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What are our universities going to look like 10 years out?

Simon Marginson
Australian Professorial Fellow

Monash Centre for Research in International Education
Monash University

simon.marginson@education.monash.edu.au
0400110805

1. Introduction

Thank you for paying me the great compliment of asking me to address the annual conference. When I consider the accumulated wisdom and collective realism in this room, I wonder what value I can add?! University leadership, administration and management are as steep a learning curve as scholarly research on higher education. At a recent meeting I attended, Ulrich Teichler, the doyen of higher education studies in Europe, whom some of you will know, summed up nicely my dilemma. He said that he wished he was an expert on mad cow disease, rather than higher education. At least if his study was mad cows, he would not find himself giving conference papers to an audience consisting entirely of mad cows, every one all too ready to jump to their feet to tell him when he had it wrong, when he had no idea what it was about, and when he was just rabbiting on about the bleeding obvious!

So please forgive me for the obvious, bleeding or otherwise, and I hope you can refrain from jumping to your feet to tell me where I have it wrong - at least until questions and discussion at the end!

I'm sure that the topic of higher education 10 years hence – two average terms in the contractual life of a senior executive –has already occupied you. The speech by Glyn Davis late last year gave all of us more food for thought. Perhaps what I can add to these speculations, at least for those of you who don't work full-time in international programs, is an international standpoint. The three elements that will determine our future are (1) the global position of Australian higher education, (2) national government support and regulation, and (3) our own institutional and academic efforts. Rather than taking the usual pre-Copernican perspective, working outwards from the local level to the national and then the global, I will reverse the order. I will look at Australian higher education from outside, locating us in the global higher education setting, because our global location frames our present potential, and changes in the global environment will shape our possible futures. This will take the bulk of my talk. Then I will work back more briefly to the national setting and system stratification, and consider some strategic options for ATN.

2. The Global Setting

So to the global setting. In face of globalisation, it's better to put up a windmill than a windbreak … though the windmill metaphor is in danger of being done to death (maybe my PowerPoint will kill it!). With this proviso: in higher education not every global wind is the same wind. Not every windmill is the same windmill. Our windmills must be custom built and positioned, just so, for the breeze we want to catch; and so flexible that we can turn them 180 degrees about when the weather changes.

Let's start with position of Australian higher education today. How do we sit, as a global player in teaching services, and a global player in research? First, let's consider undergraduate and coursework postgraduate degrees. You know the global position. Australia is a high volume exporter, especially strong in East and Southeast Asia which provide 85% of our students – very high volume in relation to national system size, having exhibited remarkable growth despite the downward pressure on academic capacity due to reductions in public funding per student. In the 2001 OECD data we ranked fifth behind the US, UK, Germany and France in exports of tertiary education, but third when degree courses only are counted. Australia's relative export position has strengthened since 2001 and we currently provide about 10% of worldwide places, 200,000 students. (I will deal with the recent downturn later). Here Australia has not created something out of nothing, so much as made hay in a period of increasing people mobility worldwide. For example between 2001 and 2002 the worldwide number of foreign students increased by 15.4% to 1.9 million, while the number enrolled in Australian universities rose by 17.7% to 185,000.

The USA has three times as many international students as Australia, and is a more attractive destination by most measures, but we are ahead of the US in exports to our natural region, Indonesia, Malaysia and Singapore. Chinese students in Australia are at 50% the USA level, though we are weak relative to the USA in exports to India, Korea and Japan. Features of the Australian system are that nearly all universities are major exporters and have now built considerable expertise. Australian business practices in education must be reckoned at least the equal of any other export nation. In the process we have also become much more competent in dealing with

Southeast Asia and China and many universities are now profoundly engaged in the region, though our lack of language skills continues to handicap us.

Second, let's consider research. Here Australia's global position is less strong than its position in high volume commercial teaching. In my view the best data available on comparative research performance is the Shanghai Jiao Tong survey, which avoids the use of *Times Higher Education Supplement*-style reputational indicators – which tell us about reputation rather about than material performance, and are all too readily manipulated to produce the desired result – and draws on both quantity and quality measures of research. The 2004 Jiao Tong data tell us that Australia has a good spread of institutions, 14, in the world's top 500 research universities. We also have six of the top 200. However, we only have two in the top 100, ANU and Melbourne. The top 100 is dominated by the United States, which together with the UK constitutes almost two thirds of the leading universities. Canada has four, twice the number of Australia. As I read it only ANU has a cast-iron case for recognition as a major global player in research, which is a function of its distinctive mission and emphasis (it has only 6000 undergraduates), funding base and staffing. In 2003 ANU had 743 research-only academic staff, and 504 teaching and research.

