[FOUR FUTURE SCENARIOS FOR HIGHER EDUCATION

What plays out in the future depends on decisions taken today, which can critically narrow the room for manœuvre over time. Hence the importance of factoring the long term into decision-making in higher education.

This paper presents four scenarios for higher education systems developed by the OECD Secretariat as part of its ongoing project on the future of higher education. The University Futures project is designed to inform and facilitate strategic change to be made by government decision-makers and other key stakeholders in higher education.

Scenarios are not meant to predict the future. They can be defined as "consistent and coherent descriptions of alternative hypothetical futures that reflect different perspectives on past, present, and future developments, which can serve as a basis for action". They are tools for thinking about the future, which will be shaped partly through deliberate strategies and actions, partly by factors beyond the control of decision-makers.

Scenarios can be a useful way of drawing upon imagination in a structured and serious way to think creatively on matters we often take for granted and to look at issues in a holistic way rather than in isolation. They help us to get out of our everyday routines and to address questions such as:

- Where are we going?
- Where should we go and why?
- How can we get there?

For more information on futures methodology and the futures projects of the OECD Centre for Educational Research and Innovation (CERI):

www.oecd.org/edu/universityfutures

www.oecd.org/edu/future/sft

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[Scenario 1
Open Networking

In this scenario, higher education is very internationalised and 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.

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. Within some restrictions, as set out by the academic profession in international conventions, students have a great deal of autonomy. They often study abroad and take courses offered exclusively online, which can be completed anywhere.

New technologies have brought about changes in approaches to teaching, especially at undergraduate level, with standardised courses often delivered online, and different use of classroom time with more small seminars and interactive discussions, and more time spent with students on their individual projects.

This modularisation of studies is both enabled by and reinforces the development of English as the lingua-franca in education. Many courses are indeed delivered in English even in non-Anglophone countries. Advanced vocational education institutions have created similar international networks and have become more like general higher education institutions.

International collaborative research has been strengthened by the dense networking between and among institutions, driven by the availability of free and open knowledge. There is still a strong hierarchy among higher education institutions: some institutions or research departments attract more funding and have better working conditions and higher prestige. Institutions do still tend to partner and network primarily with institutions of similar prestige.

At the same time, technology-driven networking allows those institutions not focused on research (including institutions in developing countries) to benefit from advances in knowledge. Academics and students in higher education institutions with fewer resources have remote access to research and research tools previously only available in well-resourced institutions. Research data are available on the Internet in real time; new data sets can be re-used by academics and students for new research; simulation, computing and visualisation tools are accessible to all.

Key drivers of change

The “Open Networking” scenario could be driven by voluntary co-operation between and among countries and institutions leading to the gradual harmonisation of higher education systems. Increased co-operation creates more trust and understanding among higher education institutions over time, and leads to the easy recognition of foreign educational offerings.

International networks are facilitated by lower costs of communication and transportation and by information and communication technology. They could also be strengthened by the ideal of open knowledge, an ideal that civil society and academics have increasingly imposed on the grounds that academic research is largely supported by taxpayers and should thus be freely available.

Related developments

- The Bologna process in Europe has induced some harmonisation of study paths, and has influenced similar developments in other regions of the world.
- International academic partnerships and consortia have developed quickly in the past decades, as well as study abroad periods.
- Rapidly increasing computing power combined with fast and cheap communication allowed by the Internet is opening new avenues for education and research.
- A culture of openness challenging traditional ways to manage intellectual property rights is gaining ground.

Questions

- Would this model be sustainable economically in a knowledge economy?
- What forces could drive differentiation (rather than convergence) in such a system?
- What are the incentives to ensure that the networks do not serve the interests of their members only and do not reproduce the national hierarchies at the global level?
- In what geo-strategic context could such a model thrive?

[Scenario 2
Serving Local Communities

In this scenario, higher education institutions are focused (or refocused) on national and local missions. They are embedded in their local and regional communities, and are dedicated to addressing local economic and community needs in their teaching and research.

As is currently the case, higher education is mainly publicly funded and administered. Academics are treated as trusted professionals and have control over the education and research processes. A small number of “elite” higher education institutions and research departments are linked to international networks (although there are now some barriers to internationalisation), and maintain their position in top national ranks. The average higher education institution, however, focuses teaching and research on the needs of the local community and region.

