Dynamism in higher education

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It is clear that we are in a time of significant flux in Australia's higher education. These changes reflect broader social changes and changes in education at national and international level. There are several attempts to both respond to these changes and to implement policies that will stabilise the sector through new modes of funding, to create tiers of university, to allocate specific functions to specific institutions and thus 'entrench diversity'. In this paper I argue that the focus on diversity is essentially a distraction.

I argue that universities roles have changed significantly over time. The current calls for 'diversity' both overlook the very considerable variability in Australian universities and seek to fix universities' research position in their current point in time. However, I argue that just as universities have changed very considerably in the recent past, they will have to change substantially in the future if they are to meet tomorrow's challenges. This capacity to change would be inhibited by imposing some artificial identity upon each university in the name of 'diversity'. The paper concludes by arguing that the better approach is to foster competition – not segmentation. The main issue becomes: what policies best encourage and sustain competition?

Universities' changing roles

If we may extrapolate from their 900 years' history, tomorrow's universities will be different from today's. Universities' roles have changed a cautious few steps behind changes in society, although Australian universities have usually been more in step with their society. Universities' first role was teaching. They were founded to train the ancient professions, mostly the secular professions of law and medicine south of the Alps (Grendler, 2002), first at Bologna which was

founded in 1088; and mostly to train for the church north of the Alps at Paris (1150) and Oxford (1096) (Tribe, 204: 609). Research as we understand it was a product of the 18th century Enlightenment, but was only incidentally conducted in universities. It did not become an institutional role of universities until the mid 19th century (Ash, 2006: 247), and even so was resisted by Cardinal Newman (1959) in his *The idea of a university* as late as 1853. Arguably universities' role in community service originated in George Birkbeck's free public lectures on the 'mechanical arts' in Glasgow from about 1800 to 1804 and later in London. However, community service wasn't institutionalised as a role for Australian universities until the prodding of the Commonwealth's Universities' Council in the 1970s.

It is now reasonable to describe universities' current role in the broad terms of learning – the transmission of knowledge and research – discovery, and various approaches to application which include community service, applied research, consultancy and innovation. Since their foundation universities' learning role has been associated with their mandate to certify to the community, initially to the church but in modern times to the state, that an individual has met certain standards and can enter a community of scholars or professional practice. This certifying role is sometimes shared with professional associations or registration boards established by the state.

Research has intrinsic worth, and many scholars undertake research for this reason and to satisfy their curiosity. While this may be a sufficient justification of research for an individual, institutions require further justification and a means for deciding on the allocation of resources between researchers and very often between research and other institutional roles. A common method is to value research that is valued by other researchers – peers in the field – and much research and research policy is directed at winning esteem from other researchers. There is a hierarchy of research esteem which differs somewhat by

discipline and context. A rough hierarchy starts with publication of a research article and proceeds upwards to earning a research doctorate, refereeing manuscripts submitted for publication, winning research grants, being cited extensively by other researchers, occupying a senior academic appointment, membership of editorial boards of research journals, refereeing grants, winning prizes awarded by peers, and membership of learned academies. At the acme of research esteem is winning a Nobel prize other than for peace or literature and winning a Field medal in mathematics.

Diversity

The contemporary formulation of universities' tripartite role of teaching, research and service has become so familiar and widely adopted that it is easy to overlook the diversity that it encompasses. Much policy attention has focused on achieving 'diversity' – as if the lack of diversity were a core failure of the Australian university and higher education system. In teaching, Australian universities range from universities that are little larger than some high schools – Bond, Sunshine Coast, Notre Dame and Charles Darwin universities have fewer than 3,000 equivalent full time student units – to universities that are larger than the provincial cities of Bathurst, Gladstone, Kalgoorlie and Mildura – Monash and the universities of Sydney and Melbourne have more than 30,000 equivalent full time students. In organisation they range from the ANU and the universities of Western Australia and the Sunshine Coast which are located predominantly on 1 campus, to my own university that has 5 campuses, to Victoria and Western Sydney universities that have 6 campuses within 2 hours' drive of each other, and to the yet further dispersed Central Queensland, Monash, RMIT and Wollongong universities that have major campuses overseas as well as several within their region in Australia.

In research, universities range from the ANU, Melbourne, UWA and the University of Queensland which are active in most of their areas of teaching as

well as having areas of considerable research strength, to Bond, Notre Dame and Southern Queensland universities which can not be described as comprehensive research universities in any normally accepted sense.

Australian universities also differ greatly in teaching modes, from Southern Queensland, Charles Sturt and New England which teach over three quarters of their students by distance, flexible and multiple modes to ANU and the universities of Melbourne, Sydney and Western Australia which teach all of their students on campus. Similarly, over three-quarters of the students at the universities of Ballarat, Melbourne, Western Australia, Queensland and Wollongong study full time, while less than 40% of the universities with large distance education enrolments study full time.

