

# Deakin Research Online

**This is the published version:**

Gale, Trevor 2009, Challenging Australian higher education : three places to begin, in *Vice-Chancellor's Colloquia Series, La Trobe University (Bundoora)*, [La Trobe University], [Bundoora, Vic.], pp. 1-13.

**Available from Deakin Research Online:**

<http://hdl.handle.net/10536/DRO/DU:30040898>

**Every reasonable effort has been made to ensure that permission has been obtained for items included in Deakin Research Online. If you believe that your rights have been infringed by this repository, please contact [drosupport@deakin.edu.au](mailto:drosupport@deakin.edu.au)**

**Copyright** : 2009, La Trobe University

## Challenging Australian Higher Education: Three places to begin<sup>1</sup>

Vice-Chancellor's Colloquia Series  
David Myers Building, La Trobe University (Bundoora)  
30<sup>th</sup> October 2009

Trevor Gale  
National Centre for Student Equity in Higher Education<sup>2</sup>

### Introduction

I want to begin by thanking Professor Johnson for this opportunity to rehearse and indeed expand on the comments I made earlier this year at the Universities Australia meeting of Vice-Chancellors in Brisbane. My comments then and now are in part speculative, given that they comment on what might be, although they are also cognizant of what we already know about student equity issues in Australian higher education and of the research data currently available, including research undertaken by the National Centre but also research available more widely, nationally and internationally. Informed by this work, the central thesis that I want to put to you today and to open up to discussion is that if the Australian higher education sector is to take seriously the federal government's 20/40 targets, then there are three main challenges that need to be confronted.

First, that expansion of higher education provision and of a particular mix, will need to be done in the context of limited excess student demand, certainly compared with previous periods of expansion by the sector. Second, that the 20/40 targets have brought into sharp relief the problems with our current set of definitions and measurements of students: of equity groups (including socioeconomic status) but also student achievement and aspiration. And third, that universities will need to confront the teaching and learning that is higher education. This is the very thing – or at least one of them – for which we would hope school students would aspire.

### Challenge No. 1: to expand the system in a context of low unmet student demand

It is difficult to single out one of these three as more important than the others or to put them in some sort of hierarchy. But if push came to shove, I should probably nominate the first: the problems around expanding the system in the context of low unmet student demand, because this tends to drive the other two and it also has the potential to be the most promising in terms of access for under-represented groups. Research in the USA (Alon 2009) suggests that the participation of low SES people in university is more likely to increase in proportional terms when unmet student demand is low and less likely to increase proportionally when unmet student demand is high. While the former is yet to be proven in Australia, the latter has certainly been evident: people from low SES backgrounds have not increased their representation in Australian higher education during periods of system expansion. If we are truly in a period of low unmet student demand, the current proposed expansion of higher education will be like no other in Australia's history. In the past, the primary driver for expanding higher education has been the demand for places significantly exceeding their supply. Reforms to Australian higher education under Whitlam and Dawkins are classic examples.

But unmet student demand for higher education has been trending down. While it is currently at 8% or 18,500 people, before the effect of the Global Financial Crisis (GFC) it was 6% (in 2008) and falling. I suspect that if the worst of the GFC is past us, and if all else remains equal, we may see these numbers return to trend. Of course, this is unmet student demand, not student demand per se. In the noughties (2000s), the rise and fall of unmet student demand has

---

<sup>1</sup> An earlier version of this paper, titled *Three 20/40 challenges for Australian higher education*, was presented to 'The New Tertiary Environment for Australia' Vice-Chancellors Workshop, Universities Australia, QUT (Gardens Point Campus), Brisbane, 30 August 2009. A version of this earlier paper was also printed in *Campus Review* as 'Three challenges for equity', 14 September 2009.

<sup>2</sup> The National Centre for Student Equity in Higher Education is an Australian Government funded research centre, hosted at the University of South Australia. It began operations on 1 July 2008. Professor Trevor Gale is its founding director. GPO Box 2471 Adelaide SA 5001 AUSTRALIA. [www.equity101.info](http://www.equity101.info)

roughly matched the fall and rise in the supply of places. That is, throughout the decade, student demand for university places has been fairly constant. The number one challenge, then, confronting Australian higher education would seem to be to encourage and enable people to seek entry from among those who currently do not.

In Victoria, the situation is perhaps a little brighter. Unmet demand in the state has more or less followed the national average, although at a slightly higher rate. For example, in 2009, unmet student demand in Victoria was running a little under 11% or around 6,400 people (DEEWR 2009: 77).

At these levels, there is room for some expansion in higher education provision but not that much and not enough to shift the proportion of 25 to 34 year old Australians with bachelor degrees from 32% in 2008 to 40% by 2025.

Kwong Lee Dow's group, which is currently charged with developing a tertiary education plan for Victoria, has estimated that in order to meet the Federal government's 40% attainment target, student enrolments in Victorian universities alone would need to increase by at least 10,000 and possibly by 12,000 (The Australian, 28 October 2009, p. 26). That's an increase of 22% on the 2009 Victorian intake, twice as much as its current unmet student demand, which is temporarily inflated by the GFC. To put this in a national perspective, by 2025, Australia will require an expansion to the system of about 4 to 5 times the size of Monash University, currently the largest university in Australia at around 50,000 students.

