OECD/France International Conference
Higher Education to 2030:
What Futures for Quality Access in the Era of Globalisation?

Conférence internationale OCDE/France
L'enseignement supérieur à l'horizon 2030 :
accès, qualité et mondialisation

Conference Speakers Biographies and Forward-looking Perspectives on Higher Education

CERI
Centre for Educational Research and Innovation
Centre pour la recherche et l'innovation dans l'enseignement

CERI
1968
2008

Liberté • Égalité • Fraternité
RÉPUBLIQUE FRANÇAISE

MINISTÈRE
DE L'ENSEIGNEMENT SUPÉRIEUR
ET DE LA RECHERCHE

ORGANISATION FOR ECONOMIC
CO-OPERATION AND DEVELOPMENT

ORGANISATION DE COOPÉRATION
ET DE DÉVELOPPEMENT ÉCONOMIQUES

Foreword

This document serves as background material for the *Higher Education to 2030: What Futures for Quality Access in the Era of Globalisation?* conference organised by the OECD Centre for Educational Research and Innovation (CERI) and France on 8-9 December 2008 in Paris. The objective of the document is to provide a global view of the challenges and the opportunities for the future higher education via presentation of a wide range of personalised and forward-looking perspectives on the topic. At the same time, it provides an introduction on the speakers of the conference.

The document contains replies to a short questionnaire on the future of higher education (please see the annex) by various international higher education experts and stakeholders. It also includes biographies and photographs of the respondents.

Marita Aho

Marita Aho works for the Confederation of Finnish Industries EK since 1994. She is responsible for anticipation and foresight activities in the areas of corporate environment, skills needs, education and research and business development. She is a Senior Adviser in charge of relations with university education, as well. For most of the member companies of the Confederation of Finnish Industries EK the operational environment is international, if not global. That is why the international co-operation is a very important part of Marita's job, too. She is an active member of the Education Committee of the Business and Industry Advisory Committee of the OECD. She is also one of the evaluation experts for the EU education and training programmes. She finds it extremely important to share experience and knowledge. Sharing knowledge creates new ideas, innovations and win-win situations. "If You give, You gain".

In your view, what is the most probable or desirable future scenario for relations between business community and higher education?

I consider the Open networking scenario to be the best solution for ensuring a good environment for HE and business community cooperation. That scenario involves intensive networking among institutions, scholars, students and with other actors such as industry. It is a model based more on collaboration than on competition, sometimes on both at the same time. The geographical boundaries do not limit the intensivity nor extent of the networks.

This scenario serves best the interests of students, as well. The increased networking of institutions and the gradual harmonisation of systems allow students to choose their courses from the global post-secondary education network, and to design their own curricula and degrees. New technologies are important networking enanablers in this scenario. There is another important element in this scenario, important in the view of relations with businesses and industries: the fact that advanced vocational education institutions create similar international networks as universities and link with them – maybe this could be the beginning of true lifelong learning paths?

International collaborative research is also strengthened by the dense networking between and among institutions, driven by the availability of free and open knowledge. The development of open innovation and learning environments could become a reality.

I believe the open networking scenario is on its way, already. It has started its development in the areas of eLearning and networks of Open Educational Resources. The Open networking scenario will gradually replace the existing, institution- and nation-based governance models and become mainstream HE solutions by 2020.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

I see HE as a vital partner in the development of sustainable, humane, and dynamic future for the global knowledge society. HE can not do this alone. I support all the efforts to create a better linkage between HE and businesses and industries. It is necessary to improve the capacity of tertiary education to respond to labour and skills demand. In addition, new skills, new theories,

models, concepts and actions need to be developed together, in partnerships with businesses, industries, and public sector. Networking is the key word. The better linkage between businesses and industries means, at policy level, that education, innovation and growth policies are well coordinated and linked, as well. I believe there is a need for a common strategy for research, innovation and skills development at different levels in the society (regional, national, international partnerships).

What do you consider to be the main future challenge(s) for higher education systems? Why?

I consider Assuring and Improving Quality as number one future challenge for HE systems. The quality assurance and development must cover all the actors in the HE model based on Open networks. Quality assurance and improvement is a prerequisite for the trust needed in the Open networking scenario to become a reality.

The quality assurance and improvement presents several "sub-challenges". How to build systems that serve continuous improvement, accountability as well as branding purposes? It is important to build capacity, to secure legitimacy and to make processes and outcomes transparent and visible for different categories of customers and stakeholders (students, employers, governments, funding providers and partners). A diversity of methods is needed, including self-evaluation. I would like to see new indicators, e.g. those measuring HE's capacity to build partnerships at national and international level, focusing at taking advantage of international complementarities and building international learning and research paths (indicators measuring a HE system's position on its way to the Open networking scenario).

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst possible way to tackle the challenges of networking and quality would be to rely on "artificial" ranking systems, that lack hindsight, insight and foresight regarding the objectives of the HE systems in the society.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The HE institutions themselves and important stakeholders such as funding partners, students and employers must be vital partners in building the quality assurance and improvement systems needed in the future. The quality assurance and improvements must be based on research and better understanding about learning: what is it that enhances learning, what hinders it? The quality assurance and improvement system must aknowledge the different elements of learning: non-formal, informal and formal. The quality assurance and improvement must be able to tackle both system-level and individual efficiency and learning outcomes.

I believe the most important un-known element in the Open networking scenario comes with the fact that HE policies are far less national than what they are today. The Open Research, Innovation and Education Environments need new governance and funding systems. What would these be, remains to be seen. It is self-evident, that the Open networking HE model must solve the possible challenges regarding equal opportunities for learning, as well. Support mechanisms are needed to avoid the risks regarding all kinds of inequity.

Philip Altbach
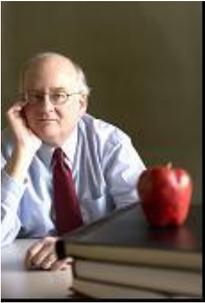
Philip G. Altbach is J. Donald Monan, S.J. University Professor and director of the Center for International Higher Education in the Lynch School of Education at Boston College. He was the 2004–2006 Distinguished Scholar Leader for the New Century Scholars initiative of the Fulbright program. He has been a senior associate of the Carnegie Foundation for the Advancement of Teaching, and served as editor of various academic journals. His most recent book is *World Class Worldwide: Transforming Research Universities in Asia and Latin America.* Dr. Altbach holds the B.A., M.A. and Ph.D degrees from the University of Chicago. He has taught at the University of Wisconsin-Madison and the State University of New York at Buffalo, was a postdoctoral fellow and lecturer on education at Harvard University, and a visiting professor at Stanford University. He has extensive international experience from China (Shanghai Jiao Tong University and Institute of Higher Education at Peking University), France (the Institut de Sciences Politique), India (the University of Bombay), Malaysia (Fulbright scholar) and Singapore (Fulbright scholar). He has had awards from the Japan Society for the Promotion of Science and the German Academic Exchange Service (DAAD), has been an Onwell Fellow at the University of Hong Kong, and a senior scholar of the Taiwan government.

In your view, what is the most probable or desirable future scenario for higher education governance?

This question is too complicated to briefly answer. The likely future scenario is continuing massification in most countries and a resulting decline in standards and increased bureaucratication. The most desirable future would be adequate funding, from public and private sources, to provide decent standards for mass higher education.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Research and training for the knowledge society of the 21st century.

What do you consider to be the main future challenge(s) for higher education systems? Why?

1. adequate funding

2. governance arrangements that permit reasonable autonomy and at the same time appropriate accountability.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Rigid state control and inadequate funding. This is possible but not too likely.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

A public and governmental recognition of the importance of postsecondary education and a combination of public and private financial support.

Richard Arum

Richard Arum is Professor of Sociology and Education, New York University; and Program Director of Educational Research, Social Science Research Council. He received a Masters of Education in Teaching and Curriculum from Harvard University in 1988 and a Ph.D. in Sociology from the University of California, Berkeley in 1996. He is author of *Judging School Discipline: The Crisis of Moral Authority* (Harvard University Press, 2003). His international comparative work includes co-directing with Walter Müller *The Reemergence of Self-Employment: A Comparative Study of Self-Employment Dynamics and Social Inequality* (Princeton University Press, 2004). He also recently co-directed with Adam Gamoran and Yossi Shavit a comparative project on expansion, differentiation and access to higher education in fifteen countries, recently published as *Stratification in Higher Education: A Comparative Study* (Stanford University Press, 2007).

In your view, what is the most probable or desirable future scenario with regard to social equity and higher education?

The most probable scenario in developed economies is that we will see greater overall access to higher education, related to the continued expansion of higher education supported by both public and private sources. This expansion will be accompanied, however, by increased differentiation of higher education experiences across and within schools. The qualitative differentiation will be associated with decreased social equity in terms of the association between educational opportunity and social backgrounds; the expansion will be associated with increased equity in educational attainment. Women will continue their historic advancement relative to men as these educational trends related to gender are produced by larger structural forces.

Similarly, what is the most probable or desirable future scenario for quality assurance in higher education?

In the United States, the most probable scenario is that we will see increasing attempts to improve both oversight and quality assurance, given the growth in both public and private investment in higher education. It is likely that quality assurance schemes will focus on monitoring organizational efficiency in instructional inputs, research productivity and student retention. Quality assurance related to measurement of student learning *per se* will lag due to both institutional resistance and psychometric obstacles, but eventually will emerge given the increasing share of public and private resources invested in this sector and the likelihood of growing public concern over the skill sets demonstrated by college graduates.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

The most important objective is to develop for as many individuals as possible their full potential as productively employed, democratic citizens. I define this as the most important objective, because the quality and character of the enterprise is as important to social progress as is its scale and scope.

What do you consider to be the main future challenge(s) for higher education systems? Why?

The greatest challenge to higher education systems is the increasing commodification of higher education and associated threats to student and institutional academic cultures that are conducive to high quality learning. Given the high rate of economic returns for individuals with college diplomas, other significant challenges, such as identification of adequate resources to provide expanded access, will in advanced economies – with the combination of public and private investment – likely be more easily resolved.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst way to handle the challenges to positive school cultures conducive to student learning would be to further accelerate the differentiation in higher education that is occurring and increasingly restrict access to elite high quality programs to those with the greatest aptitude, motivation and resources. This response to the existing challenge is highly likely to occur (particularly in decentralized systems like the U.S.) and unfortunately will detract from system level goals of increasing social equity.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best way to deal with this challenge is to modify the organizational cultures in schools so that educators' responsibility and authority to define academic culture in terms of a moral imperative is restored and institutions are discouraged from being responsive to student preferences emerging from the privileging of students' institutional role as consumers and clients.

Thomas Bailey

Thomas R. Bailey is the George and Abby O'Neill Professor of Economics and Education at Teachers College, Columbia University. He is also the Director of the National Center for Postsecondary Research (NCPR) and the Community College Research Center (CCRC). Dr. Bailey holds a PhD in labor economics from Masshusets Institute of Technology (MIT). His specialties include education, labor economics, and econometrics. Dr. Bailey's recent work analyzes access and student success at community college, with a particular focus on the experiences of low income and minority students. His articles have appeared in a wide variety of education, policy-oriented and academic journals, and he authored or co-authored several books on the employment and training of immigrants and the extent and effects of on-the-job training. His most recent book, co-edited with Vanessa Morest, is Defending the Community College Equity Agenda (Johns Hopkins University Press, 2006).

In your view, what is the most probable or desirable future scenario for quality access in higher education?

I don't think that there will be much change in higher education in the United States over the next few years. States will have other demands on their resources and it is easier to put off expenditures in this area than in many others. Moreover, colleges are going to have to figure out how to spend money more effectively and this is going to take some time.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

At least in the United States, most students have access to some form of higher education. Now we need to turn to a much greater focus on what they learn in college and whether they actually complete their courses of study. Over the last few decades, US colleges have focussed on access at most colleges and have assumed quality instruction, primarily because of the repurtations of the top tier of elite colleges. The output of higher education produced by this "system" is now not considered adequate, so educators and researchers must now focus much more on the content of higher education. This is certainly true in the US, but I suspect also true in other OECD countries.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Maintaining quality as higher education spreads to a larger proportion of the population gains access to higher education. As long as higher education was confined to higher income groups in society, they were able to work with students who come with significant academic, social, cultural, and financial capital—this made their job easier. As more students gain access, colleges must work with students who are less well prepared and have fewer resources to fall back on. Moreover, higher education expansion means more expenditures and in most countries, colleges must compete with other public demands.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

As I said earlier, I do not think that there will be major higher education reform initiaitives in the OECD countries (particularly the US) in the next few years. Colleges may try to improve their outcomes by increasing merit based financial aid to attract better students. This won't have much effect on the overall educational level but rather may simply shift good students aound among institutions. It might increase inequality without doing anything to improve the underlying quality issues that need to be addressed in order to effectively expand higher education.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The solution (at least in the United States) involves a combination of reformed need based finaicial aid, better connections between secondary school and higher education, and a focus on the internal processes of higher education including pedagogy and student services. These reforms represent a departure from typical apporoaches to college improvement.

Stefan Bienefeld

Stefan Bienefeld he is the head of the quality management project (Project Qm) of the German Rectors' Conference. The project offers a communication platform for all those involved in quality assurance and development in Higher Education. Prior to this, Mr. Bienefeld worked on the implementation of the reforms within the framework of the Bologna Process in German Higher Education Institutions. While studying psychology at the University of Bielefeld, he was also an active student member in various student organisations involved in particular with higher education quality assurance. Mr. Bienefeld's main areas on interests with regard to higher education are quality assurance and management processes, governance, change management, implementation of the Bologna Process and internationalisation of higher education.

In your view, what is the most probable or desirable future scenario regarding differentiation in higher education?

The most desirable scenario in terms of differentiation is that the differentiation of the HEIs leads to an increasingly visible profile of institutions. What would be desirable is that different missions and visions (i.e. world-class research vs. catering for the needs of the national/regional labour market) are accepted as equally valid and worthwhile in terms of public support. The result would be that institutions compete according to their differentiated missions.

What is part of this differentiation process is that there will most likely and inevitably be a stiffer competition for funding in the future, especially for expesive research. The profiling and definition of clearer missions of the institutions should make it easier to allocate funding accordingly. It is, however, important to stress that performance indicators in performnance based funding do not focus on research alone but also stress other areas (teaching, LLL) to allow niches for institutiuons that do not consider their primary role in research but focus for example on teaching excellence.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

The most important objective is to widen access while maintaining quality. It is obvious that the number of students entering HE is bound to increase. In the German context it is a political goal of all actors to increase participation, but this is equally valid in many other countries in Europe as well as in the global context, especially in emerging economies and developing countries. This increase in participation is einevaitable to ensure economic prosperity and well-being in a wold economy that is more and more shifting towards a knowledge based economy. This expansion, which in many cases goes hand in hand with a stratification of the student body (people coming straight from school – either intereted in a research career or in getting a qualification aimed towards the labour market - vs. people with working experience vs. people with professional qualifications that have never been part of an HE process before) will put the question of quality and developing offers for these different student groups increasingly demanding. Obviously this question is very much linked to funding issues as both widenining access and maintaining and improving the quality will need additional resources if these objectives are to be oursued in a sustainable way.

What do you consider to be the main future challenge(s) for higher education systems? Why?

A. Sustainable Funding, because in times of tight budgets the need to look for additional/alternative funding sources (fees, service provision, PPPs etc.)

B. Social inclusion, because in order to enhance access there is a need to recruit new and so far underrepresented groups into higher education

B. Ensuring a good research environment in increasingly intertnaionalised network, because the further advancement of HE will need the sterngthenining of research both at the national level as well as in international networks.