Similarly in modes of professional education – Melbourne may have just discovered graduate professional education, by my own university, as well as the University of Queensland and many others have professional education at the graduate level for many years.

There are also, as we know, very considerable variations in Australian universities' student intakes. The universities of Adelaide, Sydney and Melbourne recruit over two-thirds of their students from school-leavers, while school-leavers are less than 15% of the intakes at the universities of New England, Charles Darwin and Charles Sturt. Less frequently remarked as an indicator of diversity is the very considerable variation in cut-off scores between institutions and programs. These reflect very considerable variations in student demand and prestige as well as very considerable variations in the perceived quality of students.

Diversity already exists within the existing university system, even before one considers the operations of the non-self accrediting institutions. Clearly the

current framework does not impede diversity (with the exception of certain issues in the MCEETYA protocols which are currently being revised). There is in part shadow boxing between Government and universities. The Australian Government claims that the system lacks necessary diversity and universities claim diversity already exists, but not being prepared to acknowledge the extent of diversity from very research intensive universities to local public versions focused very heavily on teaching. Some universities hide behind the cloak of ostensible uniformity of university standards and standing. This reflects the continued narrow focus on research performance in establishing ranks of prestige and the failure to seriously account for local missions.

Tiers

The former and possibly the current Australian minister for education seek to promote diversity amongst Australian universities by introducing teaching-only universities so that private for profit higher education providers that conduct no research may call themselves universities and thereby increase their student demand and presumably their profits. On occasions the former minister and currently some within universities seek to extend the concept of diversity to institutionalise the evident variation in Australian universities' research performance into perhaps 3 tiers of universities that are research intensive and extensive, universities that are selectively research intensive, and teaching intensive universities. Their aim is to maximise the winning of research esteem, or at least to maximise the research esteem of a selected few universities.

But governments invest far more heavily in research than in the creative arts, music or poetry not for its intrinsic worth nor to win research esteem and still less to indulge researchers' curiosity, but for its contribution to economic development. Governments support research to increase gross domestic product, not to win Nobel prizes – the olympic gold medals for research. This is the

benefit of research. This is the underlying logic of the US post war investment in public universities which generated today's research and economic powerhouses.

While diversity has some advantages if developed organically, enforcing it by government regulation has major disadvantages. It locks the whole system and all its institutions into a 20th century view of research, ignoring the emerging new forms of research that are much more engaged with society and are directed to increasing social benefits rather than maximising esteem amongst fellow researchers (Gibbons *et al,* 1994). Neither would it allow universities and the whole sector to respond flexibly to changes in society. As the League of European Research Universities (LERU, 2000) observes –

> A rigid institutionalised system of selectivity runs a severe danger of fossilising the system at a particular point in time. It is essential for research universities to be dynamic and to enable new centres of expertise to develop, possibly at the expense of more established ones that have lost their edge.

Had universities been categorised as research-intensive and teaching intensive in 1960, in the UK Warwick, York, Bath, Nottingham Trent and Oxford Brookes universities would not have developed their current considerable research strengths; in the US George Washington University, Georgia Tech and Caltech would be much lesser institutions; and in Australia the University of Queensland and more recently the University of Wollongong would not have major research roles. A notable example is the University of California – San Diego.

In 1960 the University of California – San Diego had just been established, admitting its first students. It had no established record of achievement in any role, and was research intensive only in aspiration. The University of California – San Diego is now a major research university, ranked 7th in US in federal research

expenditures. It is a major engine for regional economic growth. Its academic staff and alumni have spun-off almost 200 local companies, including over a third of the region's biotechnology companies. The university is San Diego County's largest single employer, with a monthly payroll exceeding US$76 million, and over 23,500 employees (University of California – San Diego, 2001).

By bringing quality research to the region the University of California fostered advanced industrial growth in what was once a string of scattered coastal settlements running from the southern suburbs of Los Angeles to the border with Mexico. This conurbation is now a leading biotechnology and information technology centre and is among the most prosperous and economically advanced parts of the world. Few would have predicted this future for San Diego and its region even 30 years ago. From modest beginnings in 1960, the University of San Diego is now ranked among the top ten universities in the United States on most measures.

More generally, fixing institutional roles by government regulation produces stasis: it prevents unplanned, open-ended institutional experimentation which stimulates innovation and progress. Indeed, this reflects one of the fundamental criticisms of structural functionalism, the sociological theory upon which sectoral differentiation is based, that it is essentially conservative in not being able to account for change and in privileging the status quo which clearly advantages those at the top of social strata. Segmenting universities into tiers or sectors restricts institutions' capacity to respond to their communities, entrenches privilege and disadvantage, and induces complacency at the top and reduces incentives at the bottom.