So what can universities do to address the problem of low numbers of eligible students waiting in the wings to soak up the proposed higher education expansion?

I have heard some senior university managers suggest that universities could adjust the mix of their student enrolments to ensure more of their undergraduates are enrolled in and complete degree programs. This could possibly help at the margins of student attainment targets but it is hardly a strategy to address the massive increases required. I have also heard others say that improving student retention rates to levels near 100% would solve attainment-related targets without any need to attract currently un-attracted students. Improving retention rates is a worthy aim although achieving absolute retention is a much larger task and, if achieved, would stand apart from other higher education systems around the world.

And, as I indicated earlier, we can also anticipate that the Global Financial Crisis will act to temporarily increase student demand, some of which has already been absorbed by universities bulking up on midyear entry students in anticipation of the staged removal of volume caps. But these entrants are more likely to be mature age students who will not directly contribute to the 40% target. The 25 to 34 year olds of 2025 are currently 9 to 18 years old. Most are still at school, and being required by law and encouraged through financial disincentives to stay longer.

Yet if the younger end of this cohort follows their older siblings, interest in participating in higher education would seem to be waning. 15 to 19 year old Australians are now more likely to be out of education or employment than their OECD peers, particularly those in the European Union. With respect to the kind of education that would enable young Australians to qualify for university entry, more (in absolute terms) are staying on at school to complete Year 12 but, because of the growing population, Year 12 students increasingly represent a smaller proportion of their age cohort.

The important point to note here is that these figures relate to Year 12 students and do not include their equivalents. Year 12 equivalence has undergone something of a revision in recent times, in part in response to the federal government's target of a 90% retention rate to Year 12 or equivalent by 2015. In shifting the retention target from 2020 to 2015 – a shift initiated by government – the definition of Year 12 equivalence has also shifted from Certificate 3 to Certificate 2. This is the kind of manipulation that has allowed Victoria to claim that it has already met the 90% Year 12 or equivalent retention target. Yet neither Certificate 3 nor 2 are highly regarded by universities as preparation for university entry. In fact, Certificate 4 in Adult Tertiary Preparation currently offered by TAFE institutions is more in keeping with university entry requirements.

It is clear that many of the 15 to 19 year olds not staying on at school are moving on to VET. Indeed, the rise in VET participation since 2004 can be attributed mainly to an increased participation by this age group, which now represent

30% of all VET students.<sup>3</sup> But it is important to note that only 20% of VET students are enrolled in courses that articulate with university: 10% in Certificate 4 courses and a further 10% in Diploma and above courses. In short, VET currently provides a very narrow route to higher education that will not simply be redressed by a better Australian Qualifications Framework (AQF) and may well be diminished further in Victoria by the introduction of HECS-style fees now applied to VET courses that articulate with university.

The proposed expansion of Australian higher education will also be like no other because it is required to more than equally benefit people from low socioeconomic backgrounds. As I mentioned earlier, in the past when governments have increased the supply of higher education, the absolute number of low SES students has increased but their proportional representation has remained relatively unchanged (at around 15%). Under the current proposal, their undergraduate representation is set to rise in absolute terms and also proportionally, to 20% by 2020.

But just as we cannot rely on VET to make up the shortfall in qualified applicants for higher education, neither can VET be relied on to supply higher education with an increased proportion of students from low socioeconomic backgrounds. While low SES people are over-represented in VET, the participation rates of SES groups in upper-level VET courses (Certificate 4, Diploma and above) mirror their participation in universities. The same can be said about Indigenous peoples. They are over-represented in VET courses (at 4.7% of all VET students compared to 2.4% of all Australians), but only 6% of all Indigenous VET students are enrolled in Diploma or above courses that articulate with higher education. In short, VET will not currently deliver disadvantaged students to university in the numbers it desires and requires.

The first issue to be confronted then is that an increase in university student numbers will mean a new accounting of student achievement and aspiration, with aspiration now receiving higher prominence. Some universities could conceivably offer more places and continue to trade solely in school results (that is, student achievement or ENTER scores) but it would mean their expansion would come at a cost to enrolments in other universities. Most will need to also engage with students' aspirations.

In the past, student aspirations have remained largely in the background. Excesses in student demand have mediated competition between universities. '*Our university is the place for you*' has been the mantra of most university marketing departments. That is still an important message but it will now need to be balanced against a new one, that is, '*University is a place for you*'. To achieve the sector targets, Australian universities will need to find ways in which to work collaboratively to address the more basic problem of an insufficient supply of qualified applicants.

Indeed, the elephant in the room in all this is what individual institutions and institutional collectives will do. For example, while most Go8 universities have indicated that they have no plans to expand,<sup>4</sup> both Melbourne and Sydney, the two oldest universities in the country, have signaled that they plan to downsize their undergraduate intakes (The Australian, 28 October 2009, p. 26). In particular, the Vice-Chancellor at the University of Sydney has recently noted that, by elite university standards, Sydney currently has a large undergraduate student enrolment. If the USA research in relation to the access to university by low SES groups is born out in Australia and in individual institutions, then we can expect that increasing the demand for elite universities by reducing the places they make available is unlikely to contribute to an increased representation of low SES students in those institutions.