You are familiar with those figures but I want to take the Jiao Tong data further, by comparing research performance (measured by the number of leading research universities) to national economic capacity. In the table, the index of national economic capacity is derived from total GDP, multiplied by GDP per head – or in other words, GDP squared divided by population size. This takes into account both the size of the economy, and its wealth intensity. I then compounded all of the figures for each nation, creating a global total index, and calculated each nation's share of the global index - that's the data in the second column in the table. The nation's share of global economic capacity is then compared to its share of the top 500 research universities, the top 200 universities and the top 100.

You can see that when we consider the top 500 universities and the top 200 universities, Australia's research performance is stronger than our economic capacity would suggest. However we are less strong relative to economic capacity, at the highest level. And we are outperformed by the UK, Canada and parts of Europe.

It is significant that of the nations with stronger research universities than their national economic capacity suggests, all except one consists of predominantly public sector and mostly doctoral standard universities. Research capacity has been built largely by public funding. This group includes Australia; or rather, it has up to now. Nations with many teaching only institutions and large private sectors tend to have weaker than expected research capacity. At worst, this group will include Australia in future. The exceptional case is the USA. It has a highly differentiated sector, with about 100 research intensive universities, another 100 or so universities with areas of research strength, and 3000 plus teaching only institutions; 30% of enrolments in the private sector; and about the proportion of top research universities that its share of global economic capacity would suggest. But English-speaking nations have an advantage in research performance - English is the global research language - and on this comparative measure the research performance of United States is weaker than that of the UK (especially), Canada, and Australia. The UK has a similar university tradition and system structure to Australia but has built mass participation in a mixed funded unitary system without losing its premier global role in research.

Third, let’s consider Australia’s global position in doctoral education. As you may know, a low proportion of Australia’s international students are research students, compared to most export nations. There is much less scholarship support than in the USA, where more than 40% of international graduate students receive aid from their universities. Australian universities have a disincentive to enrol fee-paying doctoral students given that in some laboratory sciences the funding rate for domestic PhDs is double the level of international student fees. So Australia attracts relatively few of the highest calibre international students, who make particularly productive migrants and potential Australian university staff, or offshore alumni that are powerfully placed.

In sum, Australia, like the UK, has become a highly successful exporter of high volume medium quality standard cost degree programs, particularly in business studies and associated technologies. Australia also punches above its weight in research, but here the global edge is less pronounced and we are behind the other English-speaking nations, apart from New Zealand. There are few obvious synergies between our strength as a global exporter, and our global role in research – our

strongest research university, ANU, has a minor role in fee-based markets; most of our research collaborations are in North America, UK and Europe but our fee-paying students come from Asia; and we are weak in international doctoral education.

We have gone for global quantity more than global quality (the balance between them is skewed), and we have become boxed into a segment of the global market. We have given more attention to building exportable teaching than global research linkages, as shown by the paucity of scholarship funding and the failure to build a blue sky research capacity in the post-1986 universities, including the ATN group. In the long run, given that we will be beaten on price in Asia, national research capacity will be essential to comparative advantage in the export market, to the quality edge. Research is the main measurable indicator of status in higher education. This is just as true at the global level. Our research status determines our capacity to attract high quality international students and staff. Further, a strong research infrastructure underpins a broader range of quality teaching programs, and academic development strategies. Bluntly, nations with strong research capacity are better positioned to control their own destiny in a global knowledge economy. They are better placed to take global initiatives, exchange, collaborate, compete - to create their own agendas, to make effective use of ideas from elsewhere, and to attract people and capital.

