OECD/CERI Experts Meeting on "University futures and new technologies"

Discussion Paper

Six Scenarios for Universities[1]

Today's stories about tomorrow inevitably face the fundamental constraints of language and uncertainty. The ideas and words that will be used in the future have not yet been invented or lived. Nor is it possible to know the "facts" of a day that has not yet passed. As a result stories about the future are largely rooted in the present – the expectations, fears and hopes that form the path to the future.

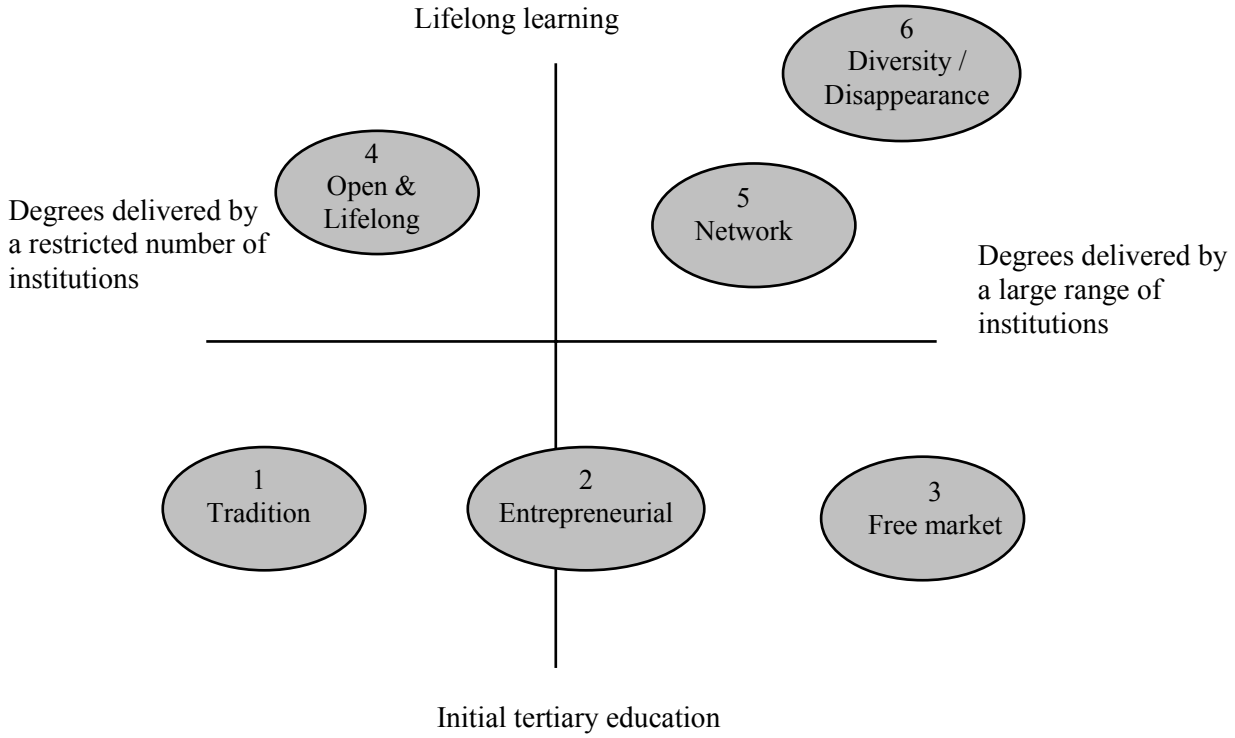
In a similar fashion, the scenarios presented below are familiar, reflecting fairly closely the burning historical and institutional issues facing universities in OECD countries today. Diagram 9 maps the six scenarios for universities. As mentioned above, the two key dimensions used to design and organise the scenarios are the range of recognised educational supply and the range of educational participation (see Diagram 1). The range of educational participation is about the age composition of the student population. At one end of the axis, *initial education* refers to universities focusing on the initial education of young students coming directly from high-school. Like today, 80% of the university students would be under 23. At the other end, *lifelong learning* refers to a situation where adults attend university at different times of their life, and possibly several times throughout their life: for their initial tertiary education, for re-training and leisure, and when they retire. Students are thus more diverse and, on average, older than today: possibly over 40 years-old for 50% of them. The range of recognised educational supply is about the strength of the university monopoly over degrees. At one end, a restricted number of institutions grant degrees and have a say on the kind on knowledge that can lead to these degrees. At the other end, a variety of institutions grant degrees and a wide range of knowledge can thus be recognised by a degree.

Other variables have been emphasised to select six stories among the thousands possible in the possibility space. The selection and emphasis of other variables have been done in order to ensure internal consistency of the scenarios, but also to propose differentiated enough scenarios – a necessary condition to generate interesting discussion. The six variables selected for constructing

[1] This is an excerpt of a paper by Stéphan Vincent-Lancrin (OECD/CERI) titled "Building futures scenarios for universities and higher education. An international approach" that was published in *Policy Futures in Education*, 2(2), 2004. The full paper is available at www.wwwords.co.uk/PFIE. It draws on the first stage of the CERI project on university futures.

the five scenarios are: 1) the type of population covered by tertiary education, as well as correlated variables; 2) the nature of funding (predominantly public, mixed, predominantly private); 3) the integration of missions offered; 4) the international dimension of the system, 5) the homogeneity of status of faculty and institutions, and 6) the degree of take-up of technology (e-learning, e-research). Matrix 1 presents the six different stories in summary form.