Sarah Box

Sarah Box – a New Zealand citizen – has been working as an Economist in the OECD Directorate for Science, Technology and Industry since early 2007. She has been analysing issues around the international mobility of highly skilled people, as well as contributing to work on public research organisations and the wider OECD Innovation Strategy project. Prior to joining the OECD, Sarah started her career as an Analyst at the New Zealand Treasury, where she undertook research on a diverse range of topics related to economic performance, to feed into policy development. She then moved to providing policy advice on telecommunications and regional, industry and economic development. Following this, Sarah moved to Australia to work as a Senior Research Economist for the Australian Government Productivity Commission, where she co-authored analytical reports providing policy advice on microeconomic issues. She holds Master of Commerce and Bachelor of Commerce (Honours) degrees in economics from the University of Auckland.

In your view, what is the most probable or desirable future scenario regarding innovation and international mobility in higher education?

From the perspective of economic growth and innovation, a desirable future scenario regarding international mobility in higher education is one where students and staff have the opportunity and ability to move freely between higher education institutions and also between higher education institutions and firms or other research organisations. Mobility of highly educated and skilled people is one of the main methods by which knowledge is diffused, thus supporting the circulation of new ideas and the development of new capabilities.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Higher education must augment the skills people learn in their foundation years of schooling so as to produce a workforce that not only has specialised expertise relating to particular fields but also has the "soft skills" (such as problem solving and teamwork) and the adaptability and change management skills to cope with our fast-paced and increasingly globalised and connected environment.

What do you consider to be the main future challenge(s) for higher education systems? Why?

We tend to demand a lot from our higher education institutions – to provide skilled people, to advance knowledge, to help us meet social goals of equity and inclusion… I see the balancing of these objectives as a major challenge – different strategies are required for each of these objectives, as well as different measures of success and progress. In addition, the outcomes are seen in the long-term – it is hard to know if you have "got it right". This challenge can only grow stronger as economies' demands for skilled people increase and processes of innovation and knowledge creation become ever more rapid.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

With so many uncertainties, the worst approach would be an inflexible, rules- or numerically-based strategy that attempts to place "one-size-fits-all" demands on institutions as regards their methods of teaching, research approaches and student selection. Top-down plans are likely to misjudge the specific needs of different groups (be they regions, communities, industries…) and are hard to change. Hopefully, however, the likelihood of this is small.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best way to tackle the challenge of "balance" is to maintain institutional openness (links with industry, communities etc, as well as openness to change), flexibility (so that different institutions can offer different things to different people) and accountability (so that the impacts of decisions about funding, research etc are fed back into the original decision making process). Of course, diversity can carry the risk of incoherence, and the risk of missing an important target. There are also many unknowns about how economies and societies will evolve. But I suspect higher education institutions are up to the challenge!

Nicholas Burnett

Nicholas Burnett was appointed Assistant Director-General for Education at UNESCO in September 2007, bringing to this position a very broad knowledge of education in developing countries. He previously was at the head of UNESCO's flagship Education for All Global Monitoring Report, where he directed the three most recent editions (2006: Literacy for Life; 2007: Strong Foundations: Early Childhood Care and Education; 2008: Education for All: Will we make it?) From the United Kingdom, Mr Burnett has spent his entire career working on developing and transition countries, with a strong focus on Africa. At the World Bank (1983-2000), he was responsible for the organization's global education sector strategy review and served as Human Development Sector Manager in West and Central Africa. Before joining the World Bank, he worked at the British Foreign and Commonwealth Office as an Economic Adviser on Africa and Latin America. From 2001 to 2004 he managed his own international consulting firm, specializing in human development and strategic management. Much of the firm's activity was in Eastern and Central Europe and Central Asia, and included work with the World Bank and the Soros Foundation to set up the Roma Education Fund. Mr Burnett holds a BA (Hons) in Philosophy, Politics and Economics from Balliol College, Oxford University and MA and PhD degrees from the School of Advanced International Studies at Johns Hopkins University, Washington, DC. He is the author and co-author of many publications and articles in education and economics. He was recently appointed visiting Special Professor of International Education Policy at the University of Nottingham (UK).

Claire Callender

Claire Callender (BSc, PhD) is Professor of Higher Education Policy at Birkbeck, University of London and co-director of the Birkbeck Institute of Lifelong Learning. She is an expert on student finances in higher education and has written widely on this topic. Claire has undertaken research for some of the most significant inquires into student funding in the UK and been called upon to give evidence to the House of Commons Education and Skills Select Committee on several occasions. She was appointed a member of the Academy of Learned Societies for the Social Sciences in 2003. Claire was awarded a Fulbright New Century Scholarship for 2007-08 and was a Visiting Scholar at Harvard Graduate School of Education conducting comparative research on student funding. Claire is currently conducting three major pieces of research: a longitudinal study of part-time undergraduate students and career-making, including an investigation into employers' attitude to part-time study; a study examining the awareness, take-up, and impact of institutional aid in England; and a study exploring the factors facilitating and inhibiting the supply of part-time HE provision.

In your view, what is the most probable or desirable future scenario for financing of higher education?

It is probable that the current cap of £3,000 on the tuition fees will be raised for English domiciled full-time undergraduate students attending Higher Education Institutions (HEIs) in England. This is likely to be one of the outcomes of the planned government review of student finances which will begin sometime in 2009. Like the Dearing Report in 1997, the findings from the 2009 review probably will not be published until after the next general election because of political sensitivities surrounding student finances. Consequently, the earliest these changes could come into force would be 2011.

The cap on tuition fees could rise to anything between £5,000 and £10,000. It is, however, very unlikely that the cap will be lifted completely. This would create greater variability in the tuition fees charged by universities, which failed to occur when the new variable rates of tuition were first introduced in 2006.

One of the main obstacles to raising (or lifting) the cap is the costs to the Exchequer. Currently all undergraduate students are eligible for government-funded student loans to cover all their tuition fees, and the vast majority of students take out these loans. The current level of government loan subsidy is around 33% due the zero interest rate on student loans and debt forgiveness. This could be overcome by introducing commercial rates of interest on the loans and/or restricting eligibility to student loans for tuition, and potentially for living costs. Neither is currently favoured by government because of their potential impact on middle class families; student debt levels; and HE participation rates especially, among students low-income backgrounds.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

The generation and dissemination of knowledge, through research and teaching.

What do you consider to be the main future challenge(s) for higher education systems? Why?

1. Funding of the HE sector and undergraduate student financial support

In the medium to longer term, central government funding for the HE sector as a whole is likely to decline, despite rising costs. This will affect both the funds received by HEIs from central government, as well as the level of government subsidies for undergraduate student financial support. It is likely therefore, that HEIs will have to raise more of their income through tuition fees. At the same time, there is likely to be less help for undergraduate students from central government to pay for these tuition fee increases. For instance, the current system of student financial support is probably unsustainable in the medium to longer term, particularly the subsidized income contingent loans with zero rates of interest available to all undergraduate students to pay for their tuition fees and their living costs. Thus, a radical overall of government student aid may well be required. The challenge will be to devise a new system of student aid that is sustainable and at the same time is progressive, equitable, and does not have an adverse impact on HE access and participation rates of students from low income backgrounds.

2. Greater polarization within the HE sector

The HE sector is becoming increasingly polarised with undergraduate students from low-income backgrounds and minority ethnic groups becoming increasingly concentrated in the least prestigious HEIs. Conversely, white undergraduates from high income families are concentrated in the most prestigious research intensive universities that currently receive around three-quarters of all research funding. As competition for students intensifies with the demographic downturn of 18 year old high school leavers, this polarisation is likely to increase. If, as predicted, government funding declines and tuition fees increase, the most prestigious universities will be able to charge much higher fees while the less prestigious institutions will become even more dependant on declining government funding. The concerns are whether this, along with greater competition within the HE sector, will lead to growing inequality in access to high quality HE provision, and how reputation trumps quality.

3. Threat to part-time undergraduate provision

This is an English phenomenon. Recent government policy changes threaten the provision of part-time undergraduate HE. The government has withdrawn funding from HEIs providing part-time courses, where the student has a qualification equivalent or lower to the qualification (ELQ) they are taking (e.g. an HEI now receives no funding from government for a student who already has a Bachelors degree and undertakes a second Bachelors degree). This is likely to lead to a decline of part-time provision, at a time when the demand for re-skilling the workforce is increasing. It is most unlikely that employers will pick up the increasing costs, despite calls for greater employer-engagement in HE.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst way of tackling both the HE funding problem and growing polarization in the sector would be an over-reliance on higher tuition fees and the resurrection of high financial barriers to HE entry due to inadequate financial support for students from low and middle-income families. This would undermine many of the achievements of the HE sector attained over the last 20 years.

The worst way of dealing with the threat to part-time undergraduate provision is to ignore the issue, and for policies to assume that all undergraduate students are high school leavers studying full time – the dominant model informing HE student funding (and other HE) policies.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best way of tackling the HE student funding system is to ensure that any rises in tuition fees and changes in student financial support do not have an adverse impact on access and the participation of students, especially from low-income families. There is a widespread belief that the 2006 changes to student funding in England, especially the threefold increase in tuition fees, has had little or no impact on participation rates. Yet, England has no robust research evidence for such assertions, nor an understanding on how these changes may impact on the behaviour and educational choices of high school students, undergraduates, graduates, and postgraduates. Most research focuses on undergraduate students who have entered HE, rather than on non-participants – especially those who have attained the appropriate HE entry qualifications but decide not to enter HE. Similarly, there are widespread assumptions that the returns of HE unquestionably justify the increasing costs of HE, despite research showing that these returns vary considerably by the type of HEI attended, even when academic ability is taken into consideration - another dynamic of the increasing polarization of the HE sector.

The best ways of confronting the issue of part-time provision would be first, to revoke the current ELQ policy. Secondly, to introduce a student financial aid system that is mode- neutral i.e. part-time students would get the same pro-rata financial support as students studying full time. This is unlikely to happen because of the costs. However, eligibility to the current limited financial support available to part-time undergraduate students could be improved so that more than the existing one in five part-time students became eligible for financial support. The key challenge is to ensure that any such changes do not act as a disincentive for employers to contribute to the costs of part-time students' tuition fees and study costs – anywhere between 7% to 30% of all part time undergraduates currently receive some help with these costs from their employer.

Bruno Carapinha

Bruno Carapinha is a doctoral student in Political Science at the University of Lisbon. He has been an active member of student organisations and Higher Education governance bodies at the institutional, regional and national level since 2000. He is currently a member of the Executive Committee of European Student Union (ESU) and represents this organisation in the Bologna Follow-Up Group. Bruno has been developing his work in the area of the Bologna Process from 2005, when he was part of the Portuguese delegation in the ministerial meeting in Bergen, in May 2005, a task he undertook again in London, in May 2007. At the national level, he is a member of the National Bologna Implementation Follow-Up Group. Currently he works as a consultant and advisor for student affairs at the University of Lisbon. Since November 2006, Bruno has been a member of the internal structures of ESU, starting by the Bologna Process Committee, where he worked first in areas such as recognition of prior learning, qualifications frameworks and ECTS, employability and internationalisation of higher education. Bruno coordinated the survey Bologna With Students Eyes 2007 and is currently undertaking the same task for the 2009 edition.

Molly Corbett Broad

A leading spokesperson for American higher education, Molly Corbett Broad became the twelfth president of the American Council on Education (ACE) on May 1, 2008. She is the first woman to lead the organization since its founding in 1918. Broad came to ACE from the University of North Carolina (UNC), where she served as president from 1997 to 2006, leading UNC through a period of unprecedented enrollment growth. Due in large part to the success of the Focused Growth Initiative, minority enrollment at UNC grew at more than double the rate of the overall student body during her tenure. She also spearheaded the creation of a need-based financial aid program for in-state undergraduates and the creation of the College Foundation of North Carolina. Broad held a number of administrative and executive positions at several universities prior to her tenure at UNC, including, among others, senior vice-chancellorship for administration and finance as well as executive vice-chancellorship at the California State University system. Broad has written and spoken widely on strategic planning for higher education, K-16 partnerships, information technology, globalization and biotechnology. She currently holds seats on the boards of the Public Broadcasting Service (PBS) and the Parsons Corporation. In the past she has served in several other boards and executive committees. Broad earned a General Motors Scholarship to Syracuse University, where she graduated Phi Beta Kappa with a baccalaureate degree in economics from the Maxwell School of Citizenship and Public Affairs. She holds a master's degree in the field from The Ohio State University.

In your view, what is the most probable or desirable future scenario for higher education governance?

The most desirable future scenario for US higher education would maintain the broad diversity of higher education institutions, with their considerable array of missions and strengths. Institutional autonomy and self regulation would remain the foundation of the governance system, but they will have to operate in a context of heightened demands for transparency and accountability.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Access to higher education is central to the economic development, innovative capacity, and social well-being of the United States, as it is to other nations. Access must be defined broadly. In the United States, that includes minority groups, low-income populations, life-long learners, and more recently, veterans. The concept of access also includes academic success. It is not sufficient to open the doors; we must help students attain their educational goals and ensure the quality of their learning experience. An essential aspect of widening access is building a stronger foundation of elementary and secondary schools and stemming the tide of high school dropouts. In short, we must see access as a systemic educational issue.

What do you consider to be the main future challenge(s) for higher education systems? Why?

1. Access: (see above)

2. <u>Accountability</u>: US higher education is facing significant pressure from various stakeholders — federal and state governments, employers, parents — to improve the quality of undergraduate education and to demonstrate its worth to individuals and to society. There are important lessons the United States can learn from the efforts of the Bologna process to focus on learning outcomes through the creation of qualifications frameworks at the European and national levels and in the disciplines through its "Tuning Project."

3. <u>Affordability of higher education</u>: Although 80 percent of US students attend public institutions, where the average tuition is $2,361 in community colleges and $6,185 in four-year institutions, the price of higher education has risen faster than the CPI. At the same time, median US family income has remained flat. The cost of higher education, even with almost $150 billion available in student financial aid, is a major national concern, and is likely to be an even greater problem in the current financial downturn.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

1 & 3 <u>Access and affordability:</u> In previous economic downturns, states have cut funding for higher education, resulting in public institutions raising tuition to make up some of the shortfall. We are already seeing state budget cuts and the detrimental results to access. Additionally, competition among institutions has led to an increase in scholarships that are not based on financial need (known as "merit aid"). Intensification of this practice also will jeopardize access.

2. <u>Accountability</u>: The worst, but possible, approach would be the imposition of a single federally mandated measurement of student learning. Federal imposition of a "one size fits all" measurement would undermine the rich diversity of American higher education, our successful models of shared governance and our voluntary system of accreditation. While the historic self-regulation of US colleges and universities has not been perfect, a federalized system of accountability is a far less effective alternative. A recent effort by the US Department of Education to exercise significant control over the institutional accreditation process elicited strong reaction from the higher education community. A number of efforts are underway to strengthen institutional measures of transparency and accountability; the need for higher education institutions and associations to push ahead on this front is great.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

1. & 3. <u>Access and Affordability</u>. Access to higher education is both a social and a financial issue. First, educational aspirations must develop early in young people. The United States must strengthen its primary and secondary school systems (called "K-12) — especially those that serve disadvantaged youth — and provide students with both high aspirations and the skills and capacities to realize their dreams. Higher education can play a greater role in working with primary and secondary schools, as well as community organizations and businesses, to create a more seamless "K-20" system. Higher education must also reach out to other populations, such as immigrants, veterans, and older adults. On the cost and affordability front, we will need a combination of federal and state student grants and cost-containment by higher education institutions.

2. <u>Accountability</u>. Higher education associations, systems, and institutions must take vigorous steps to document their policies, practices, and outcomes. As noted, there are a number of promising efforts underway, but the central nut to crack – documenting student learning outcomes – remains quite challenging. The risks are that the simpler measures (rankings, graduation rates, standardized test scores), will be used as a proxy for more comprehensive and nuanced indicators.