What then should we make of the recent trend? Arguably, the downturn in international student numbers began not in Australia but in the US in 2002-2003, which saw a sharp drop in students from the Middle East, Muslim South East Asia and China. The next year, in 2003-2004, though the US dollar was depreciating the number of foreign students enrolled in American higher education fell by 2.4%. There was a 5% decline in undergraduates, partly cancelled out by an increase in graduate students. However this was mostly at Master-level institutions; in many leading research/doctoral universities the number of foreign graduate students fell, with declines of up to 23%. In terms of national origin, in 2003-2004 students from the Middle East fell by 9%, noticeably in nations closest to Iraq (Saudi Arabia 16%, Kuwait 17%, Jordan 15%, though only 2% in Turkey). Asia remains the largest sending region for the USA, but students from China fell by 5% and there were larger declines from Muslim Indonesia (15%) and Pakistan (10%), though just 2% from Malaysia, and from Thailand (11%) and Japan (11%). There were also declines from

Germany (6%) and France (6%), European nations at variance with American foreign policy. There was an increase in students from India, now America's largest source of foreign students, from 75,000 to 80,000 (7%) and smaller rises from Mexico, Canada, the UK and Korea. In the case of the US we can explain the downturn on the supply side by pointing to the greater difficulty in obtaining visas, especially for students from predominantly non-white nations, the war, and perhaps a domestic climate now more hostile to Muslim cultures. The demand side is less clear, especially in China.

The downward trend in Australia appeared later than in the USA. Commencements fell slightly in 2004, and, but appear to be dropping much more sharply in 2005. We do not have final data yet, and I'm sure many of you know the preliminary picture better than I do, but I understand numbers from Indonesia and Malaysia are down sharply – the trend in Indonesia is of great concern given Indonesia's proximity, size and potential for growth in unmet demand, this is not a market Australia can let slide - there is a drop in students from Singapore, while China appears to be holding up.

Many explanations have been advanced. Much of it is speculation, ad hoc rationalisation or statements of the obvious, such as the importance of quality. It is clear that the restrictions on student visas, especially the financial conditions, the increased cost of applications, the appreciation of the Australian dollar and the rising cost of living in Australia (especially inner-city housing in tighter rental markets) are working against us. Our cost advantage in relation to the UK has diminished. Australia's involvement in war in the Middle East is also working against us but we do not have evidence on how significant this is. It is less clear the extent to which foreign branch campuses, growing domestic capacity in Malaysia and Singapore (it is a minor factor in Indonesia), the pull of business opportunities in China and the rise of China as an education exporter are affecting the picture. Growth in domestic capacity, which is a slow process, cannot alone explain a trend of this magnitude in applications to Australia. In the longer term it is important, because every increase in higher education places within Asia, which are more affordable, weakens the capacity of Australian higher education institutions to compete on price.

What about the climate in Australia for students from Muslim nations, and perhaps all non-white students? Does the global geo-strategic polarization, expressed as it is on

cultural lines, affect international education in Australia as it does in the USA? We lack comparative evidence, but a recent research study by my centre shows that students from Indonesia and Malaysia, especially women students wearing the hejab, are more likely than most other international students to experience loneliness and isolation, and incidences of racism and discrimination. We conducted interviews with 200 international students: of the first two thirds, for whom the data have been processed, 10 per cent said that they did not feel safe and secure while in Australia. Many were Muslim women, and all were non-white, including students from China. This is a key issue for us. Up to now student safety and security has been one of the important elements in Australia's competitive advantage especially vis a vis the USA.

My hunch is that in the post-9/11 climate there is a trade-off between security and mobility, at the global level; and issues of student security have become more important, on the demand side of international education as well as the supply side. This is reinforced by the fact that in both the USA and Australia the downturn in numbers is showing itself most strongly in undergraduate education, where parents rather than students are the main decision-makers about international education, heightening the influence of security factors. If so, in this period, in Muslim Southeast Asia and East Asia, there is potential for the permanent replacement of part of the demand for foreign undergraduate education with domestic undergraduate education more secure in pastoral and cultural terms. The enrolment trend in the UK will clarify whether there is a broader downturn in mobility and reduced demand for the English-language nations, or whether the trends are confined to the US and Australia.

In sum, looking at the future global position of Australia:

- The will be a continuing growth in cross-border university networking, jointly badged degrees and large-scale cross-country consortia and research projects. All over the world, global activity is a source of status and opportunities in higher education - though it rarely covers its costs, except in some fee-based programs;
- The provider market in cross-border teaching is becoming more competitive, as shown by the emergence of formal global rankings and of new provider nations in Europe and Asia. Many OECD nations, facing a massive demographic downturn in the 17-30 age group, will have stronger incentives to recruit international students; while importer nations have obvious incentives to reduce

imports. We may well find that all those business lessons learned bit by bit the hard way in Australia will transfer awfully quickly to Singapore, to Malaysia, to China and perhaps also to Germany and the Netherlands;