Segmenting universities into tiers by research intensity is not even needed to produce top ranked universities. Of the top 12 universities in Shanghai Jiao Tong University's institute of higher education's 2005 world academic ranking of universities only the University of California – Berkeley, ranked at number 4,

is the product of a segmented system. Cambridge at 2 and Oxford at 10 receive special funding from the British Government, but within a system that is otherwise not formally segmented into research tiers. All the other top 10 US universities are private and thus not the product of formal segmentation.

TABLE 1: SHANGHAI JIAO TONG UNIVERSITY'S TOP 12 UNIVERSITIES, 2005

1	Harvard University
2	University of Cambridge
3	Stanford University
4	University of California – Berkeley
5	Massachusetts Institute of Technology
6	California Institute of Technology
7	Columbia University
8	Princeton University
9	University of Chicago
10	University of Oxford
11	Yale University
12	Cornell University

Source: Institute of Higher Education, Shanghai Jiao Tong University (2005) *World academic ranking of universities – 2005*, http://ed.sjtu.edu.cn/ranking.htm

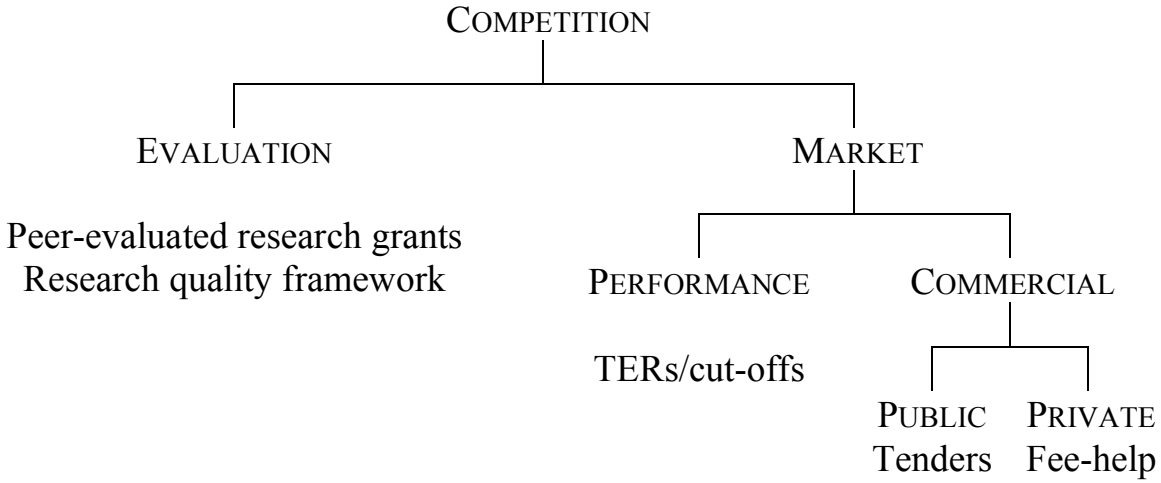
Dynamism

A more useful goal for a higher education system is dynamism: evolution through variation, feedback, and adaptation (Postrel, 1998). The main mechanism to achieve dynamism is competition. By advocating competition in preference to regulation I am not necessarily advocating the narrower mechanism of a market, nor the even narrower mechanism of commercialisation, and still less the narrowest mechanism of privatisation. Resources may be allocated competitively by non-market methods, principally in higher education by expert judgement. Thus, peer-evaluated research grants from the Australian Research Council and the National Health and Medical Research Council are highly competitive, but not in a market competition, although they may have secondary effects on the market for staff. Similarly, the research quality

framework would be highly competitive but not a market in any standard understanding of the term.

Even market competition isn't necessarily commercial. Each year over 200,000 applicants compete for places offered by higher education students in a market that allocates not by money but by tertiary entrance rank. The student admission market clears, to use the economists' term, not at a price but at a cut-off score. The allocation of Government research block grants by statistical measures of performance is also using a competitive non commercial market. To complete this typology we may note that a commercial market is not necessarily private. Tendering is a competitive commercial market mechanism that is sometimes used by governments to allocate public funds to public providers. Thus, the Australian Government could allocate the higher education places it supports by tender. This may be contrasted with fee-help, which is a mechanism for allocating Government subsidies (in the form of a Government guarantee and an interest rate subsidy) by a private competitive commercial market.

FIGURE 1: FORMS OF COMPETITION



Fair competition requires a level playing field and there are two elements that are particularly important. First in a market open to public and private providers the obligations and responsibilities should be similar. Universities have a range of

'public good' responsibilities – including support local developments, schools and industries and high cost programs. In effect public institutions return the surplus from the teaching of more low cost programs to high cost and public good activities. No such responsibilities exist for 'for profit providers'.