Serge Ebersold

Serge Ebersold is an analyst in the Directorate for Education, Organisation for Economic Co-operation and Development (OECD). He joined the OECD in 2006 as a member of the Group of National Experts on Special Educational Needs, to analyse education policies for students with special needs. He is, more specifically, in charge of a project looking at the pathways that students with educational needs follow to tertiary education and employment. Prior to joining the OECD, he was professor at the University of Strasbourg, where he taught disability sociology for 15 years, researched schooling for people with disabilities and employment opportunities. He acquired international experience by collaborating with the European Commission for comparing disability policies within the European Union and by being involved in the World Health Organisation's revision of the international classification of disability (ICF). He has published several books and articles on participation opportunities for persons with special needs and their families, including Disability in Higher Education, (OECD, 2003).

In your view, what is the most probable or desirable future scenario for diversity and equity in higher education?

The most probable future scenario in terms of diversity and equity in higher education is that HEIs will have to include pedagogical accessibility issues in their strategic plans and will be financially and technically supported to do so.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To combine equity, effectiveness and innovation in order to be able to consider the diversity of students' profiles but also the more diverse pathways they may follow to access to higher education as well as to succeed in higher education.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Higher education systems have face an increasing competition at international level. They have therefore to become learning organisations allowing for students' success (especially at the 1st years) as well as access to employment. In order to fulfil these challenges HEIs have to be embedded in their economical, social and political environment and e.g. collaborate more closely with secondary education institutions as well as with employers and local governments.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst possible way to tackle these challenges would probably be to lead HEIs to be more selective and to transform differentiation issues relating to pedagogical and organisational practices in specialisation issues leading to focus on some types of students. Such a scenario, may

take place if HEIs are not financially and technically empowered to open up to diversity and may lead in a dynamic of specialisation. This would widen the qualification gap between individuals coming from lower socio- economical background or having with special needs, aggravate difficulties to access to employment and, therefore, poverty.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best possible way to tackle these challenges would probably be to lead HEIs to consider diversity as an innovation factor allowing for dynamism, effectiveness and equity by empowering them financially and technically as well as by acquiring reliable data informing on students' experiences. This would allow for embedding HEIS in their environment. One of the risks could be considering innovation as a finality instead of a mean for developing human capital and foster economical growth and social cohesion and to lead stakeholders to turn away from reforms.

Eva Egron-Polak

Eva Egron-Polak is Secretary-General of the International Association of Universities (IAU), an international Non-Governmental Organisation based at UNESCO in Paris, France. Bringing together Higher Education Institutions and Associations from every region, IAU is committed to strengthening higher education worldwide by providing a global forum for leaders, undertaking research and analysis, disseminating information and taking up advocacy positions in the interest of quality higher education being available to all. With a long experience in international cooperation in higher education, and now as head of IAU, Eva Egron-Polak is engaged with many of the most pressing issues in current higher education policy debates globally, such as internationalization, cross-border higher education, higher education for sustainable development, and equitable access to higher education, among others. Prior to joining IAU, she was Vice President (international) of the Association of Universities and Colleges of Canada. She was educated in the Czech Republic, Canada and France.

In your view, what is the most probable or desirable future scenario regarding the role of higher education institution?

My position at the International Association of Universities situates my perspective mostly at the macro/global level. Looking at the 2030 horizon chosen by the conference, and given the changes taking place in all aspects of life, it is rather difficult to predict with any level of accuracy. So my comments are an extrapolation of current trends, though it is quite possible that seismic shifts could happen. With that caveat, the most probable scenario that I think we will see is the development of a highly stratified (nationally and globally) and still much expanded system of higher education. Universities and other HEIs will be perhaps less differentiated on paper but more so in reality in terms of quality and real mission. The number of institutions will continue to increase to provide more access – so the base of the HE 'pyramid' will grow and competition for being at the top of the pyramid will be very strong. E-learning will become a major part of all institutions' offering but e-learning will also continue to expand on its own; this may turn to be the mass higher education, while highly presonalized and selective institutions will focus on intense personal attention. The private (commercial) part of the system may become bigger in terms of enrolement than the public sector. China and India will be major players both in terms of the top institutions and in terms of numbers of graduates. Basic/blue skies research will be concentrated institutionally and networked geographically. Regulation will be strong at the local level to ensure some level of equity and quality and there will be several regional and even global regulatory bodies working on a voluntary basis to ensure quality and transperancy among various sub-systems – ie. Groups of similar institutions will and together to self-regulate. Mobility will grow steadily but more or less keeping on par with overall growth of numbers rather than expanding much as a proportion of all students.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

HE, at the systemic level, does and should continue to have multiple objectives including research to address major global issues in addition to research for economic competititveness and innovation and education on a continuous basis to prepare people for the labour market and more generally for life in society facing complex problems. HE's most important role – as it serves ever growing numbers of

people, should be to empower citizens to make considered choices among many options – practical, moral, etc. and to be adaptable to changing circumstances. HE needs to remain an objective and critical commentator, using its analytical, reseach and dissemination capacities to forecast, communicate and thus help prevent or at least predict the consequences of certain developments in all areas of life – economic, political, scientific, social, cultural, medical, environmental etc. This does not mean that all HE institutions need to have the same set of objectives and missions, but at the systemic level, these are the roles the HE objectives system should play in the future.

What do you consider to be the main future challenge(s) for higher education systems? Why?

A. At systemic level the issue will be how to continue to expand access while maintaining equity and quality, recognising that in different contexts, the challenges to meet this objective are vastly different and requires different policies

B. Under pressure of funding and accountability, how to avoid a system that is largely populated by more narrowly instrumental/utilitarian training institutions exclusively serving the world of work, yet at the same time, finding ways to respond to broader student learning needs to prepare citizens not only workers. Expected learning outcomes must be carefully and broadly defined.

C. Retaining the nexus of research/scholarship and teaching to ensure continuous innovation and improvement in the pursuit and transmission of knowledge

D. Creating an HE system full of institutions with different missions that are recognized and valued as such by the students, employers, and society more widely so that societal needs and individual aspirations can be met.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Two 'nightmarish' scenarios are possible: a) abdication of the role of the state, allowing the private sector and the market to drive the responses to these challenges and b) a controlling state that makes most of decisions. As each currently exists in reality in some countries, they are certainly possible but neither is effective. The market cannot respond to equity issues, the controlling state cannot provide sufficient flexibility to allow for continuous innovation and the need for responsiveness.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

At the risk of using the standard cliché, solutions lie in finding the appropriate balance among competing and often contradictory demands and identifying, for each society, context and moment in time, the approach that will be most responsive to the most pressing needs of a country and to the largest segment of society. Such an approach includes regulation at the system level by a state that is well informed and has a vision, sufficient investment from public and private sources that are allocated to promote both quality and accessibility, coordination of many actors and cooperation with stakeholders. Innovation in all aspects – curricular, organizational, technological, in governance and management, in linking with society etc, and thus some level of risk, need to be encouraged and accepted, respectively, at the institutional level. The main challenge lies in the fact that the status quo suits large numbers of people and reforms are neither always positive, nor always succeful. As

well, change in many areas is rapid but in other areas it takes time to bring its full benefits. Time-frames are continuously being shortened – for government policy makers due to election cycles, to institutional leaders due to shorter terms of tenure etc. Dialogue and partnerships between state, institutions and private sector as well as all stakeholders needs to be on-going; the vision of the way the system ought to evolve needs to be clear and shared; rhetoric must be matched by actions and resources and success needs to be made well-known. Finally, the approach needs to be tailored not so much to a particulary ideology but rather to the socio-economic and political realities of each system.

Ján Figel
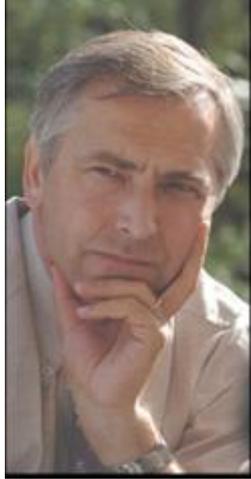
Ján Figel, a Slovak national, is the European Commissioner for Education, Training, Culture and Youth. Prior to his nomination to the European Commission in 2004, Mr. Figel held several senior positions within the European Institutions as well as within the Slovak government. He has also served as a lecturer at the Trbaca University (1995-2000) and written several publications in the field of International Relations. Mr. Figel has received several honorary awards. These include honorary doctorates from Dimitrie Cantemir Christian University (Romania), Technical University of Cluj-Napoca (Romania), St. Elizabeth's University of Health and Social Sciences (Slovak Republic) and Technical University in Košice (Slovak Republic) as well as the Award Freedom for outstanding contribution to the promotion of human rights and freedom in Bosnia and Herzegovina, Europe and the World, the Award of the Prešov, the Interfaith Gold Medallion, Honorary citizenchip of Vranov nad Topľou, Knight of the Honorary Legion (France) and Human Tolerance and Humanitarian Award. Mr. Figel holds an engineering degree from the Technical University in Košice.

© European Commission

Monique Fouilhoux

Monique Fouilhoux has been involved with Education International (EI) since its creation in 1993, and is currently the Deputy General Secretary. She works on various areas, in particular Higher education and research issues and the impact of GATS and Trade agreements on education, with EI affiliates, intergovernmental   agencies and non-governmental organisations. She is particularly engaged with the most pressing issues concerning academics and researchers, such as working conditions, careers, academic freedom, mobility. She started her career as a Civil Servant in the ministry of Internal Affairs and joined the University of Clermont Ferrand in 1973 at the creation of the Department of Further Education and Adult Education. Involved in the Trade union movement she was elected Deputy General Secretary of SNPTES and in 1987 became elected National Secretary of the French Education Union FEN, known today as UNSA-Education. She has a Bachelor and Master degree in law from the University of Clermont-Ferrand (France).

In your view, what is the most probable or desirable future scenario for academic's role in higher education?

The most desirable future scenario is one that is not considered in those provided – a "public service" university. The main characteristics of this scenario would include the following:

Public Service Mandate: Higher education and research is recognized as a vital public good that contributes to the social, cultural and economic development of communities, regions, and nations. Consequently, universities operate according to clearly defined public service principles: equality of access, comprehensiveness, affordability, high standards of quality, and public responsibility. Institutions provide a learning environment that is student-centred and that promotes quality pedagogical relationships between students and teachers.

Funding: Institutions are primarily publicly-funded to ensure they are of consistently high quality, and are universally accessible by all qualified students of all ages. While funded by governments through the tax base, universities are autonomous from government. Institutions are accountable for exercising responsible financial stewardship, but have autonomy in developing educational programs and curricula. Public financial support means that tuition fees, where they exist, are kept very low and no one is denied access for financial reasons. No or low tuition fees promote higher participation rates and increased participation from non-traditional students. Stable, predictable, and long-term public funding ensures that institutions can provide sufficient spaces and a range of programs to fulfill their academic mission, and to meet student demands. In research, the predominance of public funding also ensures greater autonomy for academic researchers and drives basic, curiosity-driven research that leads to important but unanticipated new discoveries that boost productivity and growth.

Academic Freedom: The public interest is best served when university research and teaching is independent of any special interests. To safeguard and promote free inquiry and the integrity of university teaching and research, academic freedom is vigorously protected and promoted by governments, administrations, and academic staff associations. Academic freedom is understood as including   the right, without restriction by prescribed doctrine, to freedom of teaching and discussion; freedom in carrying out research and disseminating and publishing the results thereof; freedom in producing and performing creative works; freedom to engage in service to the institution and the community; freedom to express freely one's opinion about the institution, its administration, or the system in which one works; freedom from institutional censorship; freedom to acquire,

preserve, and provide access to documentary material in all formats; and freedom to participate in professional and representative academic bodies.

Tenure: Academic freedom is protected through tenure or its functional equivalent. Tenure or its functional equivalent, awarded after rigorous peer review, ensures secure continued academic employment. It is not, however, protection against professional incompetence or misconduct. Rather, it is the means by which academic staff are protected against personal malice, political coercion, and arbitrary actions by their institutions, governments or other special interests. Strong protections for academic freedom and tenure make academic careers highly attractive, ensuring that universities can recruit and retain highly skilled and motivated staff.

Working Conditions: In addition to iron-clad guarantees for academic freedom, universities ensure that there are sufficient numbers of qualified and regularly employed academic staff. The salaries of staff are such that the university can attract and retain able scholars and researchers. Openly agreed and fair collective agreements between employers and staff are in place so that standards of compensation, promotion, tenure and discipline are fair and transparent.

Quality and Collegial Governance: The quality of higher education is recognized neither as a measurable product nor an outcome subject to any simple performance-based definition. Quality is dependent upon the conditions and activities of teaching, research and free enquiry. The quality of higher education institutions is assessed through rigorous and regular peer reviews. What constitutes quality teaching and research is debated, established, and reassessed at the institutional level through effective academic governance (such as academic senates or councils) with meaningful representation from staff and students. It is primarily the responsibility of higher education institutions to assure the quality of their programs through these collegial processes.

Teaching and Research: By integrating teaching and research, universities help prepare students for work, citizenship and further learning. Research is produced in open ways and the accumulated knowledge of universities is made freely available in the public domain. Recognizing that most on campus students desire a face-to-face educational experience over technologically mediated learning, institutions widely employ e-learning as a supplement to, but not a replacement for, in-class instruction. As universities have always done, they continue their commitment to distance education for those unable to attend campus-based programs.

Local and global collaboration. There is strong collaboration and cooperation between universities and the local community. These collaborative links foster a dialogue that helps the academic community anticipate and respond to changing social and economic demands and priorities, thus ensuring the development of high quality programs. The strength of these local links help universities develop local and global partnerships that are founded solidly on academic principles, not commercial gain. Partnerships with institutions in developing countries are motivated by a desire to help build domestic capacity. In their international collaboration, institutions and governments actively seek ways to mitigate the damaging effects of the brain drain of talent from the developing to the developed world. Such strategies include providing financial compensation to countries losing skilled people, assisting developing countries in building their domestic higher education systems, developing student and staff exchanges to promote two-way knowledge transfer, and encouraging collaborative projects and research networks with less developed nations.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

The most important objective for higher education is to contribute to the quest for knowledge, truth, and understanding so that society receives the fullest possible analysis and the broadest

range of critical and independent recommendations regarding policies, programs, technologies and products.

What do you consider to be the main future challenge(s) for higher education systems? Why?

The main challenges facing higher education systems including funding/financing, equity/access, and protecting the integrity of academic work. In order to achieve their most important objective, higher education institutions must receive adequate public funding to assure they serve the common good and are not beholden to private interests. Greater reliance on tuition fees threatens to limit access and undermine equity of participation. Finally, the autonomy, integrity and academic freedom of academics must be vigorously defended against political interference or economic pressures to assure that they are able to serve the broader public interest.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The privatization of financing and commercialization of higher education institutions would be the worst way to address these challenges. The greater reliance on private fees threatens to erect financial barriers to higher education at a time when promoting greater participation is paramount. The commercialization and marketization of higher education threatens to undermine institutional autonomy, academic freedom and the integrity of academic work.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Governments need to make a renewed commitment to adequately fund higher education. Higher education institutions need to do more to improve working conditions of staff, and to vigorously defend their academic freedom. The development of "public service" universities as outlined above would promote equality of access, comprehensiveness, affordability, high standards of quality, and public responsibility.

Aart de Geus

Aart de Geus – a Dutch national – has been the Deputy Secretary-General of the OECD since March 2007. In this capacity, he is particularly in charge of the horizontal project "Making Reform Happen". Prior to his current position, Mr. De Geus was Minister of Social Affairs and employment in the Netherlands, where he introduced major reforms in the social security system, notably by turning it into an activating system where social partners and local authorities take their own responsibilities. Previously, Mr. De Geus has served in various functions at local, national and international levels. He was also a partner in a company for strategy and management, where he worked in the fields of health care, pensions and human resource development. Mr. De Geus served as vice-chairman of the executive board of the National Federation of Christian Trade Unions from 1993 to 1998, while being a member of the board since 1988. Mr. De Geus has a law degree from the Erasmus University in Rotterdam and post-graduate studies in labour law from Nijmegen University.