While such moves have the potential to shift supply and have related effects on student demand and participation – at both undergraduate and postgraduate levels – they do not change the underlying problem facing the sector as a whole, of not enough interested and qualified applicants to meet the government's 20/40 targets.

Both the achievement and aspirations of students prior to entering higher education will need to be the focus of increased and concerted efforts by universities. Until recently, most of this effort has been focused on students in Years 11 and 12, at a time when achievement and aspirations have been largely set. More needs to be done earlier in

---

<sup>3</sup> The average age of VET students in Australia is 31 years old.

<sup>4</sup> UWA and the University of Adelaide are the exceptions. Both have indicated their intention to grow, each by about 4000 new student places.

school, at least from the upper end of primary school, when patterns of achievement and aspiration that lead to university are being formed. The research suggests that the best pay-offs for investment in higher education are when student support begins as early as possible and continues for as long as possible (Heckman & Rubinstein 2001). Given the 20/40 targets and the context in which they are to be achieved, it is in the interests of universities to be involved in partnership with schools to achieve such ends. Indeed, they are already involved in influencing school curriculum and producing the teachers who implement it.

But targeted interventions early in schooling will need to be strategic, comprised of particular characteristics and an unambiguous equity orientation. The National Centre (NCSEHE) has recently completed research for the government on how to design and evaluate effective programs of this kind. Conducted in four stages, the research found that the overall likely effectiveness of a program depends on its strength of composition and on the degree to which it is supported by an equity orientation toward policy and practice. Specifically, it suggested that programs that are quite likely to increase the number of disadvantaged students going on to higher education than otherwise would have been the case, exhibit at least 4 (from 10) design characteristics, 3 (from 4) implementation strategies and 2 (from 3) equity perspectives. The full report is soon to be released on DEEWR's website, within the next week or so.

## **Challenge No. 2: to definitions and measurements**

The second challenge that the sector faces concerns its current set of definitions and measurements: of equity groups but also student achievement and aspiration.

### *Defining and measuring socioeconomic status*

Consider, for example, how we currently think about and measure socioeconomic status. This is particularly important because universities across the country are now being asked to lift their game, to raise the number of low socioeconomic status Australians enrolled in their institutions: to 20% by 2020.<sup>5</sup> This is both a target for the sector – with variation across institutions contributing to the overall result – and, as I now want to go on to elaborate, a 'catch-all' for all under-represented groups, particularly Indigenous peoples and people from regional and remote areas.

There are at least three questions that arise for policy and practice from the current statistical precision that is applied to conceptions of equity. And, in our current policy environment, they tend to be pursued primarily in relation to socioeconomic status. They are:

- How can we account for differences between equity groups?
- How can we, indeed should we, account for differences within equity groups?
- How confident can we be that we are measuring what we claim to be measuring?

The first question speaks to the issue of the relative importance between equity groups. In the Bradley Review and in the Federal Government's response, low socioeconomic status appears to have become an umbrella term for all under-represented groups, including not only low SES people but also Indigenous peoples and people from regional and remote areas.

While it is true that many Indigenous and regional and remote people are from low SES backgrounds, it is also the case that many are not. For example, at least one third of Indigenous students are not eligible for the youth support allowance. Moreover, even those who are from low SES backgrounds, these backgrounds do not describe in full their particular social and cultural circumstances. Australia's Indigenous population rightly claims its distinctiveness in Australian society, as first Australians, as having legitimate claims to and relationships with the land, as having distinctive values, understandings, practices and rights. To its credit, the Government's recent budget paper, *Transforming Australia's Higher Education System*, announced its intention to support 'a review of the effectiveness of

---

<sup>5</sup> At the same time, universities are being invited to enrol more undergraduate students, to increase the overall participation of Australians in higher education, to 40% of 25 to 34 year olds by 2025. If achieved, this will be the fifth expansion phase in the history of Australian higher education.

measures to improve the participation of indigenous students in higher education' (Commonwealth of Australia 2009). Nonetheless, the Government is still of the view that 'The steps to improve low SES student participation will impact on and benefit Indigenous students' (Commonwealth of Australia 2009). The same concessions have not been afforded people from regional and remote areas of Australia, despite the fact that, of all equity groups, their participation in higher education has seen the largest reduction over time. In effect, in the current equity policy hierarchy, Indigenous people and people from regional and remote areas are located first and second respectively under the low socioeconomic banner, while students with disabilities are less conveniently subsumed and indeed are displaced from current policy debates.

The second issue, then, that arises from our current policy settings is the way in which people from low socioeconomic backgrounds are conceived as a homogenous group. There are in fact distinct differences within this grouping that again are derived from their different social and cultural differences. Refugees, for example, are quite a different group from the second and third generation unemployed of Anglo heritage. Take language – which we know is intimately related to culture – as just one example of these differences. For some, English is a third or fourth language, for others mastery is difficult even when English is their first language. And there are other examples of differences within this cohort that I am sure you could cite.

The third issue others and I have with a narrowly statistical approach to defining socioeconomic status involves the question of precision, in how SES is measured. Not very well, some would say. We currently use an ABS-generated measure of the employment and educational attainment of individuals within postcodes, which are then rated from highest to lowest. Those postcodes in the bottom quartile, the bottom 25%, and, by association, those people living in them, are deemed to be of low socioeconomic status. One of the problems with this measure is that it does not take account of wealthy and high status areas within low SES postcodes or of poorer and lower status areas in middle and high SES postcodes.

