

MEETING THE RUDD GOVERNMENT'S EQUITY TARGETS FOR UNIVERSITIES: THREE SCENARIOS

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The Rudd Government has outlined a goal that by 2025, 40 per cent of Australians aged 25 to 34 should hold a Bachelor's level qualification and that, by 2020, around 20 per cent of undergraduate enrolments at Australian universities should be filled by students from low socio-economic-status (SES) backgrounds. The current level of low SES participation is 16.3 per cent, with substantial diversity in outcomes between institutional groupings and states and territories. This paper considers three policy options for raising national participation levels of students from low SES backgrounds: (i) uniform increases across all institutions to meet the 20 per cent national target; (ii) differential increases in indirect proportion to current levels of low SES participation by institutions; and (iii) differential increases proportional to the share of the low SES population located within each state and territory. The authors find that a national approach to achieving the 20 per cent target needs to consider both current enrolment patterns across institutional groupings as well as differences in the low SES population across the states and territories. Students' SES is currently determined by their postcode. The authors argue that this is unsatisfactory and that better measures must be developed before targets can be set for individual institutions.

INTRODUCTION

As part of its ambitious plan for increasing higher education participation in Australia, the Rudd Government has announced an attainment target whereby 40 per cent of all 25 to 34 year olds in Australia will hold a qualification at Bachelor's level or above by 2025.

While this will partially reflect the arrival of skilled migrants to Australia, it will almost certainly still require large absolute increases in domestic undergraduate enrolments.¹ The Government estimates that the Australian higher education sector will have to accommodate 735,000 domestic undergraduate students by or before 2020, an increase of 31 per cent over the 2008 domestic undergraduate enrolment of 561,856.² To some extent this change will also be driven by economic and demographic factors which are driving the demand for university graduates.

In addition to the numerical target, the Government is committed to increasing the level of higher education participation by people from lower socio-economic status (low SES) backgrounds. In March 2009, Deputy Prime Minister Julia Gillard announced that in keeping with its commitment:

the Government will pursue vigorously the ambition that by 2020, 20 per cent of higher education enrolments at undergraduate level should be of people from low socio-economic backgrounds.³

The goal of 20 per cent participation by students from low SES backgrounds compares to twenty years of virtual stability in the percentage of domestic undergraduate students coming from such backgrounds at between 15 and 16 per cent.⁴ Achieving the 20 per cent target will require a two-step increase in low SES enrolments—one just to keep pace with the overall growth in enrolments, and one to raise the share of low SES students in those enrolments.

In this article, we show that the basic growth trend implied by the Rudd Government's policy will require low SES enrolments to increase from around 86,500 in 2008 to 113,000 in 2020 if their current share of enrolments, 16 per cent, is to hold; and that an increase in the low SES share to 20 per cent will require a further increase in enrolments to a level of 139,000 students. This means that an overall increase of 53,000, or 61 per cent, in low SES enrolments over the period 2008 to 2020, is needed for the 20 per cent target to be met.⁵

A central issue that arises from this policy is the share that each university will have to shoulder in order to achieve the 20 per cent national target. Will all universities be expected to attain the 20 per cent target? Will those universities currently with lower levels of participation be asked to do more than those already on or above the target range, or does the current range represent a relatively efficient division of labour between institutions?

This issue will become particularly relevant in the near future as universities meet with government officials to discuss the compact which each institution is required to sign as part of the Commonwealth government's broader higher education reform agenda. Funding from the Commonwealth will then be determined on the basis of performance, including low SES enrolment. The Commonwealth has already budgeted to allocate \$394 million in institutional performance funding linked to low SES enrolments over the four years to 2012–13.⁶

Addressing this institutional distributional issue of low SES enrolments forms the basis for this article. We examine, quantitatively, a number of scenarios or pathways by which the higher education sector could feasibly reach the 20 per cent low SES target by 2020, focusing in particular on the distribution of effort between universities.

We do not provide an analysis or a critique of the target itself, or of the various policies and programs that might be adopted to increase equity student participation. The Government has announced several policy measures aimed at increasing the access of equity groups in higher education,⁷ and there has already been some commentary on the target by Vice Chancellors and others.⁸ Instead, this article focuses on ways in which the target could be met solely in terms of the distribution of low SES students between universities.

Further, we assume that all institutions will experience similar growth in overall enrolments, with some divergence in terms of low SES participation, but we do acknowledge that differential growth in total enrolment is another potential pathway to reaching the low SES target.