- Portability of qualifications is already a source of comparative advantage; this will become more important and will drive extensive bilateral and perhaps multilateral negotiations, especially in Asia;
- As you know, Australia's relative position has become less favourable due to the rise in local costs; and the growing competitiveness will emphasise differentiating factors such as research status vis a vis USA, UK and Europe;
- There might be a downturn in cross-border educational mobility – or at least a levelling off in global growth – catalysed by the new focus on security on both supply side and demand side. Though the Asia-Pacific demand for education will grow by leaps and bounds, powered by economic growth and a tremendous concentration of educational demand in the major cities, demand for cross-border education, those older IDP projections, cannot be taken for granted;
- After the Nelson reforms Australian higher education will become more differentiated in mission, status and resources and this will reposition many Australian institutions in the export market. But a complicating factor here is that global standing is determined as much or more by national identity than by institutional identity. I will now expand on both factors – system differentiation, and the implications for global standing.

3. The National Setting, and options for the ATN universities

I will turn now to the national setting and the options for the ATN universities. Australian higher education has a resilient culture of uniformity. As in the UK, since the collapse of the binary divide institutions have differentiated vertically on the basis of a common model – the comprehensive doctoral university - rather than differentiating openly by function. All institutions have had the same incentive to be all things to all people and all but the sandstones have had strong incentives to expand in size – in fact in the case of international students, the sandstones have been volume maximizers just like the rest. However, the vertical differentiation has been sharp in terms of status and resources, and especially in research roles. When

we look closely we find that Australian higher education exhibits the same polarization between a predominantly research focus and a predominantly teaching focus exhibited by mass higher education systems the world over. Everywhere we find high status research universities, low status volume maximisers, often private sector and/or commercial, and institutions in between (like the newer pre-1987 universities in Australia), struggling for a role, and often doing everything at once.

In every national system, there is a limited number of high status universities with high value degrees and globally competitive research across the board. These institutions draw their status from their research, and from their power to attract students and academic staff. Each driver reinforces the other, and reproducing elite status is much easier than breaking into the elite. As you know, elite universities normally stay elite universities even when they are badly managed or the central executive is weak – a classic case is Cambridge in the UK. However in a status market there is room only for a small number of leading providers and it is very hard to break into the circle, though it is possible for some to do so in the longer term.

As you know the Nelson system partly overturns regulated uniformity, reinforcing the systemic polarization and specialisation natural to competition in higher education. The main move is full-fee places underpinned by FEE-HELP, which ensures that in future institutional status, including research performance and prestige – rather than offshore business acumen – will provide the main resource edge. This strengthens the relative advantage of elite institutions. Newer universities, especially the regional institutions, cannot compete in the full-fee domestic student market (as say CQU has been able to compete in the international student market, earning almost 40% of its revenue from that source) and will be force to adopt a different role trajectory. They will be even more dependant on high volume international revenues than before, but will be handicapped by downward pressures on their global status.

I expect that the caps will come off the limit on FEE-HELP borrowings and the proportion of domestic students in any one program that can be charged full-fees. In the medium term we can expect the full-fee and HECS strands to unify, as there are obvious anomalies in maintaining a dual system of places, perhaps with a continued public subsidy (a merit ‘scholarship’) underpinning the erstwhile HECS places. If

present trends continue, one way or another, public funding (aside from research funding) will shift from institutions to students. The emergence of full-fees automatically raises the question of scholarships - high tuition regimes must be supported by high aid if they are to be socially and academically viable as the American experience shows – but it is likely that in the longer term the main form of student support in Australia will take the form not of scholarship funding but of FEE-HELP itself. FEE-HELP will become a major item of public cost through the subsidisation of interest rates and default on the accumulated debts, placing a downward pressure on the financing of subsidised places, pushing operating funding to the margin. Following the introduction of an RAE, public research funding will become a higher proportion of public support. This might be crucial to Australia's global position; but research funds, like full fees, will flow mostly to the sandstones. This alone could secure the more open development of largely teaching-focused institutions. It is unlikely that any existing universities will be formally redesignated 'teaching-only', and isolated pockets of applied research can finance themselves, but it is impossible to sustain a general research role without blue sky funding.

The second key move is the extension of FEE-HELP to the private sector and the signals that the Commonwealth wants to loosen the barriers to entry, enabling new and existing domestic and foreign private providers. Australian public culture favours entrepreneurialism, Australia's role in cross-border trade in education makes it hard to oppose freedom of entry, and following the Nelson reforms and the government's election win, marketisation policies are stronger, facilitating the sudden weakening of the MCEETYA protocols. I doubt that foreign providers will play much of a role except in the longer term, but we will probably see many new specialist providers (in turn encouraging some specialisation in the public sector), a small number of new comprehensive private universities, and the rise and rise of Notre Dame Australia.