Second, in any market questions of standards arise. Australia needs a mechanism that assures the quality of educational outcomes – of standards.

Higher education policy should promote competition. While this is the case for much of our research funding, it is not the case for learning. My university argued in the *Crossroads* review for competitive funding for research, service and teaching, and that universities should bid for one or two of such funds. The current learning and teaching funds give universities no choice in how they participate in the funds, nor on what basis they compete. There is no reward for Griffith University to seek to be the best in work integrated learning, or flexible learning, or access for equity groups, unless these incidentally improve the performance measures selected and aggregated by government. This contrasts to research where universities can compete on their self identified areas of strength.

Our funding schemes and measures of esteem privilege traditional research intensive universities rather than actively promoting excellence wherever it is evident. Outside the university sector, the fee-help regime enables other for-profit higher education providers to compete on price, without any other public good requirement.

Meeting future challenges

I have argued that the broad goal for higher education should be to develop a dynamic sector, not impose an artificial diversity rigidity upon institutions. I have argued further that the appropriate mechanism should not be government regulation but competition, although not necessarily a private commercial market

competition. This is because the changing future and society's different and changing needs are best met by institutions responding to the different needs of their different communities.

Queensland's population weighted by higher education participation rate will grow at twice the national rate from 2006 to 2011 and will grow by 6.3% from 2011 to 2021 compared to a fall over this period in the rest of Australia. Queensland universities therefore face a different demographic challenge to universities elsewhere, and the universities in Adelaide and Tasmania are clearly more challenged by demographic change than universities in Melbourne and Sydney.

TABLE 2: POPULATION ESTIMATE (2002) AND PROJECTIONS 2006-2021 WEIGHTED BY HIGHER EDUCATION AGE PARTICIPATION RATE, QUEENSLAND AND AUSTRALIA (000)

	2002	2006	% change 2002-06	2011	% change 2006-11	2021	% change 2011-21
Queensland	782.6	832.6	6.4%	899.2	8.0%	956.2	6.3%
Australia	4,101	4,216.9	2.8%	4,381.2	3.9%	4,373.6	-0.2%

Source: ABS (2003) Cat 3222.0, projected population – series B; weighted by higher education age participation rates calculated from DEST (2004) table 19. All students by age group and broad level of course, 2003.

Griffith's Gold Coast's campus is now our largest campus. The Gold Coast is Australia's 6th largest city. The city council is committed to a broadening and deepening of the economic base of the region – and see the University as central to that aspiration. They believe that a responsive, research intensive university is essential to the development of the economic base. There are many more Gold Coasts in Australia's future. Should the level of provision of research infrastructure and public capacity be fixed at a point in time?

The great promise of university recognises while they reproduce elites, but also that they can transform the lives of individuals and communities. We need a flexible, dynamic system that is responsive to change, rather than a system which reproduces in equalities.

Likewise regions have different needs. A university which is the sole higher education provider in its region has different responsibilities and serves a different role to the universities in cities and regions whose catchment areas overlap with other universities. Universities in regions with mainly agricultural economies serve different needs to those with manufacturing or service economies. Universities in areas of social and economic disadvantage have different challenges (although arguably the same responsibilities) as those located in privileged areas. Regions' needs change over time. If Garnaut (2006) and Henry (2006) are right a sustained minerals boom will shift economic growth to Western Australia and Queensland, and if Henry is right, this will shift economic activity from manufacturing to mining. This will require universities in Queensland and Western Australia and universities serving manufacturing economies to change, but clearly they will need to change in different ways.

Further changes may be expected from internationalisation, technological change, the effects of information and communication technologies on learning and teaching, the new economy and mode 2 research (Gibbons *et al,* 1994) and presumably other factors. There may be yet other developments which we can't currently foresee. The increasing pressure of commercialisation may change universities' service role substantially.

Another possibility is that the current commercial pressures force most universities to outsource most of their teaching and become effectively examining and certifying bodies. Lest this seem outlandish, it is worth recalling that the University of London was initially established in 1836 to act as an

examining body for its colleges and other 'approved institutions'. The University of London acted solely as an examining and certifying body until 1898 when the *University of London Act 1898* established the university as a federal 'teaching university'. However, the university maintains its external system which is currently followed by over 34,000 students. The university reports (2006) that recently its external system has revived due to the globalisation of higher education, and an increasing number of overseas academic institutes are once again offering University of London diplomas and degrees.

The best strategy to deal with these changes is not to fix institutions in unchanging roles, but to give them the flexibility to try different ideas. Not all will succeed, of course. But if the system is sufficiently competitive institutions will quickly discard the strategies that fail and adopt strategies that have succeeded elsewhere.

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