In your view, what is the most probable or desirable future scenario for international organisation's role in higher education?

To develop performance indicators

To coordinate sustained increase in access and quality

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To provide the skills/knowledge needed in the labour markets based on evidence, indicators

What do you consider to be the main future challenge(s) for higher education systems? Why?

To match academic independency with political pressure (on finance, access, programs etc)

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

To resist to any reform

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

To create broad and deep consensus for a (country specific) future scenario.

Gaële Goastellec

Dr. Gaële Goastellec is a sociologist, researcher and head of the "politics and organizations of higher education research unit" at the Observatory Science, Policy and Society, University of Lausanne. She works on higher education policies in a comparative perspective, taking as main focal the issue of access and equity. This topic is addressed through a cross thematic research on identities, governance and funding. Her own researches fieldworks include France, the United States, Indonesia, South Africa and Switzerland. She has been a Fulbright New Century Scholar fellow 2005-2006 (access and equity group), and a French Ministry of Foreign Affairs (Lavoisier fellowship) fellow (2004-2005). Visiting researcher invited at the NYU (autumn 2005) and at the University of the Witwatersrand (South Africa, 2004-2005), she is also part of the Prime European Network of Excellence.

In your view, what is the most probable or desirable future scenario for diversity and equity in higher education?

The most desirable scenario for diversity and equity: to have higher education institutions and faculties accountable for the social representativity of the student body they admit and take to graduation.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Producing social mobility.

To improve societies social peace, fairness and democracy, to make the best use of individual competences, to stimulate the creation of an elite able to innovate…

What do you consider to be the main future challenge(s) for higher education systems? Why?

- Guaranting students' equity within higher education systems, institutions and degrees
- Ensuring a fair funding of both institutions and students

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Setting quotas for access to each institution and degree (weak likelihood) and developing a competition only basis for institutional and individual funding (good likelihood).

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Introduce compulsory indicators on students access and success regarding their social background in Higher Education Institutions rankings in order to improve the visibility of those producing social mobility and index institutional funding accordingly.

Maruja Gutierrez Diaz

Maruja Gutierrez-Diaz is the Head of Unit for Innovation and Creativity at Education & Culture Directorate-General, European Commission, Belgium. She has degrees in architecture and in urban planning from the School of Architecture, Polytechnical University, Madrid (1971). She was a Postgtraduate Researcher at the Planning Research Unit, University of Edinburgh; specialist in computer-aided planning techniques. After some years as Consultant, Head of the Centre for Information and Documentation of the Madrid Metropolitan Area, (extended since 1983 to the Madrid Region), in charge of both technical and citizen oriented information systems, she joined the European Commission in 1988, as specialist in introduction and promotion of new technologies. First, as Deputy Head of the Central Library, in charge of its modernisation and networking and since 1995, as Head of the Publications Unit, member of the Europa server launching team and of its interinstitutional editorial board. In October 1999, she became Head of the new unit for Multimedia – Culture, Education, Training, in charge of the eLearning initiative, prior to her current post.

In your view, what is the most probable or desirable future scenario regarding new technologies in higher education?

The most desirable scenario would be that higher education spearheads the use of new technologies to build a true lifelong learning environement. In a first stage, this would benefit mainly HE actors, but then effects would spill onto other education levels, and in the longer run it would grow into a lifelong learning infrastructure. It might also lever an extension of universities' role as knowledge agents in society and open a wide range of new HE services.

The most probable, according to current trends, is that the increasing use of new technologies makes a mark in access to learning resources, general "delivery" of HE and international cooperation, but without a true transformation of HE.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Focusing fiercely on quality. Why? Because the core mission of universities is creating knowledge, and this hinges first and foremost on quality. This entails re-thinking HE quality in the broadest sense of the term, including objectives, means, and results. For example, the trend to an output oriented system does not take away the need to ensure high quality inputs in the form of lecturers, tutors, or libraries (which will increasingly be digital ones).

What do you consider to be the main future challenge(s) for higher education systems? Why?

1. Focusing on quality while ensuring "massification". If the XIXth century meant quasi-universal primary schooling and the XXthe century quasi-universal secondary education, the XXIst century might mean quasi-universal HE

2. Fostering a critical attitude and a sense of initiative while ensuring the wide knowledge base required for practically any discipline.

3. Building an ethos of hard work and demanding personal realisation goals while developing a closer connection with society.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The new digital era is a new frontier. The worst possible way would be to ignore it, keeping to further development of existing models. It is not a matter of technology, it is a cultural change as deep and pervasive as printing or the steam engine. A new civilisation is in the make, and HE has a key role in it.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

It is easy to recommend courage and imagination, but it is hard to see how to best act. In the first place, there needs to be a deep and shared awareness of the challenges at hand, in HE itself, but also in political and business decision making spheres. The knowledge society is not a slogan, it is a new frontier. It is also a new source of energy. A social will to build it, and to build on it, is the best possible way ahead.

One remarkable characteristic of current times is is the speed with which innovations emerge, propagate and are adopted. From air travel to GSM, not to mention internet or health services, daily life has experienced sea changes in a very short period of time. User expectations have become increasingly complex and demanding with the same speed. This implies a much closer contact of technical and scientific progress with end users; of research with applied research with innovation, ie with societal adoption.

IT based changes have proven once and again unexpected, some would say uncontrollable. The education sector has been particularly reluctant to taking them on. There is a repeated historical phenomenon of academia becoming entrenched in existing cultural patterns and values to the point of refusing new horizons. HE is immersed in a world wide process of scientific, economic, social and cultural change and needs to perform a conscious adaptation to it. Ignoring what is happening, losing synch with culture is the main risk.

Manuel Heitor

Manuel Heitor was appointed in March 2005 Secretary of State for Science, Technology and Higher Education in Portugal. He was the founding director of the Center for Innovation, Technology and Policy Research at the Instituto Superior Técnico (IST), the engineering school of the Technical University of Lisbon, which named in 2005 one of the top 50 global centers for research on "Management of Technology" by the International Association of Management of Technology, IAMOT. After completing in 1985 a PhD at the Imperial College, London, and a post-doctoral training in 1986 at the University of California San Diego, both focused on combustion research, he has served as a Professor at IST, as well as its Deputy-President (1993-1998). He is also a Research Fellow of the University of Texas at Austin's Innovation, Creativity, and Capital (IC2) Institute. His research work includes publications initially in the area of combustion, but since the mid 90s he has focused on the management of technical change and the development of science, technology and innovation policies. He chaired during the period 1996-2005 the Organizing Committee of the series of International Conferences on "Technology Policy and Innovation", and his co-editor of a related book series through Purdue University Press. He was co-founder in 2002 of "Globelics - the global network for the economics of learning, innovation, and competence building systems". He is a member of the Science and Technology Council of the "International Risk Governance Council", IRGC.

In your view, what is the most probable or desirable future scenario for government's role in higher education?

Strengthening the knowledge dimension and external societal links (i.e., "system linkages") are critical in making the institutional changes required for tertiary education institutions, TEIs, to meet the needs of global competition and the knowledge economy. In public policy terms, by focusing governmental and political actions on the growing appropriation of scientific and technological culture by society and on the external dimension of knowledge institutions, we require tertiary education institutions to strengthen their capacity to make the critical internal changes for modernising their systems of teaching and research within a path of diversity and specialisation, without compromising quality. Furthermore, by strengthening their institutional integrity together with enhancing their external links with society, tertiary education institutions are asked to carefully improve their relationships with economic, social and political actors, thereby creating "new" reinforced institutions that have gained societal trust. And this must be achieved in a way that will promote new leaderships for our institutions.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

I would like to follow Charles Vest , former MIT´s President, in his most recent book in that "…what is best about American higher education – we create opportunity. That is our mission. That is our business. That is first and foremost what society expects of us."

My underlined assumption is that "students matter" and that it should be clear that the main reason for governments to increase funding for tertiary education is to increase participation rates and extend the recruitment base and the number of students in tertiary education . At the same time, it

is also clear that new opportunities are required to give students more flexible pathways across different types and levels of educational qualification, including through recognition of prior learning and credit transfer, in order to reduce repetition of learning. As a result, increased diversified systems are required

What do you consider to be the main future challenge(s) for higher education systems? Why?

I suggest four selected and interrelated issues, which are considered to be central to understanding the knowledge dimension and external societal links of tertiary education institutions, namely: i) improved funding and equity for enlarged participation rates; ii) strengthening knowledge production and internalization for improved knowledge networks; iii) fostering diversified systems for improved knowledge transmission and learning; and iv) strengthening institutional integrity together with systems linkages.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Limiting institutional autonomy and focusing governmental and political actions on the internal dimension of tertiary education institutions: it would reduce the capacity of institutions to make the critical internal changes for modernising their systems of teaching and research within a path of diversity and specialisation. Ultimately, it would compromise quality.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The need, and the opportunity, to accelerate reform of TEIs in order not only to stimulate progress across the whole tertiary education system, but also to foster the emergence and strengthening of our institutions which can demonstrate their excellence at international level. But accelerating reform requires the need to concentrate tertiary education reform on a myriad of issues that will ultimately open the "Black Box" associated with all type of institutions, preserving autonomy while building-up a new set of relationships with society at large and introducing an "intelligent accountability" associated with a renewed structure of incentives.

To cope with such a variety of demands and with a continuously changing environment, we all know that the tertiary education systems, in particular, needs to be diversified. But the challenge of establishing modern tertiary education systems requires effective networks and a platform of research institutions, notably for stimulating the political debate among the various stakeholders and for assisting in the networking of national constituencies promoting the positioning of our institutions in the emerging paths of brain circulation worldwide.

And this must be achieved in a way that will promote new leaderships for our institutions.

By focusing governmental and political actions on the external dimension, tertiary education institutions are asked to strengthen their capacity to make the critical internal changes for modernising their systems of teaching and research within a path of diversity and specialisation, without compromising quality. Furthermore, by enhancing their external links with society at large, higher education institutions are asked to carefully improve their relationships with economic, social and political actors, thereby creating "new" reinforced institutions that have gained societal trust.

Lizzi Holman

Lizzi Holman is a Senior Policy Adviser in the Education and Skills Group at the Confederation of British Industry. Lizzi leads on Higher Education policy for the team, and supports the CBI's flagship initiative to bring business leaders together with universities in the Higher Education Task Force. She is also the main contact for UK universities who are members of the CBI. Prior to joining the CBI in 2007, Lizzi worked for a private research consultancy in the North East of England, undertaking a range of social and economic research projects for clients including the Learning and Skills Council, regional development agencies and sector skills councils. She took this role after completing her postgraduate work on Social Policy at the University of York.

In your view, what is the most probable or desirable future scenario regarding labour market changes and higher education?

Looking to the future, CBI surveys show that almost three quarters of employers (71%) expect increasing demand for higher level skills. And with three-quarters of the 2020 workforce in the UK already having left compulsory education, increasing the proportion of the workforce holding graduate level skills will require inflows of young graduates and training those already in the workforce. It is therefore desirable that universities are increasingly able to provide those already in the workforce with higher level skills and the knowledge the economy needs. There is also a greater role for business to communicate the skills needed and to develop partnerships with universities to meet these needs.

Bruce Johnstone

D. Bruce Johnstone is Distinguished Service Professor of Higher and Comparative Education Emeritus at the State University of New York at Buffalo. His principal scholarship is in international comparative higher education higher education finance, governance, and policy formation. He directs the International Comparative Higher Education Finance and Accessibility Project, an eight-year examination into the worldwide shift of higher education costs from governments and taxpayers to parents and students. During a 25-year administrative career prior to assuming his professorship at the University at Buffalo, Johnstone held posts of vice president for administration at the University of Pennsylvania, president of the State University College of Buffalo, and chancellor of the State University of New York system. Johnstone was the *Distinguished Scholar Leader* in 20007-08 of the Fulbright *New Century Scholars Program*. In the 2006-07 academic year, he was a part-time *Erasmus Mundus* lecturer in higher education administration at the Universities of Oslo and Tampere. He has written or edited more than 115 publications and is best known for his works on the financial condition of higher education, the concept of learning productivity, student financial assistance policy, system governance, and international comparative higher education finance. His newest book (2006 by Sense Publishers) is *Financing Higher Education: Cost-Sharing in International Perspective*. Johnstone holds Bachelors (in economics) and Masters (in teaching) degrees from Harvard, a 1969 Ph.D. in Education from the University of Minnesota, and Honorary Doctorates from D'Youville College, Towson State College, and California State University at San Diego.

In your view, what is the most probable or desirable future scenario for financing of higher education?

The most desirable future for the financing of higher education is that governments recognize the importance of public (tax) revenues in recognition of the role of higher education for the social, political, and economic good of nations – but that students and/or parents also contribute in recognition of: (a) the very considerable private benefits that accrue to both students and parents; (b) the inherent limitations in most countries on tax revenues and the socially and politically compelling competing public needs; and (3) the equity or "fairness" of some cost-sharing in light of the fact that taxes in almost all countries are proportional or regressive (only rarely are truly *progressive*) and the recipients of higher education are disproportionately from middle and upper classes.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

[The limitation of the answer to only one is a foolish constraint as the objectives are inherently multiple.] If I am forced to cite only one objective, it would be to maximize human potential – in a cost-effective and equitable manner – for the benefit of the individual and the greater society.

What do you consider to be the main future challenge(s) for higher education systems? Why?

1. The already high and annually increasing cost trajectory, which in almost all countries exceed the trajectory of likely or even possible public revenues, and exceeds possible private revenues as well.

2. The tendency of higher education to perpetuate or even to widen inequalities: that is to accelerate the intergenerational transmission of status, wealth, and influence.

3. The politicization of higher education – including its faculty, leaders, curriculum, financing, standards, and admittance of students.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

In the matter of higher educational finance, the worst way is to accede to pressure from students and/or politically influential families to preserve the pretence of free higher education – meaning higher education for themselves or their children paid for by the average taxpayer / consumer – with the resulting austerity and consequent impoverishment of the institutions themselves and/or the fierce and totally inequitable limitation on accessible capacity.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

To support substantial university (and other institutions of higher education) autonomy in the hiring and compensation of faculty, admission of students, setting of curricular standards, and allocation of budgetary resources; to require a reasonable accommodation of student numbers with real efforts to accommodate socio-economic, ethnic, and linguistic diversity; to be accountable for student progress and scholarly output.

The risks, of course, are that all of these imply considerable subjectivity, and are inevitably subject to the distortions of politics, ideology, and self-interest.

In the end, countries must fall back on the established tradition of <u>academic integrity</u>: our main hope, which must be recognized and nurtured by governments.

Michelle Lamberson

Dr. Michelle N. Lamberson is the Director of the Office of Learning Technology (OLT) at The University of British Columbia in Vancouver, Canada, a role she has held since 2002. Her department is responsible for supporting and managing the development and delivery of the majority of distance education courses at the University, as well as advocating for the needs of distance learners. In addition, the OLT is facilitates learning technology initiatives across the University, including serving as the business owner of learning technology systems. She is a distance educator, teaching an online course in Earth and Ocean Sciences. Michelle has a 13-year involvement in online learning, receiving an Educom Medal in 1997 for her work in developing resources that support online learning in the geosciences. Her early involvement in web-based course development and faculty support at UBC led her to join WebCT for three years in a variety of roles related to training, community facilitation and best practice use of the system. Prior to that, she was the EdTech Coordinator for UBC's Faculty of Science and a Sessional Lecturer in Earth and Ocean Sciences. Michelle's discipline area is Geology, receiving her degrees from The University of British Columbia (PhD, 1993), The Pennsylvania State University (MS, 1987) and Boston University (BA, 1981).