Naturally, Vice-Chancellors are concerned about the lack of clarity around these issues, particularly those who believe that their current student populations include students from low SES backgrounds who originate from and/or live in middle and high SES postcodes. Vice-Chancellors are also concerned about the compacts that each institution will be required to establish with the Government in 2010, which will include institutional commitments to meeting certain targets related to the improved participation of students from low SES backgrounds. A university may well be in a position where, in effect, it is able to meet its target but this may not be represented within the official statistics.

In recognition of these difficulties, the Government has advised that it intends to revise the way in which low SES is currently measured for higher education participation purposes. This will most likely include taking account of smaller areas within postcodes. It may also involve combining this with data on students' parental educational attainment,<sup>6</sup>

---

<sup>6</sup> While the research suggests that people whose parent(s) have a university degree are more likely to seek a university education themselves, and information about a student's 'parental educational attainment' (PEA) would be useful to know, it is less clear that PEA is a good proxy for socioeconomic status. Socioeconomic status is far more than the educational qualification one has received. Certainly it would appear that people from low socioeconomic backgrounds tend not to have parents with a university degree, but this might be by association rather than indicative of a cause and effect relationship. Even so, if the Australian government and Australian universities are successful in raising the participation levels of low SES students in higher education, over time, when those students have their own children approaching a higher education, the PEA effect will be less relevant with respect to their SES. That is, PEAs will have lost its potency as a SES measure. In addition, PEAs, as they are currently proposed to be measured, do not take account of degree types. We know, for example, that some Australian university degrees are harder to access than others (e.g. compare degrees from elite with 'equity' universities, or degrees obtained in law and medicine compared with teaching and nursing), and that degrees obtained in other parts of the world are not of the same standard as Australian university degrees. We also know that it is one thing to have obtained a degree in the 1960s and another to have obtained it in the 1980s. This has implications particularly for mature age students, and for the institutions that tend to enrol large numbers of them (e.g. regional universities), who's parents may have obtained the highest education qualification available to them at the time (e.g. grade 8). And in times of global financial crisis (GFC),

which DEEWR is requiring universities to collect from students from 2010. Another possible measure could be derived from youth support allowance data, available from Centrelink, particularly now that the Government is committed to 'cleaning up' the eligibility criteria to exclude students whose financial circumstances do not warrant such support. To be worthy of our trust, any new measure of low socioeconomic status needs to be cognizant of at least three things:

- First, socioeconomic status is a concept that is defined by its context; we need to avoid measures that 'context-strip' individuals, effectively discounting their social and cultural circumstances, which contribute to who they are;
- Second, because of the range of circumstances that constitute socioeconomic status, better statistical measures need to involve a combination rather than rely on one single measure;
- Third, the combination of social, cultural and economic circumstances that define socioeconomic status means that any statistical representation needs to be treated as indicative rather than prescriptive; statistical measures of social and cultural issues are always approximations.

As I have already noted, the Government has recently commented that 'Better measures of low socio economic status will be developed which are based on the circumstances of individual students and their families' (Commonwealth of Australia 2009: 14). However, the value of the current and arguably flawed measure is its regard for context and that it is not purely derived from economic considerations, although one's employment certainly speaks to this. The danger in any new measure is that it becomes so focused on individuals and their individual circumstances, that it loses any sense of the influence of these individuals' socio-cultural contexts, and which constitute the group.<sup>7</sup>

In developing a new measure of socioeconomic status – and I would argue that this also needs to account for mid and high as well as low socioeconomic status, because wealth and poverty tend to be relative terms in advanced economies – the Government would do well not to lose sight of 'family', and I would add 'community' or 'context', in its calculations. We need to avoid reducing socioeconomic status to a single measure of an individual's financial and/or educational attainment alone.<sup>8</sup>

#### *Defining and measuring student academic achievement and potential to achieve at university*

A further aspect of this challenge to our current set of definitions and measurements concerns the ways in which universities determine who to select for entry. This has received considerable attention in recent times, particularly in Victoria. The evidence from the research is finally getting through, that ENTER scores are highly correlated with socioeconomic status. As Richard Teese and John Polesel at the University of Melbourne have identified in their research, "the TER is an authoritative measure that rewards the cultural resources characteristic of the most economically powerful groups in society" (Teese & Polesel 2003, in George et al. 2005: 144).

Moreover, there are any number of studies, small and large scale, which demonstrate that when students from low socioeconomic backgrounds gain access to university, their retention rates and their academic performances are at or about the same as their higher ENTER score peers.

---

we know that mature age students are highly likely to be attracted to enrol in university and will be needed to do so, if the higher education sector is going to meet its 40% target of 25-34 year olds with bachelor degrees by 2025. In short, PEAs will be so varied that it will be almost impossible to use them as a viable measure across the higher education system and it is doubtful that they will be indicative of SES anyway.