Diagram 1: Six possible scenarios for universities



Matrix 1: Six Scenarios for the Future of Universities

	Scenario:	1	2	3	4	5	6
1	a) Selective/Initial education/Mostly young students	X	X	X			
	b) Open/Lifelong learning/All ages				X	X	X
2	a) Mainly public funding	X					-
	b) Mixed funding		X		X		-
	c) Mainly private funding			X		X	-
3	a) Teaching & research ("+": with strong research)	X	X+				
	b) Mostly teaching				X	X	
	c) Specialisation by missions			X			X
4	a) Mostly national focus	X			X		
	b) Importance of international focus		X	X		X	X
5	a) Homogeneous status of staff and institutions	X			X		-
	b) Polarisation in status of staff and institutions		X	X		X	-
6	a) Low e-learning and role of ICTs	X					
	b) High e-learning and role of ICTs		X	X	X	X	X

- : undetermined

The six scenarios are the following.

Scenario 1: Tradition

Universities are mostly like today, catering to a relatively small share of the youth population for the purposes of job selection credentials. Universities pursue both teaching and research, as now, without excessive dependence or involvement with the private sector. Governments continue, in most OECD countries, to play a prominent role in funding, regulating and managing universities. Within a public accountability and equity framework there is little scope for profit-generating initiatives. Lifelong and e-learning both develop largely outside of the university sphere.

Scenario 2: Entrepreneurial universities

Selective institutions cater largely to young people in their initial preparation for life. The key difference with the previous scenario is that universities (public or private) can respond with greater autonomy to a variety of funding sources. There is a more mixed public-private funding model, with university resources coming from a wide variety of sources. Along with the returns to the intellectual property rights that it secures, research is seen as very important and lucrative activity. However, in this scenario universities take a market-oriented approach to operations without losing basic academic values. Given the prestige and income accorded to research the teaching side remains quite elitist. As for lifelong learning it occurs within a university setting but in teaching-only institutions with lower status. The three missions of the university – teaching, research and community service – are well balanced, although there is greater differentiation across institutions due to enhanced autonomy and greater responsiveness. Commercial approaches to international markets and e-learning are important. University resources as well as wages and prestige of academic staff improve. Links to the local economy are strong.

Scenario 3: Free market

Market forces are the main drivers of this scenario with a private tertiary sector regulated by private companies as far as quality assurance and accreditation are concerned and mostly funded through market mechanisms. Market forces give rise to institutions that become specialised by function (teaching, research), field (business, humanities, etc.), audience (young students, part-time students, distance education, adult education, lifelong learning) while business firms grant degrees to their employees for their corporate training. Hierarchy between those very diverse institutions becomes very strong, with the apparition of a global super-elite, and more polarisation in the status of faculty. With the widening of student choice there is greater competition for students and tuition revenue comes to represent a more important share of overall income. Technology is widely used in teaching methods. The international dimension of the market becomes important. And, since the majority of students and their parents are not interested in research, refusing to bear the costs, research moves out to public research centres and corporate R&D divisions. What research remains in universities becomes even more elitist while teaching to mass markets leads to greater standardisation and the patenting of curricula and teaching methods. Research becomes more demand-driven, specialised and secures important returns through intellectual property rights.

Scenario 4: Lifelong learning and open education

Universities are marked by universal access for all ages and much less research. The knowledge economy has flourished and higher education becomes a source for recurrent professional development financed by companies, individuals seeking recognised skill upgrading, and states. In an ageing society, more elderly people enrol for non-professional reasons. Universities become more learner- and demand-oriented, more teaching oriented, with short courses, more distance learning, and more e-learning. Governments or independent accrediting bodies are responsible for quality assurance and accreditation. Most research is done outside of the higher education system, with the best researchers moving to private companies, specialised institutes or the few remaining elite universities. Corporations and corporate universities have a large influence. Integration with the applied side of learning might go so far that all university education would follow the professional school model. Responsiveness to market forces is high in this scenario and there is considerable business oriented investment in e-learning.

Scenario 5: Global network of institutions

Post-secondary studies become demand- and mostly market-driven. The two main innovations are 1) that learners define their own course of study from across all available courses throughout the global post-secondary education network and design themselves their degrees; 2) that higher education institutions partner increasingly, including with industry. E-learning develops strongly in this scenario, as well as other means of education. The training content becomes more standardised and possibly embedded in technology and media (e.g. modular learning objects or edutainment through partnerships with game industry). The provision of and market for lifelong learning becomes very large, especially as education takes a multiplicity of new forms. Most research is carried out outside the higher education system, and faculty in mostly teaching institutions becomes less qualified than today but use more sophisticated teaching techniques. There is a strong polarisation in the status of academic, with academic superstars and developers of "learning tools" getting high status whereas the average teaching staff becomes less qualified and gets lower status. Programmes and courses matter more than institutions. Intellectual property rights for substance as well as for teaching methods give high returns to their owners.

Scenario 6: Diversity of recognised learning – Disappearance of universities

In this scenario, the formal tertiary education sector disappears. People learn throughout their life, at work, at home, for personal and professional motivations, more and more by themselves and by sharing their expertise with other people interested in the same field. Professional education requiring hands-on practice, like surgery, etc., is transmitted within businesses through an apprenticeship system or thanks to new sophisticated electronic devices (e.g. online). Technology is an enabler for the diffusion of information and knowledge. People learn as much and possibly more than today but in a different way: learning takes the model of "open course" education, mostly free and non commercial, involving a lot of partnerships between individuals and institutions of all sorts. Global networking is thus important and goes beyond institutions. Knowledge and experience acquired in all life situations are acknowledged through formal assessments of credentials carried out by specialised assessment bodies. But given its pervasiveness, knowledge is less of a determinant for a career or in the stratification of society. While research becomes less specialised in fields requiring little money, like humanities or

mathematics, a large share of research requiring high investments takes place in public research centres and in corporate R&D divisions.