In your view, what is the most probable or desirable future scenario regarding the use of new technologies in higher education?

I always struggle with the concept of "new technologies", as the term is such a moving target! Recently I read an excerpt from our university's 1938 Presidents Report in which the Director of the Extension Division (founded two years earlier in 1936) discussed how they were "…exploring new media for equalization of opportunities offered by the University". He (Gordon Schrum) referenced their intention to use radio and directed study groups to reach underserved and remote areas of the province of British Columbia. The juxtaposition of these two intrigues me, as it speaks to the need to deploy technology with educational purpose, while supporting the social context of learning. While specific applications and products have changed since 1938, the use of technology to bridge distances (even if it is only from the front to the back of a classroom) as well as to support community engagment and content delivery have held constant. For me, a desirable future scenario is that we continue to keep technology and educational purpose tightly linked, and that deployment focuses on addressing issues of pedagogy, expanding access to high quality learning experiences and developing ways to capture information that will enable us to become even better teachers. In particular, I would like to see us invest more in implementing technologies that enhance students' ability to express ideas, receive constructive feedback and showcase/document learning. We need to make it easy for students to store, access and reflect on their learning products as they move through their course of study and into their careers. From an institutional viewpoint, this means improving system usability, streamlining data exchange and facilitating content mobility as well as building strong and ongoing relationships with our students. At the same time, we need to enable faculty to spend more time supporting student learning as opposed to administering courses. Though there has been significant improvement in learning technology tools over time, there is not enough effort going into thinking about the workflows associated with teaching and how that is implemented in software design. Consequently, faculty are reluctant to incorprate technologies into their teaching because of added workload. Time is our most precious commodity.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

In my opinion, the most important objective for higher education now and in the future is to be relevant. If we think of the university as an idea, it is a place that inspires people and to which people aspire. To me, that speaks to the University's position as a place that people believe understands knowledge – its creation, dissemination and stewardship. Teaching is a process that helps students learn and discern, preparing them to contribute to society in meaningful ways. Research enables us to pursue ideas, discover new knowledge or further existing understanding, and invent new products and processes that contribute to the ongoing advancement of society. Service is a means of sharing the intellectual outputs of the University in grounded ways. To remain relevant requires that a university deeply understand its community and is responsive to the changes that affect their lives and dreams. Probably nowhere is relevance more important than preparing students to be creative contributors to a workforce that will change many times over in a person's lifetime. If the focus of their education is on consuming, as opposed to creating, revising and extending knowledge, their ability to adapt will be limited and the university's relevance severely compromised.

What do you consider to be the main future challenge(s) for higher education systems? Why?

In alignment with the answer to the previous question, I believe that the main future challenges for higher education systems revolve around the ability to demonstrate relevance to the community in accessible ways. The community for higher education systems comprises diverse stakeholders, varying according to its mission and mandate. My experience has largely been in the public sector in the Canada and the United States, so my comments centre in that arena. Demonstrating relevance to government in a time of increased fiscal scrutiny challenges institutions to create meaning out of the complex data generated within the university system. What output measures can be used to capture the broad range of activity within the university? How do we devise systems that enable us to gather rich data from diverse sources in scalable ways? How do we collect meaningful data that inform practice while respecting individuals' privacy? Demonstrating relevance to students, particularly those just starting in their careers, is not a task, but a process. Students bring to university their own perceptions of how education works and the university often challenges those perceptions. For example, in situations like that of UBC – a large, publicly funded, research-intensive institution – the competition for admission is intense. The skills that students believe led them to success in their high schools (e.g. an ability to memorize content) are not those which enable them to excel in university (e.g. conceptual understanding, problem solving). Moving students from passive information consumers to knowledge creators is a core, ongoing challenge regardless of the type of university. Exacerbating this challenge is the growing disconnect between the technology-enhanced world students live in and the seemingly unchanging University world – in particular the technologies used by their instructors in classroom situations. Keeping pace with technological change is difficult; getting out in front of it is even more daunting. Addressing both the student-related and government challenges speaks to the need to demonstrate relevance to a diverse set of stakeholders.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

In my opinion, the worst, but possible way that institutions can respond is to fall back on "tradition", and consider the need to address the relevance challenges described as "passing fads". Considering the long history of many institutions, and the changes that they have already endured, the likelihood that some institutions will respond in this way is high. Examples of this type of response can be seen in the e-learning arena. The for-profit move of institutions that resulted in well-publicised failures has coloured opinions of the methodology; these scenarios are used as justification for not expanding the use of learning technologies. However, institutions that have moved with deliberate purpose and created programs in alignment with their mission have demonstrated success. Responding to government accountability measures with cynicism (afterall, governments do change), and providing only those numbers that are required without thinking about how the data can be used to affect change is possible, but will not move institutions forward. The strongest likelihood that institutions will fall back on tradition, in my opinion, lies in the challenges associated with students, and particularly related to technology use. This is unfortunate, as the newer forms of technology, including those that emphasize personal publishing and allow multimodal collaboration hold strong promise for promoting new forms of scholarship and enabling a shift in student role from information consumer to knowledge producer.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

This is the most difficult question that you have put before us! The challenge of demonstrating relevance calls for institutions to be in tune with their stakeholder communities, as well as prepared to affect deliberate and considered change in response. At the institutional level, the most concrete expression of a university's intentions is its vision, mission and strategic plan. In my opinion, the best place to begin to address the challenges lies in the framework provided by these core institutional documents – starting from their development and through the cycles of revision. Engaging stakeholder communities in ongoing dialogue and providing meaningful opportunities for them to contribute will support institutional efforts in this regard – particularly where students and key community leaders are concerned. In addition, there is a strong need to promote and nurture a culture that considers understanding and responding to change as an operational imperative – something to be embraced and studied, as opposed to avoided an ignored. For public institutions in particular, the relationship with government and funding agencies is an ongoing challenge, particularly with respect to accountability and performance measures. To begin to tackle this, institutions might consider developing a collaborative research agenda that can be used to identify ways to measure the key outputs of the university. This means examining all of the available data sources and researching their value in key areas such as curriculum evaluation and supporting student learning. For example, our major institutional systems (e.g., the learning management system, student information system) are tremendous warehouses of tracking data on the types of resources that students are using – are there ways to leverage these data to inform the practice of individual teachers and students as well as the institution? This is a brand new field so much is still unknown. Privacy is a key consideration in this regard. How should such data be used? How meaningful are aggregated data? At what level do we interpret data (lesson, module/course, program or higher)? These questions are tough ones, but the university should be driving this agenda as it speaks to its core mission. The use of technology to support education is being demanded by students, but as responsible stewards of the public trust, we also need to be actively researching the impact of use in terms that are meaningful to understanding if and how well we are achieving the goals expressed in the vision, mission and strategic plan.

David Lammy

David Lammy was appointed Minister of State for Higher Education and Intellectual Property at the Department for Innovation Universities and Skills, (DIUS) in October 2008. Previously David was the Minister for Skills at DIUS with responsibility for the Commission for Employment and Skills, Leitch implementation, Train to Gain, Skills academies, Skills for Life and apprenticeships. David Lammy was appointed as Minister for Culture at The Department of Culture Media and Sport in May 2005 with responsibility for arts, galleries, museums, libraries, heritage and cultural proprieties. He was previously appointed as Parliamentary Under-Secretary of State at the Department for Constitutional Affairs on 13 June 2003. He was elected Member of Parliament for Tottenham in June 2000 following the death of Bernie Grant. Before being appointed as Parliamentary Under-Secretary at the Department for Constitutional Affairs, David Lammy was Parliamentary Under-Secretary for Health, appointed on 29 May 2002. He was Parliamentary Private Secretary for Rt Hon Estelle Morris at the Department of Education and a member of the Greater London Authority with a portfolio for Culture and Arts. David Lammy studied Law at the School of Oriental and African Studies (SOAS) in the University of London and was called to the Bar of England and Wales in 1995. He achieved a Masters degree in Law at the Harvard Law School in 1997. He has practised in both England and the USA.

In your view, what is the most probable or desirable future scenario for government's role in higher education?

It is possible to see elements of all four [CERI] scenarios in the UK at present. We are seeing universities collaborating with peers across the globe in research and increasingly in teaching; we are investing in new small community-focused HE provision; we are seeing increasing levels of commercial activity, involving knowledge transfer to businesses and the creation of new commercial ventures; and there is an important role for choice, with universities facing incentives to respond to demand. It is not a matter of choosing between the scenarios. All of them are relevant to today's world and tomorrow's.

An important role for Government is to ensure a balance between these scenarios as they unfold. This means ensuring that there is diversity within the university sector, to meet the diverse challenges we face. Government should promote a healthy ecology within the system, ensuring that higher education is able to respond effectively to all the legitimate calls that are made on it by society.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

At root, higher education is about knowledge and understanding. About extending that knowledge through research, and imparting knowledge to learners. So the most important objectives for higher education in the future must be excellence in research and in teaching. It is impossible to imagine any scenario for 2030 in which society would not be enriched by such excellence.

There are then a number of important further questions, such as how we can ensure access to learning for all people in society? How can businesses and public services harness the power of learning and wider knowledge? What distribution of universities and organisation within universities will best achieve these objectives? These and other questions are inevitably the ones on which we as

policy makers will spend most time. But as we answer them, let us not lose sight of the fundamental and timeless purposes of higher education.

What do you consider to be the main future challenge(s) for higher education systems? Why? (Please indicate no more than three main challenges)

Three challenges that I believe to be important are:

- For universities to identify the areas where they really can achieve excellence, and also the institutions where they can most effectively collaborate. This may mean making some hard choices about which areas a university should no longer engage in

- Developing teaching methods and a curriculum relevant for our times. This includes the imaginative and effective use of learning technologies; providing programmes that are accessible and valuable for non-traditional groups of learners, such as mature students; and increasingly allowing the learner to plan their own development, breaking down barriers between academic departments and individual universities

- In the future the economic case for public and private investment in HE will become even stronger than now; but public and private funders will face increasing demands on budgets because of secular trends such as an ageing population, increasing health costs, and climate change. An ability to control costs and to demonstrate this to funders will be paramount.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

There are two possible fundamental mistakes, which are polar opposites to each other.

One would be to establish a detailed plan for the next two decades. Such an approach would be counterproductive. Its would consume resource and energy. But inevitably some of the assumptions that it made would be wrong. At worst, governments and universities could find themselves tied into a set of actions increasingly irrelevant to the world around them.

But we should also avoid the opposite temptation, of simply letting the future be determined by a set of uncoordinated individual decisions. If we do not have a vision of a good higher education system for the long term and an awareness of challenges, government is unlikely to invest effectively; and universities will not develop sound strategies for the future. The diversity that we need will not come about. A clear and open debate needs to take place between all those involved in delivering higher education and this is what we are aiming to do in England at the moment.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Working towards a sound future for higher education must involve an effective partnership between government and universities. That is why in England we have launched a debate on the future of higher education which is involving universities themselves and all those who have a stake in the future of higher education. In 2009 we shall be producing a Framework for the future development of higher education which will include not just a vision of how Government should act, but also a vision for how universities themselves can meet the challenges ahead. The Framework will not be a rigid plan. It will be capable of being adjusted over time as the world changes. But we intend that it will set a compelling vision for long term success, and allow all parties to take stock of how far we are progressing towards that vision.

Richard Lewis

Richard Lewis has had a varied career in Higher Education. Following a period as Professor of Accountancy at the University of Wales, he occupied senior management positions in a number of institutions during which time the focus of his interest moved from resources to the not unrelated area of quality assurance. He was the Deputy Chief Executive of the Council for National Academic Awards (CNAA), the degree awarding and quality assurance body for the Polytechnic and College sector of UK Higher Education. While at the CNAA he was responsible for the introduction of the first UK wide system of Credit Accumulation and Transfer. With the ending of the binary system in the United Kingdom in 1992, and the subsequent demise of the CNAA, his career took another turn when he joined the UK Open University (OU) – the country's leading distance learning provider. He served as Pro-Vice-Chancellor with special responsibility for services, both academic and administrative, provided to students. Early in his career he was a visiting Professor at the University of Washington, Seattle while later he spent two yeas in the United States as Interim and then Associate Chancellor of the United States Open University. Following his retirement from the OU he is actively engaged as a higher education consultant. He has extensive international experience and has served as a consultant in over 20 countries. He has also worked with a number of international agencies including the World Bank and UNESCO. He has been closely involved with the work of the International Network of Quality Assurance Agencies in Higher Education (INQAAHE) since its establishment in 1991; he served as its President from 2003 to 2007 and remains one of its Directors.

In your view, what is the most probable or desirable future scenario for quality assurance in higher education?)

<u>Desirable</u>

A system that has the following features

- That encourages Higher Education Institutions (HEI) to develop their own internal quality assurance procedures. That has an appropriate balance between internal and external procedures with the balance shifting to internal procedures as HEIs demonstrate the adequacy of their internal mechanisms

- A system that is flexible to recognise the very wide diversity in types of HEI from the large 500 year old university to the newly established specialist provider that may have only a handful of students.

- That is subject to a benign government that recognises the importance of an effective system of quality assurance for Higher Education but which dies not seek to interfere whether the running of the system but which nonetheless will play its part as a stakeholder on the part of the wider community and is prepared to step in if the system starts to fail.

- That does play proper regard to output measurements in the broader sense but which also recognises that many of the important outputs of an HE system are not capable of measurement.

- That keeps a balance between having a positive relationship with its local community of institutions (which may not necessarily all be part of one jurisdiction) and relating to the

international community by, for example, being prepared to rely on the work of quality assurance bodies in other countries.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To contribute to the social and economic benefit of all humankind.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Money

The need to compete with other worthwhile causes for economic resources whether taxpayers money channelled through government or the same people's resources flowing through the commercial sector.

This is going to be a particularly problem in the case in those countries which will need to achieve significant increases in participation rates over the next half century.   But it will also be problem for many developed countries especially those within aging populations.

Diversity

While quite a few countries have moved from elite to a more populist or even a mass system of higher education many of the features of the elite system remain.   There is a real danger in many countries that HEIs that are not research intensive or otherwise exhibite the historical characteristics of an elite institution will be undervalued as will be their graduates.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Money

So fat as teaching and learning are concerned retain the same model but spend less so that students will increasingly learn from redigested material, have even more reduced access to personal support and discussion groups and receive even less formative feedback.

I think there is a high level of risk attached to this scenario.

Diversity

The acceptance of a two tier system of higher education or possibly the relegation (either formally or informally) of many institutions from the higher education system. At its worst it could lead to a situation where there would in effect be two tiers of academic qualification with the graduates of the lower tier institutions finding it increasingly difficult to enter certain types of employment or progressing to universities in the upper tier.

To an extent elements of this scenario already exist.   I think that there is good chance that the situation will deteriorate but to be positive I think the more extreme manifestation of the model will be avoided.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Money

To minimise the chance of it happening or, to be more realistic, to lessen the impact the HE sector, and its champions, need to promote the benefits of HE to the wider community. As part of this campaign more attention needs to be given the social returns while not neglecting the economic returns.

However, it is most unlikely that expenditure per student will be maintained at existing levels, especially in countries where student numbers are increasing significantly.   In such circumstances the best that could happen would be to develop ways of teaching and learning that will enable to students to develop the desired range of subject specific and generic competences but at a lower cost, this will probably depend on a greater use of IT even for the campus-based student.

A more flexible approach to modes of learning could be adopted with less emphasis on the full-time campus based mode and more on the part-time, distance and especially blended learning modes.