<sup>7</sup> Margaret Thatcher once famously claimed that 'there's no such thing as society', that we are simply a collection of disparate individuals or 'individuals plural'. Of course, this gives no account of the way in which individuals negotiate their lives in combination with others. Indeed, our very lives involve others. We are social beings and social arrangements govern our interactions. We do this in collectives or groups: individuals interacting with each other in groups, groups interacting with other groups, and rules that govern our interactions.

<sup>8</sup> For these reasons it would be worth using the ABS SIEFA Index of Relative Advantage, rather than the index currently used and which the ABS notes should not be used in education contexts.

The emerging Victorian solution to this measurement and selection problem is to replace or at least displace ENTER scores, through the wide-scale introduction of aptitude tests. Aptitude tests are not new to Australia.

Examples of their use in the Australian higher education sector include the following:

- Special Tertiary Admissions Test (STAT),
- the Undergraduate Medicine and Health Sciences Admission Test (UMAT),
- Deakin University Law School Admissions Test (DULSAT),
- uniTEST – administered by ACER, participating universities: ANU, Flinders University, University of Ballarat, and Macquarie University.

The espoused virtue of aptitude tests is that they are ‘school-proof’, to the extent that they are able to measure a person’s ability in a way that is not influenced by prior education attainment, quality of education or socio-economic background (Stringer 2008: 55). For example, the uniTEST – in which the Victorian government has a current interest – advises students that:

The purpose of uniTEST is to assess the generic reasoning and thinking skills that underpin studies at Higher Education. For this reason uniTEST has been developed as a test that is not based on learned academic curriculum or study of particular subjects, but as a test of your response to stimulus that will not necessarily be familiar.<sup>9</sup>

Yet despite claims that aptitude tests ‘cannot be studied for’, research from the USA and the UK show that preparatory courses and coaching for aptitude tests do exist, and that students from more affluent backgrounds more often have the economic, social and cultural resources to access this preparation. For example, Stringer (2008: 57) notes that in the USA, many affluent parents enrol their children in preparation courses. In the year 2000, an estimated 150,000 students in the USA paid over \$US100 million for aptitude-test coaching and preparation. Moreover, aptitude tests are more likely to assess skills and understandings informed by knowledge to which the more affluent have greater access, even before receiving explicit coaching. To exclude such knowledge from schooling is to reduce low SES students’ access to it and hence diminish their chances of performing well on such tests.

The strong message from the research literature is that ‘there is no evidence to suggest that aptitude tests alone provide any more predictive power [of university achievement] than curriculum-based tests alone’ (Stringer 2008: 57). And, as Teese and Polesel note with regard to ENTER scores, aptitude tests are just as indicative of socioeconomic status and no better than ENTER scores at predicting future academic achievement.

However, the fact remains that we need to develop measures of student potential in which we can have confidence and which do not preclude capable students from entering university. The research literature suggests that a ‘combination of quantitative and qualitative measures’ (Stringer 2008: 59), in addition to mechanisms that measure and rank educational achievement in context, provides the best way forward. Indeed, many Australian universities already use such measures to determine an applicant’s potential to achieve at university, albeit at the margin of the university’s mainstream selection procedures. Examples of these alternative admission procedures include an applicant’s high school grades, extra-curricula activities, letters of recommendation from schoolteachers or principals, interviews, and personal statements and essays that indicate an applicant’s personal qualities and levels of interest.

Often some or all of these are combined with ENTER scores, moderated through the addition of ‘bonus ENTER points’, which are calculated according to the variation between scores of similar ability students from advantaged and disadvantaged educational backgrounds, and justified on the basis that “compensatory processes in student recruitment and selection will always be necessary to reduce social inequalities” (James, Bexley & Shearer 2009: 3).

---

<sup>9</sup> See [http://unitest.acer.edu.au/index.php?option=com\\_content&task=blogcategory&id=15&Itemid=28](http://unitest.acer.edu.au/index.php?option=com_content&task=blogcategory&id=15&Itemid=28)



Using such methods, colleges in the USA have been able to increase the participation of disadvantaged groups while maintaining high academic standards (Zwick 2007; Shanley 2007). The Australian experience has been similar. At the University of South Australia, nearly 25% of the offers to school leavers in 2006 were made through these processes (Tranter, Murdoch & Saville 2007: 71). And RMIT's Schools Network Access Program (or SNAP), which operates in partnership with 70 disadvantaged schools located in various parts of Victoria, demonstrates that such programs do not necessarily lead to a reduction in academic standards. Indeed, SNAP students have been shown to perform very well:

Consistently, the academic outcomes of our SNAP cohort demonstrate the same patterns of achievement as their non-SNAP peers. While there are different clusters of grade achievement in the first year of study, the SNAP cohort demonstrate a slightly lower level of withdrawal, a higher incidence of credit (60-70 grade), comparable distinction (70-80 grade) and lower levels of high distinction (80-90) in their first year of study. Overall academic success, since the pilot in 2001, is remarkably consistent with patterns of success of the total domestic student population broadly, and within discipline areas. (Fels 2009: 1-2)

The success of these alternative entry processes illustrate that we already have mechanisms, which are effective in identifying disadvantaged students with potential to perform well at university. Indeed, these mechanisms are able to reveal far more about students than current ENTER scores and there are good reasons to argue that Australian universities should be working towards generalizing these more robust methods of student selection across the entire applicant pool rather than restrict their selection decisions to applicants' narrow ENTER scores.