With reduced international and research ambitions, funding has become less of an issue. Local authorities and businesses are keen to support local institutions; recreational courses also generate some revenue. Universities and polytechnics are on more or less the same footing, as universities have a less intensive role in research than they used to. Both types of institutions respond to their communities by working more closely with industry to design relevant initial and lifelong training. They also offer more recreational education for elderly people. In regions with ageing and shrinking populations, higher education institutions have not disappeared as was once predicted.

The scope of academic research has diminished somewhat (while research has regained ground in the government sector). Research in “strategic” areas such as physics or engineering is relocated in the government sector, and international collaborative research continues with a more limited number of “friendly” countries. University-based academic research is focused on humanities and social sciences, two fields valued for maintaining national culture. Academics continue to conduct research, but teaching is their primary objective, and research, a welcome by-product.

Key drivers of change

The "Serving Local Communities" scenario could be driven by a backlash against globalisation. Governments place a strong emphasis on the national missions of higher education. There is growing scepticism in regard to internationalisation in the general population for a variety of reasons including recent terror attacks and wars, concerns about the growth in immigration, frustration about outsourcing and the feeling that national identity is threatened by globalisation and foreign influence. For geo-strategic reasons, governments launch ambitious new military research programmes and give security classification to an increasing number of research topics in natural sciences, life sciences and engineering.

Related developments

- Migration is at the centre of heated political debate in many OECD countries and not always well accepted by populations.

- There is a growing anti-globalisation movement based on cultural and economic grounds, and geo-strategic concerns have come back to the fore in the last decade.

- The regional and national missions of higher education are increasingly highlighted in the policy discourse and higher education is increasingly asked to play a more important role in fostering social cohesion.

Questions

- Would this lead to greater inequalities within countries (with rich regions only being able to afford rich universities)?

- What would this disconnection from international networks imply for the progress of scientific research?

- What would this refocus imply for the most internationalised countries, especially when they face a demographic decline?

[Scenario 3
New Public Responsibility

In this scenario, higher education is primarily publicly funded, as is currently the case, but there is a greater focus on the use of “new public management” tools, including market forces and financial incentives.

Higher education institutions are autonomous (or legally private). They still depend on the public purse for a significant share of their budget. However, institutions have taken advantage of foreign education markets, the deregulation of tuition fees, the patenting of their academic research and their growing financial links with industry to diversify their funding sources.

The boundaries between public and private higher education institutions have blurred, as most resources of university are private, coming from student tuition, and support from business and private foundations. Students and their families pay a significant share of the cost of their studies, with the possibility of financing some or all of their education through income contingent loans.

Institutions are more accountable to the state as well as to other funders. They are also more attentive to the learning needs of students of all ages and with a wide range of learning needs. While reputation in academic research is still institutions’ prime competitive advantage to attract the best students and set their level of tuition fees, other factors such as quality of teaching and employability are increasingly taken into account by students and their families.

The division of labour between (or within) institutions is more marked, most of them specialising in different missions in teaching and research – a differentiation that does not necessarily prevent all of them from continuing to carry out both research and teaching. Most higher education institutions continue to allocate some research funding internally on their own funds.

But the bulk of the allocation of public funds for academic research is generally from external sources, financing specific research projects and awarded according to competitive peer-reviewed processes. As a result, there is more national competition for research funding among a smaller number of higher education institutions. Only a small amount of research funding crosses national borders, except within the European Union where the recently created European Research Council funds an increasing share of European academic research.

Key drivers of change

In the "New Public Responsibility" scenario, the shift in public governance could be based on mounting budget pressures created by the ageing society. First implemented with success by a few countries, this doctrine of public management calls for institutions operating at arm's length from national government, with a mix of public and private resources.

Accountability, transparency, efficiency and effectiveness, responsiveness and forward vision are the golden standards of good public governance. Rising public debt has shifted a significant part of the cost of higher education from government to other education stakeholders, especially students and their families. In ageing societies, the costs of health and pensions are now the primary government spending priorities.

Related developments

- Cost-sharing is under debate in many OECD countries and some countries have recently introduced or raised tuition fees to increase the financial resources of institutions.

- Higher education institutions have been given more autonomy from national governments and in some cases have been legally privatised (while still highly dependent on governments for their funding).

- Higher education institutions are increasingly being encouraged to be more entrepreneurial in research and education.

- Research funding is increasingly allocated to specific projects through competitive processes rather than as block grants to higher education and research institutions.