The article is structured as follows. Following this introduction, we outline key aspects of the low SES target. The next section describes the current situation for low SES enrolments. We then outline a number of scenarios whereby the 20 per cent low SES target could be reached in 2020. Finally, we summarise the main findings and suggest lines of further investigation in order for the policy target to be sensibly advanced.

KEY ASPECTS OF THE LOW SES TARGET

There are three key aspects to the low SES target that need to be borne in mind when analysing its feasibility.

First, low SES background is defined by current government practice which uses the so-called 'postcode measure'. This defines low SES students as those whose permanent home address postcode falls within the postcodes that comprise the bottom 25 per cent of the population aged between 15 to 64 years at the date of the latest census, as coded by the Australian Bureau of Statistics (ABS) SEIFA Index of Education and Occupation.⁹ This measure is controversial and the government in December 2009 released a discussion paper on the topic, aimed at developing a better measure based on the circumstances of individual students and their families, rather than on the characteristics of the postcode from which they originate.¹⁰ For now, in the absence of a new measure, this article will work with the postcode definition.

Second, the target is limited to a subset of the total higher education population in Australia. The Government has indicated

that the low SES target only relates to domestic undergraduate higher education students—effectively excluding international and, more relevantly, domestic postgraduate students, from the analysis. It should be noted that the 20 per cent low SES target is a participation share, which is itself a function of the rate at which new students enter higher education (their access rate) and their retention rate between years. According to the Bradley Review, the retention rate of low SES students is about 97 per cent of all students.¹¹ Consequently, increasing low SES participation from the present 16 per cent to the target of 20 per cent is unlikely to be achieved by increasing retention rates for low SES students. Instead, their access rate will also have to increase.

Third, as a further refinement, only the domestic undergraduate population of Table A institutions is considered. These are as defined in the *Higher Education Support Act*, namely the 37 public higher education institutions (HEIs) and the Australian Catholic University (ACU), who combined, account for almost 95 per cent of all domestic undergraduate higher education enrolments. The remaining five per cent of undergraduate enrolments are accounted for by private universities such as Bond University and the University of Notre Dame and a range of smaller, often specialist, institutions across Australia

such as the Perth Institute of Business and Technology and the Australian Maritime College in Tasmania. Because of the relative heterogeneity of the Australian higher education system, we also categorise the 38 Table A institutions into the four commonly identified university groupings:

1. The Australian Technology Network (ATN)—Curtin, UTS, RMIT, QUT, UniSA.
2. The Group of Eight universities (Go8)—ANU, Melbourne, Monash, Sydney, UNSW, UQ, UWA, Adelaide.
3. The 10 universities founded in the 1960s and 1970s plus the University of Tasmania (founded in 1890) (1960s–70s)—Murdoch, Flinders, Griffith, JCU, Macquarie, Newcastle, New England, Wollongong, La Trobe, Deakin, Tasmania.
4. The 14 Post-1988 universities (post-1988)—ACU, Canberra, ECU, Charles Darwin, Batchelor Institute, Swinburne, Victoria, Ballarat, Sunshine Coast, CQU, USQ, Southern Cross, UWS, Charles Sturt.