#### *Defining and measuring student aspirations*

Briefly, a third aspect of the 20/40 challenge to definitions and measurements is to develop a more nuanced definition of student aspiration. The dominant view, that we need to 'create' aspiration for higher education among disadvantaged groups and to encourage them to 'aim higher', is condescending and misses the point that some people do not see university study as a better option to the aspirations that they currently hold. University study is not self-evidently better in terms of cultural identity, life choices or even economic prosperity.

Our conceptions of student aspiration are also ignorant of the fact that many people already aspire to a higher education but do not gain or seek entry when the time comes. For example, researchers at Victoria University have found that 70% of secondary school students in Melbourne's low SES western suburbs aspire to go to university, although clearly they are not all realizing those aspirations, at least not at the end of their secondary schooling.

What we can say about the education aspirations of low SES people is that they tend to be more brittle and, as for all of us, are defined by what they understand to be possible – given the social and economic resources at hand – and desirable – given the influence of family and culture. We can also say that aspirations are related to achievement and that both need to be addressed much earlier in schooling than is the case with most current university outreach programs aimed at low SES students in Years 11 and 12.

#### **Challenge No. 3: to teaching and learning**

The third broad challenge that I see for Australian universities is the need to confront the teaching and learning that constitutes higher education. In the 2009 federal budget papers, the government expressed its view that teaching and learning in university requires some attention. The issue is not that universities will need to do better because they will have more low-qualified students to teach. As already noted, the current retention rates for students from low SES backgrounds match their peers. If retention rates are an issue, they are an issue for all students.

But rethinking our teaching and learning, needs to go beyond simply targeting retention rates. A 'more sophisticated approach' (Bradley et al. 2008) to student equity in higher education entails the creation of space in universities not just for new kinds of student bodies but also for the knowledges and ways of knowing that they embody.

In the past, there has not been enough regard for what students bring to university, to the learning environment and experience, and for what they are potentially able to contribute. Although, there are some notable exceptions. For example, international students are now very much part of the landscape of Australian universities. Their very

presence, and in such numbers, has changed Australian higher education for domestic students, for the most part for the better. International students have challenged our epistemological and ontological assumptions and prompted many Australian academics to think differently about the kind of higher education offered to all, not just to students who come from overseas.

In the same way, people from low socioeconomic backgrounds come to university with sets of knowledges about the world, of what it is and how to engage with it, which are potentially different from and valuable to others. Taking account of this, in fact understanding that **all** students bring assets to university, will require us to think about how we can structure the learning experience in ways that open it up and make it possible for students to contribute from who they are and what they know. The absence of these contributions from our universities means a diminished higher education for our current university students, particularly for those who are part of a more homogeneous student population. Such absence also goes some way to explain why some groups of students do not aspire to higher education. There is little incentive to join or remain in a system in which you are invariably positioned as being 'without'.

Thinking differently about teaching and learning in higher education is starting to gain traction across OECD nations, particularly in the UK, the USA and more recently Australia. There are at least three different sets of teaching and learning principles that have gained currency in this environment, albeit in different higher education systems. In comparing them, three things are worth noting.

First, not all principle-sets are the same and they do not agree on the ideal number, but there are at least three principles that seem to be consistent across each set. The narrative that weaves these together is that:

- **Curriculum design:** There is a diversity of learners and ways of learning, which need to be taken into account when designing learning and learning activities;
- **Pedagogy:** Learners learn best when learning activities require them to be actively engaged;
- **Assessment:** Assessment should have a pedagogical intent, making a contribution to students' learning and not just serving an institutional purpose of allocating grades.

These seem eminently sensible, almost 'motherhood' statements, with which few would disagree. They – and many of the other principles – are also informed by a particular constructivist theory of learning, which posits that people learn through their experiences, through activity, by doing. This is another way of saying that most of these principles share a particular philosophical orientation, which emphasizes the role of the individual in the learning process. George Kuh, the founder of the National Survey of Student Engagement – the USA equivalent of the AUSSE – provides the perfect and probably extreme illustration of this way of thinking. Kuh has often asserted that:

When we control for factors such as students' socioeconomic backgrounds, parents' education and students' measured level of academic achievement prior to university, it turns out that *how much students learn is not a function of who they are, it's a function of what they do.* (Kuh in Leech 2009: 3; *Campus Review* 7 July 2009; emphasis added)

Of course, if we are to take 'a sophisticated approach to equity' (Bradley et al. 2008) as Denise Bradley encourages us, stripping back learning to what individuals do is at the heart of the higher education problematic for equity groups. To think otherwise is to imagine that *what* people are asked to learn has no bearing on *how well* they learn it. It fails to take into account that *who people are*, in relationship with others and where they are located, has a bearing on what they already know and what they count as worthwhile. It is like imagining that an Indigenous person has no connection with the land, other than a European notion of ownership that allows for land to be bought and sold or acquired by force. It is like suggesting to a working-class person that knowledge can be generated outside contexts of

practice or that contexts of practice rely on abstract knowledge to inform action. It is in fact hard to imagine how *who people are* can be disentangled from *what they do* and, hence, what they might learn from the experience.<sup>10</sup>

To be fair, buried in these sets of principles are three that hint of a more critical constructivism that moves us towards socio-cultural, even political understandings of teaching and learning. I deliberately want to emphasize what I see to be the possibility of an equity principle in each of them. Consider then:

- **Student-faculty contact:** which signals a level of significance for students in the higher education environment, in their own terms; students matter, time spent with them in intellectual discussion matters, engagement with who they are matters;
- **Informal learning:** which acknowledges that students learn things outside the official boundaries of education systems and that these knowledges and ways of knowing have value, that they have something to contribute to higher education;
- **Research for teaching:** which is not research that determines what to teach (and learn) but which informs the teaching and learning experience, which informs teachers about how to engage with different knowledges and ways of knowing, including research about what students know and how they know.