Questions

- Is there a tipping point after which real markets would replace quasi-markets, and governments lose some or most of their control over the system?

- At what point should the concentration of research capacity in a few higher education institutions be encouraged?

- Could this model allow the systems to become more responsive to the diversity of individual, social and economic needs (research, initial education, lifelong learning, elite and special needs education, etc.)?

[Scenario 4
Higher Education Inc.

In the scenario, higher education institutions compete globally to provide education services and research services on a commercial basis.

Research and teaching are increasingly disconnected, as they have always been in the General Agreement on Trade in Services (GATS). Higher education institutions concentrate on what they consider to be their core business – either teaching or research. Research universities thus hardly teach (if they teach at all), whereas most vocational and general institutions concentrate almost exclusively on teaching.

Most segments of the market are now demand-driven, with business-like methods (responsiveness to customer needs, attention to effective management and administration of the institution, etc.), while the most prestigious institutions continue to be more supply-driven and managed through peer assessment. Governments still encourage and subsidise research and teaching in areas where there is little commercial interest, such as archaeology and Sanskrit. But following the principles of free trade, these subsidies should not distort trade in commercial research and education. Vocational education has a significant share of the global market for education.

There is fierce competition for students. Many universities are opening new institutions or branch campuses abroad, franchising educational programmes, etc. Individual institutions and even whole higher education systems specialise according to their competitive advantage. An international division of labour is emerging, with some countries earning reputations for high-quality undergraduate education, while others are competitive in training postgraduate students and conducting research.

Formerly “emerging countries” are developing competitive advantages in selected/specific research fields (for example, technology in India, agronomics in China, etc.) and outsourcing research has become common practice. India and Singapore are large exporters of education services in the developing world.

In the research segment of the market, there is fierce international competition for super-star academic researchers. Basic research projects are still funded by governments, but following a tender to which all research centres in the world can – and increasingly do – apply. The research sector is rapidly becoming concentrated. International rankings play an important role in informing students of the comparative quality of different educational offerings.

Finally, English has become the language of research and postgraduate studies, while local languages are still used in vocational and undergraduate teaching. Most cross-border higher education institutions and programmes operate almost exclusively with local staff of the receiving country.

Key drivers of change

The “Higher Education Incorporated” scenario could be driven by some form of trade liberalisation in education. Originally pioneered by a few countries, trade in higher education has gained ground and become more pervasive. An increasing number of governments have decided to liberalise the higher education sector and even commit themselves through the GATS negotiations at the World Trade Organisation or bilateral free trade agreements.

An international marketplace for higher education and academic research services thus emerges on a commercial basis. Such a change is facilitated by low transportation and communication costs and the increasing migration of people. It is also facilitated by the rise of private funding and provision of higher education, which has led to the growing recognition that higher education services were not very different from other types of services. At one point, stakeholders felt that there was no longer any reason not to open these services to worldwide competition, as has happened for other formerly public services.

Related developments

- Education services and research services are already included in the GATS negotiations.
- Countries such as Australia, Malaysia, New Zealand, Singapore, and the United Kingdom have turned or are trying to turn their higher education sector into an export industry. Cross-border higher education now represents an economic stake: student mobility alone was estimated at around 40 billion US dollars of export revenues.
- Programme and institution mobility under commercial arrangements has grown significantly in the past decade and full tuition fees for mobile students are put in place in an increasing number of countries.
- The competition to attract foreign students has grown over the past decade.
- Cross-border funding of research and private research activities has increased in the past decades.

Questions

- Are all systems equally equipped to compete globally in education and research?
- Will all countries be able to retain some national educational and research capacity?
- What would happen to areas of human knowledge that are not commercially viable?
- How would national cultures and languages be kept alive?

[QUESTIONS TO START THE DISCUSSION

- From your perspective, which scenario is the most desirable? Which is the most probable?
- What would it take to get closer to the most desirable scenario?
- What are the pros and cons of the different scenarios in terms of quality, access, equity and innovation?
- In which ways do the systems diversify in the different scenarios (e.g. public/private, research/teaching, types of students, fields, etc.)?
- What level of funding would they require and how would the cost of higher education be shared between stakeholders?
- How is the control of the system shared between all stakeholders (government, academics, students, business, etc.) in the different scenarios?
- To what incentives, interests and demands would the institutions be responsive?