Diversity

The best approach is very much bound up with quality assurance. The system should be such as to ensure that the "minimum" standards that are associated with awards is at an acceptable level or that the "worst is good enough".

In addition greater emphasis should be given to the functions of higher education other than pure research viz applied research, the communication of knowledge, teaching and learning and service to community. Means should be found to identify and celebrate excellence in these fields and the view that the only excellent HEIs are successful research intensive universities needs to be resisted.

Francisco Marmolejo

Francisco Marmolejo serves Executive Director of the Consortium for North American Higher Education Collaboration (CONAHEC), a network of more than 130 colleges and universities primarily from Canada, the U.S. and Mexico. CONAHEC is headquartered at the University of Arizona, where Francisco also serves as Assistant Vice President for Western Hemispheric Programs. He has taught at several universities and has published extensively on administration and internationalization. Marmolejo has consulted for universities and governments in different parts of the world, and has been part of OECD and World Bank peer review teams conducting evaluations of higher education in Europe, Latin America and Asia. During the 2005-2006 academic year, while on sabbatical leave, he collaborated as an international consultant at the Organisation for Economic and Co-operation Development (OECD), Programme on Institutional Management of Higher Education (IMHE), based in Paris. Marmolejo holds a M.A. in Organizational Administration from the Universidad Autónoma de San Luis Potosí, received professional training at the JFK School of Government, Harvard University, and has conducted doctoral work at the Universidad Nacional Autónoma de México.

In your view, what is the most probable or desirable future scenario for diversity and equity in higher education?

A desirable scenario is one in which diversity and equity will be properly addressed in higher education at the international level. However, I am afraid that a most probable scenario is the one in which on a worldwide basis unequal access to higher education will prevail, and in which still important sectors of our societies will have limited options for access and success.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To provide equitable, accessible, and meaningful social and economic mobility for our societies through the means of teaching, research and public service.

What do you consider to be the main future challenge(s) for higher education systems? Why?

The main future challenge for higher education systems, no matter where, will be to provide relevant education, research and public service, in an environment will be characterized by increasingly competing social demands, limited resources, and increased accountability

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Unfortunately in some countries/regions a response to this present/future challenge in higher education has been the development and implementation of policies and strategies which limit institutional autonomy, constrain academic innovation, and dramatically reduce the possibilities for

higher education institutions to become more flexible, entrepreneur and relevant to the needs of the surrounding communities.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Experience has proved that it is more effective to establish higher education policy at the national and regional levels empowers institutions, provides appropriate incentive based funding and allows institutions to become more flexible in their academic offerings and in their administration. Sound accountability mechanisms provides appropriate counterbalance.

Petr Matějů

Petr Matějů is director and chaired Professor of Sociology of Education and Stratification at the Institute of Sociology of the Czech Academy of Sciences. At the same time he serves as a director of the Department for Analysis and Strategy at the Ministry of Education, Youths and Sports. Between 2006 and 2007 he served as a Deputy Minister for Higher Education and Research. Between 1998 and 2002 he was a member of the Czech Parliament, where he chaired the Committee for Science and Higher Education. In July 2002 he established (and until September 2006 also chaired) the Institute for Economic and Social Analysis, an independent think-tank addressing and promoting reform processes and policies in the Czech Republic and other Eastern and Central European countries. Currently he is a Fulbright *New Century Scholar* participating at the program Higher Education in the 21st Century: Access and Equity.

In your view, what is the most probable or desirable future scenario with regard to social equity and higher education?

Given the historical and social circumstances of East Central Europe, particularly the Czech Republic, the most desirable scenario with regard to social equity in higher education would consist in successfully implementing tightly linked and well coordinated reforms of secondary and tertiary education. The former should aim at reducing differentiation between types of secondary schools, eliminating early tracking into different types of schools, and – consequently - diminishing the currently very strong relationship between social background and the type of attended secondary school. Reform of tertiary education will increase accessibility and participation by means of further diversifying the system, and would require the introduction of an efficient system of student financial aid and deferred tuition fees.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Make the most of the available human capital of the country. Other objectives (equity, economic competitiveness, social and cultural development) will be achieved more easily if human potential is unfolded and developed by achieving the highest possible education.

What do you consider to be the main future challenge(s) for higher education systems? Why?

1. Fiscal constraints for investing in higher education from public resources; this is due to demographic developments and changing political priorities for public spending;

2. The continued resistance of politicians to allow the introduction of tuition fees that would compensate for inadequate public funding and would increase the efficiency of the entire system of tertiary education; unfortunately, the majority of voters, particularly older ones, are more interested in other issues than higher education.

3. To make higher education one of the most important instruments of upward social mobility; there is a lack of funding needed to increase participation from lower social strata.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Blaming others and doing nothing because of the lack of political will and courage to implement reform scenarios proposed by experts.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Using the existing evidence to open a professionally moderated public debate on the necessity of reforming both secondary and tertiary education. That will in turn create a more supportive climate for politicians and policy makers to launch reform processes.

Grant McBurnie

Grant McBurnie is senior research associate in the Globalism Institute at Royal Melbourne Institute of Technology (RMIT) University, Australia. Previous roles include executive officer international and director of transnational quality assurance at Monash University, Australia. He is currently working on a ten-country comparative study on 'governing cross-border higher education'. His research focus is on internationally mobile students, programs and institutions, particularly in the Asia Pacific region. In 2007 Routledge published Transnational Education: Issues and trends in offshore education, by Grant McBurnie and Christopher Ziguras.

In your view, what is the most probable or desirable future scenario regarding innovation and international mobility in higher education?

A likely scenario in the next two decades is international competition (at least among more developed countries) to address demographic change (in particular the variations in student numbers in the traditional 18-25 age group) by attracting international students (both from less developed countries and other developed countries) to fill domestic vacancies for university places (especially research students) and encourage them to stay on as skilled migrants.

The most desirable scenario is international cooperation to effectively address: mutually beneficial approaches to the relationship between student mobility and skilled migration; developing/refining internationally transparent and comparable information about education programs; good governance principles for public, private and hybrid providers; ongoing refinement of quality assurance principles to keep up with (or anticipate) innovations/developments in international education.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Only one objective? Ensuring equitable access to affordable, quality education that strikes an effective accommodation of the following: equipping gradutes well for the workforce/professional life (and any subsequent updating of professional readiness); addressing national priorities; wider community engagement (playing a constructive role in the issues affecting people, public debate etc so that it is not only staff and students that benefit from higher education); promoting international cooperation.

Maybe that's more than one objective (though I did fit the parts into one sentence ... semi-colons are very handy!).

Short version: higher education should be beneficial to as many people as practicable, even if they don't attend.

What do you consider to be the main future challenge(s) for higher education systems? Why?

1. As mentioned above, it's no surprise that one major challenge will be demography. Many countries face a combination of relative decline in younger population (the main university catchment age) together with a relative growth in older population (cranky old baby boomers, requiring major health

care expenditure, and pension payments – so, a squeeze on budgets). There will be increasing international competition to attract students (to keep numbers up and the cost-per-head down); to attract postgraduate students to fill research gaps; and also to attract skilled migration to fill labour gaps. These priorities must be balanced with maintaining educational values, and an ethical approach to issues of "brain drain". I have already heard some folks in education departments saying "we are concerned that we don't want to become de facto migration agents" (and priority given to "those who will stay", compared to academic merit "those who have the grey" [matter ie brains], and the revenue focus on "those who will pay" – not that these are mutually exclusive).

2. Effective governance of higher education systems, in a scenario where there may be a proliferation of different provision across borders: further growth of internationally mobile programs and institutions (some of them perhaps of dubious quality) that can fall between regulatory cracks; and growth in programs aimed primarily at attracting international students to stay on as skilled migrants (and may also result in some provision of dubious quality, and a skewing of resources into job-oriented programs).

3. Effective quality assurance, for the same reasons mentioned above

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst ways would be

1. Either extreme of a laissez faire (or leave it to the market) approach to educational mobility (in which quality and public confidence may suffer), or a protectionist approach that reduces the options for access to education. Neither extreme seems likely to be sustained (though there are some examples of protectionism already, and some cases where it can be argued that foreign providers should be more closely regulated).

2. A scenario in which there is an overabundance of programs aimed at filling student/labour shortages, with the effect of "student poaching", education as de facto migration agency, and brain drain for less developed countries. That is a more likely possibility.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Cooperation between: different ministries within countries (eg education, immigration, foregn affairs) tocoordinate priorities; cooperation between countries to develop guidelines principles etc and to share information; cooperation between institutions and other organisations to develop coalitions (perhaps language-based, or diaspora based, or combinations of aid and trade oriented) taking innovative approaches to international education.

The main risks are that: (1) education will be unduly driven by other considerations (migration, revenue raising), to the detriment of quality and balance (2) countries develop cooperative instruments that do not have any practical effect (3) the imperatives for competition will outweigh or undermine efforts at international cooperation.

Malcolm Read

Dr Malcolm Read graduated in 1973 with a degree in Environmental Science from the University of East Anglia and went on to do a PhD at the University of Manchester on the hydrometeorology of a glacial catchment. He then worked in the Overseas Development Administration before moving to the Natural Environment Research Council (NERC) in 1979. He ran the computer department at the Institute of Hydrology before moving into administrative computing to head the Joint Administrative Computing Service of NERC and the, then, Science and Engineering Research Council in 1988. Since July 1993 Dr Read has worked for the Higher and Further Education Funding Councils as the Executive Secretary to the Joint Information Systems Committee (JISC). Apart from his overall responsibility for the Executive he has been particularly involved in ICT policy and strategy development in post 16 education and research. He is also heavily involved in international ICT infrastructure activities particularly in Europe and the United States.

In your view, what is the most probable or desirable future scenario regarding the use of new technologies in higher education?

ICT is the most significant new technology with the potential to transform HE. In particular better integrated and effective use of information resources is necessary to improve organisational efficiency, exploit research resources, enhance learning and teaching, and support outreach activities.

Information should be treated as a strategic resource: as is the case with human and financial resources. Information should be meaningfully joined up across research, teaching and administrative environments.

Research outputs (eg. scholarly papers and particularly data) should be properly curated and preserved for re-use. Much data is discarded at the end of a research project; this is often a wasted resource that is often expensive to collect and, in some cases, cannot be replicated. Research data should be properly managed and made readily available, with appropriate safeguards, to other researchers. A properly managed resource of research data could greatly increase the efficiency of research and stimulate new discoveries and especially provide a broad base of experimental data to test models and hypotheses against.

Learning and teaching is already greatly enhanced by ICT, especially through learning management systems, Web 2.0 applications and on-line resources. These resources would benefit from professional management and, particularly in the case of open educational resources, being placed in a pedagogical context. There is considerable convenience and benefit to students where on-line resources are made available, particularly to support distance and flexible learning. Universities need to exploit on-line resources more effectively to provide unmet demand for higher education from students who cannot, or choose not, to enjoy a conventional campus based learning experience.

Knowledge transfer, engagement with industry and other outreach activities could also benefit from exploiting informational resources more effectively.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To raise the skills and knowledge base of a country's workforce to promote and stimulate economic growth, innovation and intellectual advancement.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Economic sustainability and a compulsory education system able to produce students of adequate calibre to benefit from further and higher education.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The widespread privatisation of HE which would lead to a risk of lower standards to meet commercial pressures.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

A mixed public/private funding model, clear institutional missions directed at achievable goals in terms of research activity and addressing different student markets. Growth through an international focus addressed to unmet need for Higher Education in SE Asia, Middle East and the developing world.

Marino Regini

Marino Regini is Vice-Rector of the University of Milan and Professor in this University, where he teaches courses in Economic Sociology, Political Economy and Comparative Industrial Relations. He studied Sociology at Columbia University and the University of California, Berkeley, and has been visiting professor in several US and European universities. He is the past-president of the Society for the Advancement of Socio-Economics. Among his several writings, the following volumes have been published in English: *Why De-Regulate Labour Markets?* (2000), *Uncertain Boundaries. The Social and Political Construction of European Economies* (paperback edition 2006), *The Future of Labour Movements* (1992) and *State, Market and Social Regulation* (1989, with P. Lange). Professor Regini's main thematic and geographic area of interest is changing relationships between higher education and the economic system in Western Europe.

In your view, what is the most probable or desirable future scenario regarding labour market changes and higher education?

As far as Continental Europe is concerned, reform of the "European social model" has been on the political agenda for some time now. Whether it will go towards further de-regulation as in Anglo-American economies or towards the Nordic model of "flexi-curity", European labour markets will become more flexible, as well as more polarized between a low-skill and an increasingly important knowledge-intensive sector. Higher education institutions will be required to provide the future "knowledge worker" with not just technical and specific skills but also a broader, multi-disciplinary basis as well as social skills.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To keep providing leading-edge, innovative, basic research, as well as highly-skilled "knowledge workers" even in excess of actual labour demand, in order to make it more convenient for companies to follow a "high road" to competitiveness

What do you consider to be the main future challenge(s) for higher education systems? Why?

The main future challenge from the point of view of relationships with the labour market will be for higher education institutions to become very sensitive to the employability of their graduates, but at the same time capable to anticipate the range and type of skills needed by innovative economies without depending on short-term demands from employers

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst way to tackle this future challenge would be for higher education systems to simply look at the past records of graduates' employment and strictly adjust their curricula, teaching methods,

research objects, to such records. In this way they would succeed in avoiding major mismatches between the supply of graduates and current demand, but would amplify the problem of adjusting to rapid obsolescence of technologies and skills. Where a market ideology permeates higher education systems and is not counterbalanced by a more forward-looking strategy of development, this scenario is likely to take place

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best possible way would be providing students with a mix of specific professional skills highly demanded by the labour market, a broad multi-disciplinary training that allows graduates more easily to adjust to variable and rapidly changing work contexts, as well as social skills that are highly appreciated by employers. The risks of this scenario are of course the possibility for graduates to lack in-depth specialization in specific fields while not fully acquiring the ability to keep learning as well as a positive attitude towards flexibility.

Tatsuya Sakamoto

Professor Tatsuya Sakamoto is Vice-President for International Affairs at Keio University, Tokyo. Prior to this, he was Director of the Keio International Center and the Center for Japanese Studies (2003-2005). After obtaining his B.A. (1979) and Ph.D. (1984) from Keio University's Faculty of Economics, Professor Sakamoto became a Keio professor of History of Social and Economic Thought in 1989, focusing, in particular, on David Hume, Adam Smith and the Scottish Enlightenment. Professor Sakamoto has received Suntory Academic Prize (1996) and the Japan Academy Prize (2001). He has international research experience at the University of Glasgow (1984-1986) and Boston University (1997-1998).

In your view, what is the most probable or desirable future scenario for higher education governance?

One extreme scenario is that the social role and significance of higher education will be entirely dominated by market forces in order to meet people's needs for better living and social condition. The opposite extreme is that higher education will maintain its independent status and power against market forces. In Japan's case, its past tradition clearly prefers the second scenario but, in reality, under increasing financial pressure and the declining population of younger generation, the first scenario will have more reralistic impact upon policy makers in both government and HE instituions. It is particularly the case in a short term.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

It is to foster human resources of various kinds highly skilled and motivated to serve the progress of human society in general and to be capable enough to play leading roles in a variety of positions of a given society. Given the increasing number of HE enrollment in developed countries, general role of HE has become to educate and produce highly intellectual human rsources for the ility and progress of a society. Pursuit of universal knowledge and scientific truths are no longer the only and ultimate goal of HE.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Main future challenges are,

1. how to define the ultimate mission and goal of HE (education, research or public service?),

2. how to finance HE under the unprecedented situation in developed countries at least, of universal access to HE,

3. how to internationalize HE in non-English-speaking countries without neglecting the imporatance of native language for profound understanding of any national culture and tradition.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

A. Exclusive choice of either one of the three goals of HE (education,research, service) at the cost of neglecting the others. Under the increasing pressure of global competiton, top universities are going in the direction of research-concentrated strategy of their own institutions even risking the general neglect of education and student's satisfaction. This is highly likely result in many developed countries.