One way of translating this acknowledgement of marginalized knowledges into real world curriculum is through what is known as a *funds of knowledge* approach (Moll et al. 1992; González 2005). This includes recognizing that all students come with valuable understandings that can contribute to the education of others. The approach requires identifying and inviting students' knowledges into the learning environment and using them to develop curricula. Students are then positioned differently, because they are now expert in the kinds of knowledges that inform the learning experience.

Complementing this approach, Lew Zipin (2009) argues that we also need to identify *funds of pedagogy*. It is not just the knowledges from students' different socio-cultural groups but also the ways in which students learn in those groups, which need to be taken into account. Finding a way of bringing those into the formal learning environment is far more challenging to the logic of higher education. To bring in different content is one thing. To bring in different ways of knowing at a deeper level is more threatening.

A third approach is potentially a hybrid or fusion of these funds (González 2005). It involves lightly framed, open curricula and pedagogy that allow for student contributions, without these being predetermined. Such an approach has implications for:

---

<sup>10</sup> I have recently had the pleasure of reading a pre-publication book manuscript written by Derrick Armstrong and his colleagues (Sage, 2009 in press), in which each of them provide a personal account of the development of their interest in 'inclusive education', the subject of their book, as a kind of epilogue. I was particularly engrossed in Derrick's account, which illustrates very clearly and strongly the relationship between what he did (e.g. welder, taxi driver, student, academic) and what he learned (welding, driving, inclusive education) but also how both of these were related to who he was (working-class, English). One does not drive taxis if one is born into the aristocracy! Rather, one learns to wait for one's inheritance (see <http://sixtyminutes.ninemsn.com.au/article.aspx?id=833424>). I have also recently come across a book by Ernst von Glasersfeld (1994) titled *Radical Constructivism: A way of knowing and learning*. The first chapter contains a wonderful narrative of the author's early years of learning, born into the home of an Austrian diplomat at the rather awkward time of the end of the first world war and into a world rich with language. Again it illustrates the strong relationship between who he was (the son of an Austrian diplomat who, through the shift in national boundaries, became a Czech), what he learned (which was closely related to where he was and when) and how well (French less well than German, English, Italian, etc). Because of the fortunes of war, his father, once an Austrian diplomat became a Czech photographer. What clearer evidence is needed of the relationship between who you are and what you do?

- The repositioning of lecturers, peers, academic literature, fieldwork, and so on, as resources for students' learning; and
- The repositioning of disciplines and traditions as resources to aid the understanding of issues, problems, themes, etc.

Of course, these are tentative ideas that need fleshing out in the higher education context but they have significant potential to re-inform the way we currently do higher education. The Teaching and Learning Research Programme (TLRP) at the Institute of Education in London, is far more advanced in these matters than we are in Australian higher education, particularly in the development of 'connectionist pedagogies' (Hockings, Cooke & Bowl 2010). In their terms, connectionist pedagogies or connectionist-deep teaching approaches, emphasize:

- Prior learning and experience,
- Conceptual and deep understanding of the subject matter,
- Students' engagement with the subject matter rather than always having 'right answers',
- The use value (vs. exchange value) of learning – i.e. that what is learnt is useful in itself and not just a means of accessing the rewards of good exam results,
- Can make a significant difference in a student's disposition to study a given subject.

By contrast transmissionist-surface approaches emphasize:

- performance (i.e. highly exam focused),
- fluency of performance over student engagement with the topic,
- 'Exchange value' of performance/education (i.e. the rewards of exam results),
- Passing the exam (teaching to the test) rather than engaging with the subject matter and enhancing learning.

## **Conclusion**

The 20/40 targets have brought to the fore the problems with the definitions and measures with which we have been working. And they are encouraging us to rethink the ways in which we approach teaching and learning. But most significantly, they have highlighted that expansion to the system to reach the 20/40 targets, will require a new engagement with Australians who currently have no intention or who are without the necessary qualifications to seek access to university.

Logically, meeting these sector targets will be extremely difficult for most institutions working in isolation, even for those who have a strong track record in this area, and yet the compacts are set to be the subject of a series of individual negotiations. It would make more sense for the problem of the under-representation of low SES people in higher education to be addressed by focusing on people in disadvantaged areas, rather than on institutional targets, and to encourage universities to work collectively and collaboratively with each other and with the people in these areas.

