent in the process of higher education and research internationalization.

Internationalization is an important policy for higher education leaders: the most recent global survey undertaken by IAU on internationalization of higher education in 2009 shows that 65% of HEIs assign a high level of importance to the process and furthermore that it has increased in importance over the past 3 years. The vast majority also view student mobility as a central aspect of internationalization, as does the Bologna Process.

At the same time, Brain Drain is identified as the most important risk of internationalization by HEIs in Africa, Latin America and the Caribbean. (IAU, forthcoming)

Certainly, part of the rationale for mobility is linked to internationalization – exposing students to different cultures, new ways of knowing, etc. Equal parts though can also be assigned to the ‘demand and supply’ mismatch, and to the increasing ‘privatization’ of higher education including in the public sphere to which international students, in a growing number of nations, bring much needed revenue. In Canada, for example, international students are reported as bringing 6.5 Billion CAD\$ to the economy and create 83,000 jobs (Kunin, 2009). In the UK, it is reported by UUK that personal, off-campus expenditure of international students and visitors amounted to 2.3 billion pounds in 2007/08. (UUK, 2009)

In addition, international students, especially at the graduate level represent a huge part of the knowledge creation workforce in many universities of industrialized nations. For all these reasons, while mobility trends and patterns are changing, the importance of the phenomenon and the competition that surrounds it continue to grow.

Given the growing importance of highly educated people and of research and innovation for economic development, it is clear that no nation can afford a brain drain, or a sustained exodus of its teachers, researchers, lecturers, medical doctors, nurses, etc.

Can we hope to create a worldwide community of higher education if we compete at all costs for the best and the brightest, without developing compensatory mechanisms and or those that ensure that true circulation of the intellectual resources takes place among nations? A recent US study indicates that about 40% of the science and engineering work force with doctorates in that country is foreign born. The report goes on to state that the US ability to continue to attract and keep foreign scientists and engineers is critical to the country’s plans for increased investment in R & D. (Finn, 2010)

There are numerous causes for the brain drain and they include a variety of both academic and non academic/scientific issues ranging from research infrastructure, academic freedom, salary levels to political stability, safety, discrimination as well as quality of education for children, etc. Of course, taking up opportunities and enjoying the freedom of choice is a right of each individual, but the consequences for the sending nations and the impact on their capacity to join the Global Knowledge Society of tomorrow must be considered however, when mobility programs are designed and offers made. So far, the search for effective ways to use the scientific and professional diaspora has not been without problems. Thus the primary strategy to combat the brain drain remains the creation, through support, development, cooperation and capacity building partnerships, the conditions that will allow students and scholars to remain or return to their home institutions where they are indispensable to the future of their nations.

The growing competition for the best and the brightest brought the brain drain phenomenon to focus in Europe in the relatively recent past. For some nations, the exodus has been going on for much longer and the impact has been devastating – indeed in proportion to the magnitude of the exodus – Yes, China and India exemplify cases of brain circulation, but China and India are not typical examples; their sheer size as well as recent economic growth rates place them outside the norm.

#### ***4. Final considerations in guise of Conclusions***

What can we learn from the European efforts to build a Higher Education Area? What can we, as non-Bologna Process participants, bring to the debate?

First of all, looking at Europe from the outside, there are numerous aspects that inspire admiration and from which lessons could be learned elsewhere. I will only cite three that are linked to the process rather than to the more structural achievement of Bologna reforms.

- Voluntary, incremental process to which ministers are politically committed
- Multi-stakeholder and inclusive approach that includes a strong role for students and is flexible and subject to continuous monitoring

- National and regional funding sources are available to provide incentives and supports for progress making.

As we meet here within the framework of a regional process of transformation, we cannot ignore that it is the global dimension or to some extent the broader process of globalization that acts as the real catalyst for this meeting. Furthermore, this globalization catalyst is exerting pressure in Europe to reach out to non European partners just as we seek to learn from your experiences in Europe.

But globalization is fundamentally a different process. Instead of removing borders and barriers by decision, often by consensus, and with equalizing measures, as is the case in regionalization or regional integration movements, globalization is fueled by the power of capital flows, the market, information and communication technologies and competition that create strong interdependencies. It lacks the checks and balances that act as a safety net and minimize the negative consequences.

So among the fundamental questions we need to ask is whether removing borders for trade, for the mobility of capital and people on a more global scale is contributing to the removal of borders or barriers between the rich and the poor, between those who know and those who have no access to knowledge; whether by removing borders the quality of life improves for the many or if, on the other hand, this process leads to an even more rapid spread of negative consequences such as environmental degradation, health pandemics and economic meltdowns, while increasing the gaps between people and making the barriers for entry, even to the Global Knowledge Society, that much higher.

In a forum on higher education, these questions are essential for various reasons: because it is our responsibility as teachers and researchers to examine critically, the various trends and question them with detachment and objectivity while educating our students to do so as well. But also because we need to avoid the negative aspects of the process, and put in place those much needed safety nets, when, as is increasingly the case, higher education institutions are adopting globalizing strategies. That is why it is important to keep in

view the unexpected and unwanted consequences that such developments may bring and to listen to higher education stakeholders from other parts of the world.

The Global Knowledge Society is a highly positive concept. Can we build it using competing regional blocks? Can it be built without the global South? What must we do to ensure that people of all nations participate not merely as subjects but as empowered actors whose contribution enriches the global space? How far do we wish to see higher education become merely an export sector or an instrument of economic and political diplomacy, rather than a sector that can serve as models for new types of collaborative relations and innovative partnerships?

I look forward to taking part in this Forum and debating these and related issues that may serve to bring us closer to realizing the Global Knowledge Society ideal.

Thank you

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