B. Cost of maintaining HE to be entirely borne by the students resulting in the exclusion of the poor from the benefits of HE. Japan has currently seen increasing drop-out rate of students for economic reasons. Scolarship is increased for foreign (and in many cases, relatively richer) students by way of reducing support and service to Japanese students. This is not highly likely because of the imporatance of the native (and poor but smart) students for financial stability of HE institutions.

C. Domination by English of the non-English speaking culture causing a general degradation of the respect for native culture and tradition. Popularity of Japanese university is declining among Korean and Chinese students because of Japanese language skill becoming less and less evaluated in labour market after graduation. This is not also higly likely because majority of Japanese students are not able to survive full-English taught courses and they are the main student body and the main source of university income.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

A. Quality education is systematically supported by quality researchers and teachers, and the final output of the collaboration serves society by means of producing high-quality human resources as potential innovators and leaders in a varity of fields. The main risk here is the general difficulty of nurturing a good educator and a good researcher combined in one and the same individual.

B. A fair and equitable balance between public and private funding to be achieved for HE resulting in a proper cost sharing among students and parents alike. No particular risks are identifiable in this scenario.

C. Incoming foreigh students without the prior native (Japanese) language skill are gradually trained by proper provision of the courses in the language. Since English courses are fully offered concurrently, by the time of graduation, foreign students become quite familiar with both the national and international wealth of knowledge. The high risk here is that the graduating students feel frustrated from poorly offered English courses or from the sense of NOT having acquired the native language.

Jamil Salmi

Jamil Salmi, a Moroccan education economist, is the World Bank's tertiary education coordinator. He is currently a member of the International Advisory Network of the UK Leadership Foundation for Higher Education, OECD's expert group on Assessing Higher Education Learning Outcomes, the Editorial Committee of OECD's Journal of Higher Education Management and Policy, and the International Rankings Expert Group. Prior to joining the World Bank in December 1986, Mr. Salmi was a professor of education economics at the National Institute of Education Planning in Rabat, Morocco. Mr. Salmi is a graduate of the French Grande Ecole ESSEC. He holds a Master's degree in Public and International Affairs from the University of Pittsburgh (USA) and a Ph. D. in Development Studies from the University of Sussex (UK). He also completed an Executive Development program at Harvard Business School. Mr. Salmi is the author of five books and numerous articles on education and development issues. Over the past fifteen years, he has written extensively on tertiary education reform issues.

In your view, what is the most probable or desirable future scenario for financing of higher education?

Increased demand-side funding is good for institutions and the individuals. It puts more responsibility into the hands of students as users of tertiary education.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Preparation for lifelong learning.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Financing, then governance, then changing demographics.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst option is to delay reforms because of their political cost.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best way to tackle the future challenges is to work relentlessly on awareness raising and consensus-building by organizing a public debate with objective information about the present situation in a given country (and the danger of not introducing reform), and by providing examples on good practices in other countries. Empowering higher education institutions through increased autonomy is a useful way to encourage the most innovative institutions to explore new ways, as the example of Sciences Po and the Toulouse School of Economics in France show.

Claude Sauvageot

Claude Sauvageot is the Head of Sector for European and International Relation at the Directorate of Evaluation, Forecast and Performance in the Ministry of Education. This sector is in charge of all matters related to the European and International Affairs linked with Statistics, Indicators, Evaluation and Forecast since June 2006. He is also the Chairperson of the OECD Ines Working Party since March 2008, the Vice-Chair of the INES Advisory group since November 2008. Mr. Sauvageot is the French Representative on CERI (Centre for Research and Innovation in Education) since July 2004 and in the Standing Group for Indicators and Benchmarks of the European Commission since June 2006. He is also an Associate Professor in Education Sciences at Paris Descartes University at the Faculty of Letters and Humanities Paris Sorbonne: courses in educational economics to degree and Master level. Mr. Sauvageot was in charge of the organisation of a French Presidency conference on 'International comparison in education: a European model? 13-14 November 2008 Paris. He is also an author or a co-author of many articles about indicators and information systems, international comparisons and vocational education and training.

In your view, what is the most probable or desirable future scenario regarding differentiation in higher education?

The desirable scenario: a well balanced supply for tertiary education in all the countries and, for large countries, inside the country.

The supply must contain: short vocational courses, bachelor level both well adapted to the province where they are located, master and doctorat with some fields of excellence at the world level.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To give access to a larger number of people with a good quality of teaching

What do you consider to be the main future challenge(s) for higher education systems? Why?

To develop at the same time a larger access and a top level research domain

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

To choose only one of the previous challenges

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

To organise a coherent and consensual mapping of higher education institutions in order to have a network more complementary than competitive

Ulrich Teichler

Ulrich Teichler is professor at the International Centre for Higher Education Research (INCHER-Kassel) and the Department for Social Sciences of the University of Kassel, Germany. Born in 1942, he studied sociology at the Free University of Berlin and received a PhD from the University of Bremen, in 1975. He has been Professor in Kassel since 1978, former director for altogether 16 years of INCHER-Kassel, former dean of faculty, and vice president of the University of Kassel. Professor Teichler has also worked in several international universities including the Northwestern University, the United States, College of Europe in Bruges, Belgium, Hiroshima University, Japan, and the Open University, the United Kingdom, in addition to other temporary teaching assignments and research work in various countries worldwide. His key research areas are higher education and the world of work, international comparison of higher education systems, and international cooperation and mobility in higher education. Professor Teichler has conducted expert and consultancy activities for UNESCO, the OECD, the World Bank, the Council of Europe, the European Commission, various national governments as well as various international and national university organisations. He has served in several boards and executive committees, and is former or current co-editor of various academic journals. He was awarded the Research Prize by CIEE (1997), the Comenius Prize by UNESCO (1998), and the ERASMUS Special Prize 2008 by the German Academic Exchange Service (DAAD). He is Doctor honoris causa of the University of Turku, Finland (2006). Professor Teichler is the author or the editor of more than 1,000 academic publications.

In your view, what is the most probable or desirable future scenario regarding labour market changes and higher education?

A gradual move towards a Highly Educated Society would be most desirable: A large proportion of the population should have a good command of the best established "rules" and "tools" to cope with demanding professional tasks and concurrently be able and motivated to be sceptical, to challenge constantly conventional wisdom to change their work setting pro-actively, thereby contributing towards dynamic change towards a society less stratified according to knowledge, power and living conditions.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To strengthen intrinsic motivation for students. Because the dominant information and incentive systems are designed to reinforce non-creative imitation behaviour. Moreover, extrinsic motivation systems can only work if substantial income differences are preserved instead of efforts made to move towards a Highly Educated Society (cf. OECD: Tertiary Education Reconsidered, 1998).

What do you consider to be the main future challenge(s) for higher education systems? Why?

A. To counteract the misleading notion of a clear divide between "academic" and "professional emphasis" in higher education.

B. To move towards a closer ties of "quality" and "relevance" in teaching/learning and research

C. To promote "horizontal diversity" in terms of diverse substantive approaches of curricula serving substantially diverse activities of professional problem-solving

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst way is to establish information, incentive and reward system which aim to reinforce only vertical diversity (e.g rankings) or to measure or praise only narrow a set of competences (e.g. a higher education "Pisa")

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Don't ask me (ask the almighty).

Pedro Teixeira

Pedro Teixeira is an Associate Professor at the Faculty of Economics – University of Porto and Senior Researcher at CIPES (Centre of Research on Higher Education Policy Studies). His research activities also include an affiliation with PROPHE – Program of Research on Private Higher Education, being a Research Fellow of IZA – The Network of Labour Economists, and a participation in PRIME (an European Union Network of Excellence). His research interests focus on the economics of higher education, notably on markets and privatisation, and in the history of economic thought. Recent publications include several articles in economics and higher education journals and his book "Jacob Mincer – A Founding Father of Modern Labour Economics" (Oxford UP, 2007). He has also co-edited two volumes on "Markets in Higher Education – Reality or Rhetoric?" (Kluwer, 2004), and on "Cost-Sharing and Accessibility in Higher Education – A Fairer Deal?" (Springer, 2006).

In your view, what is the most probable or desirable future scenario regarding differentiation in higher education?

I think the foreseeable strengthening of market forces, namely competition and privatization, will tend to stimulate increasing institutional differentiation. Although many governments, especially in Europe, have previously resisted to that, there are many signs suggesting a shift in this respect, with governments willing to promote it. There is nevertheless that we will see increasing segmentation, rather than just differentiation, in the coming years.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

I think higher education should be primarily about giving more and better opportunities to individuals. These opportunities should not be restricted to better future income and employment opportunities, though these are very important, but also to opportunities regarding intellectual, cultural and artistic development and fulfilment. This requires that we think about long-term relevance and broad intellectual training.

What do you consider to be the main future challenge(s) for higher education systems? Why?

I think the main challenge in the coming years will be to ensure its financial sustainability. Although we all preach about higher education's contribution, we seem to be less willing to contribute to it. All stakeholders, including government, students, families and businesses, should refrain from free-riding the various, enduring and significant benefits provided by higher learning.

A related challenge in the coming decades will be how to balance economic and social relevance, especially in the short-term, with longer and broader purposes of scientific and intellectual development.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

I think there is a significant risk that many HEIs will become trapped in a under-funding situation, because governments face significant limitations and the other stakeholders are not willing to contribute or to increase significantly their contribution. This is more likely if we avoid reforms and just try to stretch an insufficient budget to increasing necessities.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

I think there is a political and social argument to be tackled. If we think that we all benefit from higher education, we all should contribute more. This argument needs to insist more on the pragmatism rather than on the idealism tone that thinks that government funding is endless.

Karine Tremblay

Karine Tremblay – a French national – is a Senior Survey Manager in the OECD Directorate for Education, where she has been since 2001. She has been in charge of the OECD Assessment of Higher Education Learning Outcomes (AHELO) feasibility study since May 2008. Previously, she was an Analyst on the OECD Thematic Review of Tertiary Education. Previously she managed the World Education Indicators programme (2001-2004) and has been working and writing on student mobility, the impact of education on economic growth, the development of a survey of primary schools in developing countries and comparative education trends in Europe, China and India. She holds a PhD in Development Economics from Panthéon-Sorbonne University in Paris where she also lectured. She specialized on internationalization and quality assurance policies and the political economy of reform in tertiary education.

Louis-André Vallet

Dr Louis-André Vallet, born in Angers (France) in 1957, was firstly educated in psychology, then got a PhD in quantitative sociology from the University of Paris-Sorbonne. He is currently senior researcher in the French National Centre for Scientific Research (CNRS). Before entering the CNRS in 1996, he was an assistant professor in the Catholic University of Angers during a dozen of years. Within CNRS, he belongs to the Quantitative Sociology Laboratory in the mixed research unit of CNRS and INSEE (the French Statistical Office) in the context of the Centre for Research in Economics and Statistics (Paris). He has been a member of the editorial board of *Revue française de sociologie* since 1991 and an Associate Editor of *European Sociological Review* since 2000. His main research interests are the sociology of stratification and social mobility and the sociology of education. In the context of French society, he has studied the social mobility of women, the trends in intergenerational class mobility, the trends in educational inequalities between social classes and the school trajectories of the children of immigrants. From a methodological point of view, he has expertise in the analysis of categorical variables with log-linear and log-multiplicative models. Among his most recent publications is the chapter about France in the *Social Mobility in Europe* comparative volume (2004, Oxford University Press) and a chapter in the *Globalization and Education* book that presents the proceedings of a joint working group of the Pontifical Academy of Sciences and of Social Sciences (2007, de Gruyter).

These replies have been formulated after reading Four Future Scenarios for Higher Education by the OECD Centre for Education Research and Innovation (CERI).

In your view, what is the most probable or desirable future scenario with regard to social equity and higher education?

With regard to social equity and higher education, I think that the most probable future scenario is Scenario 3 (New Public Responsibility) because of the general tendency to increase the autonomy of universities, but that the most desirable scenario is Scenario 1 (Open Networking) because this model is based more on collaboration than on competition.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

The most important objective for higher education in the future should be to disseminate knowledge as widely as possible. This is the reason why I definitely prefer Scenario 1 (Open Networking). This is not just for altruistic reasons: disseminating knowledge as widely as possible will increase the exposure of the population in the world to that knowledge and will thereby increase the capability and the probability that any individual in the global population will become able to add something significant, even small, to that knowledge.

What do you consider to be the main future challenge(s) for higher education systems? Why?

I think that the main future challenges for higher education systems are as follows:

- fighting against a tendency towards commercialization (or marketization) of education, i.e. combating against Scenario 4 (Higher Education Inc.);

- fighting against any temptation to adopt a too narrow and too exclusive *local* view of higher education, i.e. combating against Scenario 2 (Serving Local Communities);

- using the advancement of technology to foster collaboration-based teaching, training and research.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Although it is certainly not the *worst* way to tackle these future challenges, a not so desirable way would be to adopt Scenario 3 (New Public Responsibility). It is not the worst scenario because the state and public funding is still present, but it is not the most desirable scenario because the accentuation of the autonomy of higher education institutions will probably implicate, in mid term or long term, an accentuation of the differences between universities as regards quality of learning environment, quality of research opportunities, and so on. However, this is probably a plausible scenario, especially given the appetence of the XXIst-century society for worldwide rankings of universities!

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

For all reasons explained above, I consider that the best possible way to tackle the above mentioned future challenges would be to adopt Scenario 1 (Open Networking), but it is certainly not so easy given that "imposing" collaboration (and simultaneously relatively high academic standards) is more difficult than letting autonomy and competition develop freely.

Dirk Van Damme

Dirk Van Damme currently is Head of CERI (Centre for Education Research and Innovation) at OECD in Paris. He holds a PhD degree in educational sciences from Ghent University and is also professor of educational sciences in the same university (since 1995). He also was part-time professor in comparative education at the Free University of Brussels (1997-2000) and visiting professor of comparative education at Seton Hall University, NJ, USA (2001-2008). He has been professionally involved in educational policy development as deputy director of the cabinet of the Flemish Minister of education Luc Van den Bossche (1992-1998), as general director of the Flemish rectors' conference VLIR (2000-2003), as expert for the implementation of the Bologna Declaration for Ms Marleen Vanderpoorten, Flemish Minister of education (2002-2003) and as director of the cabinet of Mr Frank Vandenbroucke, Flemish minister of education (2004-2008). In 2004 he served also as executive director of the RAGO, the organization of public schools in the Flemish Community of Belgium.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

If I have to define the most important objective of higher education in the future I would like to take a rather conservative position and still define it as 'knowledge creation and transmission'. It is not only rhetoric that we will develop into knowledge-intensive economies and societies and higher education should maintain its crucial contribution to this. It will not be the only institutional environment active in the domain of 'knowledge creation and transmission', but it certainly should still be a crucial one. I believe that only higher education institutions such as universities have the potentiality to guarantee the layers of knowledge creation that are really essential: exploring the boundaries of knowledge, questioning and falsifying existing knowledge, working on 'deep' knowledge, developing socially and culturally critical knowledge, etc.

What do you consider to be the main future challenge(s) for higher education systems? Why?

The first main future challenge will be to cope with the loss of monopoly on the educational and research functions. There are many competitors around and the mechanisms which have guaranteed a more or less automatic recognition of the functions and position of universities are eroding. A good example is the disappearance of the monopoly over degrees and diplomas as 'testifiers' for high-level skills and competences of graduates. I am afraid universities still don't see that employers increasingly are critical on degrees awarded by universities.