The Australian Social Inclusion Board has recently developed a Compendium of Social Inclusion Indicators that could be used to identify the areas of greatest disadvantage and social exclusion within Australia and then to measure progress over time towards their resolution. And the Design and Evaluation Matrix for Outreach (DEMO), developed by the National Centre, could also be used by institutions to inform the development of collective outreach activities into these areas that have the greatest likelihood of success. The compacts, to be negotiated with government, could then be structured to reward institutions for working in partnerships and in identified areas in ways that the research suggests to be most effective.

Not only could this enable universities to collectively meet the longer-term sector-wide targets set by Government, it could also support their wider social role in achieving social inclusion. It would, in Bradley's terms, be a more sophisticated approach to student equity.

## Acknowledgements

This paper was produced as part of the work of the National Centre for Student Equity in Higher Education and with the financial support of the Australian Government through the Department of Education, Employment and Workplace Relations. The views expressed in this paper do not necessarily reflect the views of the Department of Education, Employment and Workplace Relations.

## References

- Craig, N. (2009). Push to make uni entrance fair for all. *The Age*, 18<sup>th</sup> October 2009, <http://www.theage.com.au/national/push-to-make-uni-entrance-fair-for-all-20091017-h26o.html>
- David, M., Parry, G., Vignoles, A., Hayward, G., Williams, J., Crozier, G., et al. (2008). *Widening participation in higher education: A Commentary by the Teaching and Learning Research Programme: Teaching and Learning Research Programme; The Economic and Social Research Council*, <http://www.tlrp.org/pub/documents/HEcomm.pdf>
- Dobson, I. R., & Skuja, E. (2005). Secondary Schooling, Tertiary Entry Ranks and University Performance. *People and Place*, 13(1), 53-62.
- Dobson, I., & Skuja, E. (2007). ENTER scores: an over-rated measure. *Principal Matters*, 70, 34-37.
- Garner, R. (2008). Aptitude tests 'are biased against comprehensive school pupils'. *The Independent*, 28<sup>th</sup> February 2008, <http://www.independent.co.uk/news/education/education-news/aptitude-tests-are-biased-against-comprehensive-school-pupils-788569.html>
- George, R., Lucas, J., & Tranter, D. (2005). *Portfolio Entry: Alternative university access for year 12 students*. Paper presented at the HERDSA, Higher Education in a Changing World. [http://conference.herdsa.org.au/2005/pdf/refereed/paper\\_244.pdf](http://conference.herdsa.org.au/2005/pdf/refereed/paper_244.pdf)
- Haigh, C., Reynolds, P., & Levy, S. (n.d.). Who deserves a chance? Identifying talent that might otherwise be lost in university admissions processes. School of Humanities, Communications, and Social Sciences, Monash University.
- Hockings, C., Cooke, S. & Bowl, M. (2010). Learning and teaching in two universities within the context of increasing student diversity: complexity, contradictions and challenges, in David, M. (ed.) *Improving Learning Widening Participation in Higher Education*. London and New York: Routledge, pp. 95-108.
- James, R., Bexley, E., & Shearer, M. (2009). *Improving Selection for Tertiary Education Places in Victoria*. Centre for the Study of Higher Education: Joint Policy Unit on Youth Transitions.
- Levy, S., & Murray, J. (2005). Tertiary Entrance Scores Need Not Determine Academic Success: An analysis of student performance in an equity and access program. *Journal of Higher Education Policy & Management*, 27(1), 129-140.
- Shanley, B. J. (2007). Test-Optional Admission at a Liberal Arts College: A Founding Mission Affirmed. *Harvard Educational Review*, 77(4), 429-435.
- Shulruf, B., Hattie, J., & Tumen, S. (2008). The predictability of enrolment and first-year university results from secondary school performance: the New Zealand National Certificate of Educational Achievement. *Studies in Higher Education*, 33(6), 685-698.
- Stringer, N. (2008). Aptitude tests versus school exams as selection tools for higher education and the case for assessing educational achievement in context. *Research Papers in Education*, 23(1), 53-68.
- Syverson, S. (2007). The role of standardized tests in college admissions: Test-Optional admissions. *New Directions for Student Services*(118), 55-70.
- Tranter, D., Murdoch, L., & Saville, D. (2007). 'Bonus points are the only reason I'm at UniSA': equity outreach and higher education success. Paper presented at the Ethics and Equity: Revaluing Social Responsibility in Education. EOPHEA Conference, 2007. <http://www.adcet.edu.au/StoredFile.aspx?id=2038&fn=eophea+2007.pdf>
- Warren, J. R., & Grodsky, E. (2009). Exit Exams Harm Students Who Fail Them – and Don't Benefit Students Who Pass Them. *Phi Delta Kappan*, 90(9), 645-649.

West, A., & Gibbs, R. (2004). Selecting Undergraduate Students: What can the UK Learn from the American SAT? *Higher Education Quarterly*, 58(1), 63-67.

Williams, J., Black, L., Davis, P., Hernandez-Martinez, P., Hutcheson, G., Nicholson, S., Pampaka, M. & Wake, G. (2010). Keeping open the door to mathematically demanding programs in further and higher education: a cultural model of value, in David, M. (ed.) *Improving Learning Widening Participation in Higher Education*. London and New York: Routledge, pp. 109-123.

Zwick, R. (2007). College Admissions in Twenty-First-Century America: The Role of Grades, Tests, and Games of Chance. *Harvard Educational Review*, 77(4), 419-428.