The pathway for the sandstones - and perhaps for a small group knocking on the door of the Go8, such as Macquarie - is clear. The way head is research, prestige-building investments in staff and facilities, adding services to underpin fees that rise faster than inflation, and the marketing of tradition leavened by knowledge economy modernity and global engagement. They can leverage full fee income and public research funding to consolidate their domestic position and strengthen their global

role, though they will need to expand scholarship programs for international doctoral students. With full fee domestic students the new source of discretionary revenues, they no longer have the same compulsion to build high volume medium quality international student enrolments. A couple might become less engaged in Asia, pulling their identities back to their traditional base, the domestic *bourgeoisie* and emphasising the importance of Europe and the Atlantic. However the international specialists, ANU, Monash and UNSW, focused on Asia-Pacific, will remain so.

Other institutions will continue to aspire to elite status and will set in place long-term strategies to achieve that goal. The trick will be to render these compatible with medium term trajectories that may well look rather different. Below the sandstones, roles within the national system will tend to differentiate into three groups:

- State/Territory-wide providers based in near the CBD and strongly identified with the city, with its work and its cultures, thus taking advantage of the mission gap left by the sandstones. This group could be expected to have a strong presence in second degrees and continuing education;
- Regionally-oriented institutions whether on the edge of the large cities or in provincial centres, intersecting with TAFE institutions and feeding students into the major providers at postgraduate stage;
- Niche public and private sector providers.

At the global level, Australian institutions will take varying roles within the hierarchy of universities and nations. It is impossible that any Australian institution will achieve the status and power of a Stanford or a Cambridge, unless Australia as a nation becomes much more powerful than it now is. Under the most favourable scenario, some Australian universities could eventually achieve global recognition in their own right equivalent to, say, a major American state university, or Warwick or York in the UK, though if so its main role would be in Asia-Pacific. ANU is closest to this at present. However the strongest Australian institutions are currently found in segment 2 of the global hierarchy. It is not clear how many will remain effectively engaged in segments 2 and 3, and whether some might fall back to a predominantly localised role. It is clear that a more differentiated Australian system will send out contradictory global signals. Given that global reputation is as much determined in terms of nation as in terms of institution, which signals will predominate? Will Australia be seen as a

regional research powerhouse, or as a global polytechnic? In the longer term the matter is unlikely to be resolved by quality assurance systems, and by recognition protocols (though these will help) but by the real capacity of research and teaching.

What are the options for the ATN group? Moving upwards into the category of genuine elite university, globally recognised as such, able to perform in the whole range of roles, is a difficult but not impossible task. The competitive circumstances differ. QUT faces only Griffith as competition for number two position in a growth state and Curtin, perhaps only Notre Dame. The Royal MIT despite its troubles is beautifully placed in the centre of Melbourne, and Victorian consciousness. Sydney is a big market and perhaps there is room for four elite institutions in the long run, though private sector competitors will appear. It is harder for South Australia, but it has made all the right moves, such as its city campus and its international profile.

Whether the ATN universities aspire to be global research universities or major city-based institutions, prestige building will be essential. This means a Law faculty, if there isn't one already, and a strong presence in emerging elite professions such as communications and bio-medicine. Needless to say, developing a Medicine Faculty changes everything, not least the institution's potential in research.

If the desired orientation is City-University with selected research strengths, then it will be essential to grow community-building activities, which have been comparatively weak in Australia, and will continue to be underplayed by the sandstones. This means investing in community projects that add value; and bringing the community and industry more overtly into governance, course development and certification and applied research, building on present activities.

If the desired orientation is Global Research University then there is no choice but to develop blue sky research capacity across the board, which will take a generation. A fundamental research capacity cannot finance its own development. In the absence of public funding – and here it is essential to secure a capacity development fund as part of any RA-based research system - the choices are to leverage alumni donations, and to leverage foreign and domestic fees. In the last decade much of the revenue raised in foreign student fees has been siphoned into non-academic

services and facilities, driven by the costs of competition and expansion. If expansion slows, and priorities shift into research development, with a partial move from engineering and technologies to research in the life sciences, the goal is within reach.