The second, related to the first, challenge is in my eyes the development of global markets of knowledge. Universities have a hard time in balancing their local, national and global roles. As products of 19th- and 20th-century nation-states, they still are very attached to the regulatory environments coming from national governments. In the meantime global markets are developing in research and increasingly also teaching & learning. I personally think that more market doesn't necessarily have to be a bad thing in higher education and that it would even be beneficial, but it certainly will need other mechanisms and systems of governance, regulation and management and I

don't see a sense of urgency in developing them. The naïve and superficial approach to rankings we can see today will certainly not be the best way to tackle this challenge.

A third challenge in my eyes would be that, as a consequence of the previous ones, higher education will find itself not in the position any longer to attract the best talents in society. This refers to attracting the best students as well as the best researchers and professors. If we are not attracting and concentrating the best minds in institutional environments that we define as universities today, the critical knowledge creation function will suffer from it. This would be a bad scenario for higher education, but also for society at large.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst scenario in my eyes is the so-called 'disappearance' of universities, in the sense that they would become rather irrelevant in the processes of knowledge creation and transmission. Universities in their institutional arrangements as we know them nowadays may disappear and exchanged for other institutional types and whether we will still call these institutional environments 'universities' is another question. But that's not what I mean. My worst-case scenario would be that both the research and teaching & learning functions would be taken over by completely different kinds of institutional arrangements and environments. This scenario is not very likely to happen, but still is possible. It will depend on the adaptability of universities to the changing global context whether this scenario will become reality or not.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best possible way to tackle the mentioned challenges would be a rather fundamental and drastic change in the regulatory context in which universities have to operate and in governance and managerial arrangements within universities themselves. The national regulatory systems will have to be transformed into international and open regulatory systems. I still think that rather strong regulatory systems will be necessary, because there are too many risks in radical deregulation for safeguarding quality standards. The international governance and managerial arrangements in universities also will have to change: further professionalization of management, modern accountability systems, governance systems which can tackle the risk of mission overload, and, overall, a drastically improved strategic management of universities.

Marijk van der Wende

Marijk van der Wende is a professor in higher education at the Vrije Universiteit Amsterdam and a visiting professor at the Centre for Higher Education Policy Studies (CHEPS) at the University of Twente. She is the founding dean of Amsterdam University College, an international liberal arts & science college being established jointly by the Vrije Universiteit Amsterdam and the Universiteit van Amsterdam. She chairs the Honours Programme and the Internationalization Board of the Vrije Universiteit Amsterdam. She is the President of the Governing Board of the Programme on Institutional Management in Higher Education (IMHE) of the OECD, member of the Governing Board of Nuffic, member of the Scientific Board of the Dutch Military Academy, and member of various national and international advisory committees and editorial boards. Her research focuses on innovation in higher education, the impact of globalisation on higher education and related processes of internationalisation and Europeanisation. She published widely on how these processes affect higher education systems, their structure and governance, institutional strategies, curriculum design, quality assurance methods, and the use of technology.

Stéphan Vincent-Lancrin

Stéphan Vincent-Lancrin is a senior analyst at the OECD Centre for Educational Research and Innovation (CERI). He is responsible for the project on the Future of Higher Education (University Futures), which aims to inform and facilitate strategic decision making by governmental and other key stakeholders in higher education. He is also the co-leader of the human capital working group of the OECD Innovation Strategy. His past work includes work on internationalisation and trade in higher education as well as on e-learning in tertiary education. Before joining the OECD, Stéphan worked for 7 years as lecturer and researcher in economics at the University of Paris-Nanterre and the London School of Economics. He holds a PhD in economics and Master's degrees in business administration and philosophy.

In your view, what is the most probable or desirable future scenario for higher education access and attainment?

In most OECD countries, I believe the most probable scenario is an increased and to some extent widened access to higher education, because both country policies and people's individual interest will contribute to it. I also believe this is a desirable scenario because it is good for people to be more knowledgeable and cultured, and for society to have citizens who are learned, demanding and who can be critical. I believe access will continue to widen to international and older students in many countries, but that progress might continue to be slow for students from less advantaged backgrounds. This will depend considerably from one acountry to another, especially as starting points are different. Attainment may not increase proportionally to access, and student achievement s is a dimension of quality that will need to be addressed in a more proactive ways in the decades to come. The most probable is that attainment will increase though, thanks to inclusive admission and delivery policies and more emphasis on the actual graduation of students.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

The most important objective for higher education is to continue to develop and keep alive culture and knowledge in their highest forms, to share them with all, regardless of their personal or social background, and to help people conduct a happy life.

What do you consider to be the main future challenge(s) for higher education systems? Why?

The main future challenge will be to reach the right balance between some of the tensions (and sometimes even contradictions) between the different missions and aspirations of tertiary education. A first important challenge will be to better address the variety of needs and aspirations of students in an expanded system. A second challenge will be to strengthen primary and secondary education so that eligible students to tertiary education have the appropriate academic preparation regardless of their individual and social characteristics. These are two conditions for higher education to deliver appropriate quality to all. A third challenge will be to keep a research of quality

in all areas of human knowledge, acknowledging that research is not just about producing new knowledge but also about keeping alive past knowledge and cultures.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

The worst way to tackle these issues would be for an excessive hierarchical stratification to develop within systems, keeping quality only at the top end of the system but inducing more social inequity, or a total lack of diversification, as it would lead to low quality and social inequity. For different reasons, very egalitarian and very elitist systems would be a possible response to the challenges, but in my opinion both would have serious pitfalls: the first would be unrealistic while the second would inequitable and reduce the creativity in the system.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

The best way to tackle this issue would be for higher education institutions and policy-makers to promote innovative teaching and learning methods, in the tailoring of tertiary education offerings to the variety of interests and abilities of students, and to open up and give more chances to new social groups. For that the systems should try to have a good balance between demand-side and supply-side forces, between competition and cooperation, between the drive for excellence and for equality: tertiary education systems have to be responsive to society, but it should not be too responsive either.

Thomas Weko

Thomas Weko is Associate Commissioner, National Center for Education Statistics, US Department of Education. In this capacity he is responsible for the collection and reporting of data on US postsecondary education. He has served as a policy analyst with the OECD Education Directorate, a congressional staff agency (the US Government Accountability Office), the Washington State Higher Education Coordinating Board, and, as an Atlantic Fellow in Public Policy, with the UK Higher Education Policy Institute.

In your view, what is the most probable or desirable future scenario for diversity and equity in higher education?

Diversity of what? Diversity of students/learners? Diversity among providers of higher education? If you mean the second, I anticipate wider diversity with respect to providers of higher education, both within the public sector, and, in OECD countries where private provision is allowed, among private providers as well. Rates of participation will gradually grow, both among traditional age cohorts and among adults, marginally increasing student diversity by age and other characteristics. At the same time, students' social backgrounds will be even more closely associated with different types of programs, degrees, and institutions than at present, i.e. stratification is likely to increase.

Similarly, what is the most probable or desirable future scenario with regard to social equity and higher education?

The most probable scenario is a gradual increase in rates of participation, and this will be accompanied by increased differentiation in cost and reputation among providers of higher education, and wider differences in the economic returns to higher education qualifications. The first of these things is a traditional equity goal – wider participation. But I think it likely that this will be offset by widening differences in provision (including price) and in wider differences in returns to schooling that are likely to be associated with different qualifications and institutions.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Higher education must become more effective at developing the capacities of students – to earn, to learn throughout their lifetime, to engage in original thinking and research, and to be engaged, effective members of their communities. Higher education will need to do this for a wider range of learners (adults, those with disabilities, those with academic deficiencies), and it will have to learn how to do this efficiently, as past increases in resources will be difficult to sustain in the face of other spending demands, such as health care spending, pensions, and so on. Public authorities will have to figure out how best to organize governance, institutional funding systems, student support systems, and data systems to encourage these improvements on the part of higher education institutions.

What do you consider to be the main future challenge(s) for higher education systems? Why?

I expect that there will be very different challenges in different parts of the world, and even very different challenges with the same country, among different sectors of HE systems.

i. Demographic challenge: Countries with aging populations and already high levels of participation (e.g. Japan) will be challenged to maintain quality and the efficiency of spending while coping with declining enrolments due to shrinking youth populations. These pressures will be felt most heavily by institutions at the bottom of a hierarchy of prestige and reputation, and which are often most poorly resourced, but leave institutions of national/global standing unaffected.

ii. Diversity challenge: as student populations become more varied in age and social background, preparation for study, and aspirations, institutions are challenged to adapt to them. At the same time, public authorities are challenged rethink and redesign policies for more diverse students and institutions of higher education – including quality assurance, institutional funding, and student support.

iii. Governance challenge: public officials (and, indirectly, higher education institutions themselves) will be faced with continuing fiscal pressures and demands that higher education institutions be held publicly accountable for their performance, at least in much of Europe and the Anglosphere.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

i. Demographic challenge: the worst response is to protect the existing institutions, since protecting the suppliers of higher education will result in great inefficiencies in public sector institutions and declining quality, especially in private institutions (stemming, for example, from the large-scale importation of ill-prepared fee-paying students from countries where demand exceeds supply). The likelihood of these outcomes in high.

ii. Diversity challenge: the worst way to respond to this challenge is to do nothing. For example, for higher education institutions to offer instruction as they have always done, without regard to the needs on different student populations, and for public authorities to maintain policies fitted to a different era, such as student support systems that are designed only for young, fulltime, and continuously enrolled tertiary students. The likelihood of these outcomes is moderately high.

iii. Governance challenge: either to do nothing, or to adopt policies that are simple-minded with respect to funding and highly intrusive with respect to the management of higher education institutions. Likelihood moderately high.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

i. Demographic challenge: governments should encourage institutions to diversify their student populations to non-traditional learners, while also encouraging consolidation and the coordination of operations among public institutions. This can be done, for example, by re-examining policies that establish separate institutional sectors (e.g. universities and polytechnics in Finland, and national and prefectural universities in Japan). Where private sector institutions are numerous and demographic pressures are strong, governments should establish a policy framework that protects students – e.g.

by providing meaningful public information about institutional quality, by ensuring that academic work can be transferred among institutions – but allows institutions to close or merge.

ii. Diversity challenge: institutions and governments should respond by thoughtfully monitoring who their students are, and adapting institutional practices and public policies to their needs. This may require new or improved data collection with respect to student populations (e.g. student surveys), new student support policies (that permit working adults/parents to receive support), and more flexible forms of study of study provided by institutions (e.g. recognition of prior learning) and supported by public authorities.

iii. Governance challenge: with respect to fiscal pressure, public authorities must help higher education institutions identify opportunities for efficiencies. This is very difficult, owing to the weak development both of cost accounting and meaningful evidence of student learning – without which planned improvements in efficiency probably are not possible. With respect to accountability for performance, governments and institutions should to work together to build information (e.g. data systems) that can provide credible public evidence of performance, and link public support to institutional performance very carefully, in ways that leaves institutions wider scope to manage themselves in meeting their core obligations.

Hye Kyung Yang

Hye Kyung Yang is the principal researcher at the National Knowledge Information Center of the Korea Education & Research Information Service (KERIS) in Seoul, Korea. In this capacity, Ms. Yang works on a project concerning higher education contents sharing as well as on evaluation of a university e-learning center. Her research interests include ICT in Higher Education, Interoperability of Contents Sharing System, E-Learning Contents Development Methology as well as Evaluation of ICT Policy in Education. Ms. Yang holds a M.A. in Computer Education, YonSei University, Seoul, Korea.

In your view, what is the most probable or desirable future scenario regarding new technologies in higher education?

Higher education for all : universal higher education could be possible through technology

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Human development rather than human resource development

What do you consider to be the main future challenge(s) for higher education systems? Why?

Financial sustainability, autonomy in governance, demographic change

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Market-oriented higher education, interference of government, recruit for student in global community

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Civil participation, accountability of institution, life-long education

Richard Yelland

Richard Yelland has been Head of the Education Management and Infrastructure Division in the OECD Directorate for Education since its creation in 2002. This Division is responsible for the work of the Programme on Institutional Management in Higher Education (IMHE) and the Programme on Educational Building (PEB). Richard joined OECD in 1986 from the Department of Education and Science in the United Kingdom, where he had held a range of posts in educational policy and administration since 1974. He has led PEB since 1989. Following a secondment to the University of Adelaide, South Australia, he was given the additional responsibility for IMHE in 1998. Richard is a member of the Advisory Board of the UNESCO Centre for European Higher Education (CEPES), and of the International Advisory Network for the Leadership Foundation for Higher Education in the United Kingdom. He has contributed as an international expert to the evaluation of educational institutions and programmes in Belgium and France

In your view, what is the most probable or desirable future scenario regarding differentiation in higher education?

After fifty years of growth I expect to see a period of rationalisation of the higher education sector: a trend towards larger institutions, with some weaker and lower-quality institutions merged or closed and major brand names emerging and others strengthened.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

Improving access to higher education while maintaining and improving quality.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Addressing the needs of the twenty-first century for human capital and innovation

Securing adequate funding

Improving efficiency

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Homogenisation of the system as too many institutions pursue 'world-class university' status through international rankings.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Finding genuine ways to value the various outputs of higher education so that diversity of institutional mission can be achieved without reinforcing hierarchies between institutions. The question is whether this can be done in a reliable way without creating an excessive administrative burden or creating new distortions.

Akiyoshi Yonezawa

Akiyoshi Yonezawa is an associate professor for higher education policies at Center for the Advancement of Higher Education (CAHE), Tohoku University. He has worked at the University of Tokyo, Hiroshima University, and the National Institution for Academic Degrees and University Evaluation. His research focuses on the impact of globalization on higher education policies, especially in terms of internationalization, quality assurance, and dynamics between the public and private domains.

In your view, what is the most probable or desirable future scenario regarding innovation and international mobility in higher education?

Most probable: Higher Education Inc.

Most desirable: Open networking

Open networking will be, at least officially, aimed by most of the leading higher education institutions, while the financial and operational capacity for developing open networking will be oligopolised by a limited number of universities which succeed to be transformed to university inc.

In your opinion, what is or should be the most important objective for higher education in the future? Why?

To provide a flat and mutually respected envilonment as a platform of knowledge exchange and sharing.

What do you consider to be the main future challenge(s) for higher education systems? Why?

Making effective use of talented human resources with less opportunity for realizing open-networking scenario.

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

Excessive concentration of financial and human resources into a limited number of 'globally competitive' universities in market or support by the governments. Monopoly of opportunities to participate into the knowledge creation process will damage the global knowledge development in the long run.

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

Universities should take a confident leadership for open up knowledge property for public, and tyr to get voluntary support from wider and diversified participants (including governments and industry) into knowledge creation and sharing.

ANNEX
Questionnaire for the Speakers of the
Higher Education to 2030 Conference

Please kindly take time to write a concise response to each of the questions below, specifying which <u>geographic area(s)</u> you are referring to and considering <u>international dimensions</u> of the issues, if possible. Please indicate clearly the <u>time-scale</u> used. Please note that we would like the responses to reflect your <u>personal perspective</u> on higher education, from your specific expertise to more general view.

In your view, what is the most probable or desirable future scenario for *[relevant specialisation or a role with regard to higher education]*?

(Please note that you may choose to discuss <u>either one or both</u> of the scenarios and <u>specify which</u> scenario you are referring to)

In your opinion, what is or should be the most important objective for higher education in the future? Why?

(Please choose <u>only one</u> objective)

What do you consider to be the main future challenge(s) for higher education systems? Why?

(Please indicate <u>no more than three</u> main challenges)

In your opinion, what would be the worst, but possible, way to tackle these future challenges? Why?

(Please discuss also the <u>likelihood</u> for this scenario to take place)

What do you consider to be the best possible way to tackle the above mentioned future challenges? Why?

(Please discuss also <u>the main risks and unknown elements</u> related to this scenario)