THE CURRENT SITUATION

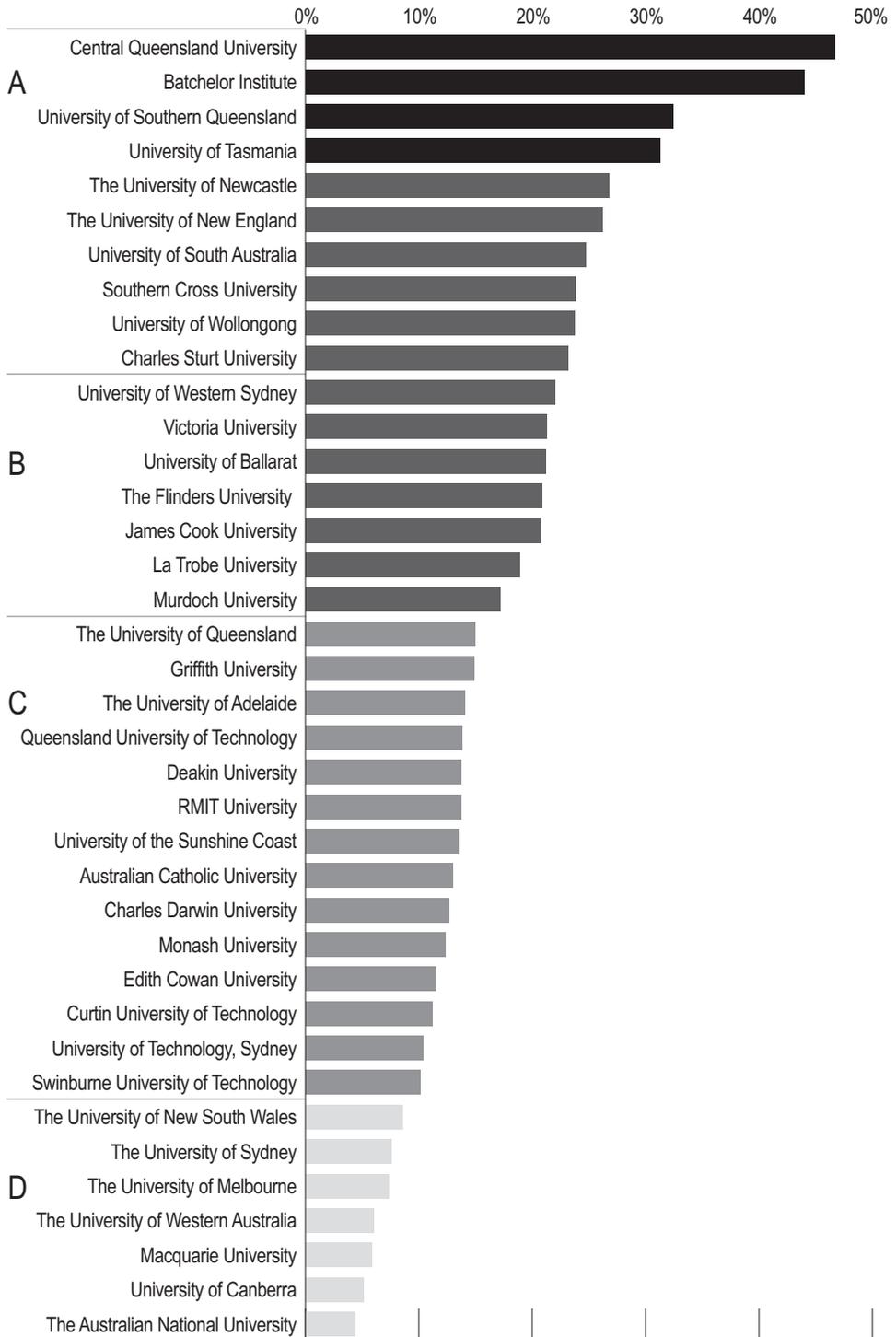
An indication of current participation levels by low SES students in higher education for all higher education providers is given in Table 1 below. This shows that in 2008 there were 90,467 domestic undergraduates enrolled in all HEIs who were classified as

Table 1: Total and low SES domestic undergraduate enrolments, 2008

	Low SES enrolments	Total enrolments	Low SES as per cent of total enrolments
Table A Providers	86,581	532,503	16.26
Other institutions	3,886	29,353	13.24
All institutions	90,467	561,856	16.10
Table A: share of total	95.70%	94.78%	—

Source: Department of Education, Employment and Workplace Relations 2009, customised dataset, August 2009.

Figure 1: Ranking of universities by low SES participation, 2008



low SES, or 16.1 per cent of the total enrolment. Unsurprisingly, Table A institutions had a higher percentage of low SES enrolments (16.26 per cent) than non-Table A providers (13.24 per cent). As noted above, this article focuses on these 38 Table A providers, who provide the overwhelming bulk of all undergraduate (94.78 per cent) and low SES (95.70 per cent) places.

The level of participation by students from low SES backgrounds varies considerably. Figure 1 ranks universities in terms of their level of low SES student enrolments; it shows that meeting the 20 per cent participation goal will be more challenging for some universities than others. The proportion of

low SES enrolments ranges from Central Queensland University where 46.7 per cent of all students come from low SES postcodes to the Australian National University with just 4.4 per cent of all students coming from low SES areas.

In 2008, 15 of the 38 institutions already had more than 20 per cent of their domestic undergraduates from low SES postcodes. Enrolments in these institutions represented one third of all students in Australia and just over one half of all low SES students. By contrast, the bottom 10 institutions (in terms of share of low SES enrolments) enrolled 28 per cent of the nation's domestic undergraduates but only 14 per cent of the

Table 2: Levels of low SES participation by university grouping, 2008

Grouping	Low SES	All students	Low SES per cent
The Australian Technology Network (ATN)	14,054	95,512	14.7
The Group of Eight universities (Go8)	14,719	148,482	9.9
Universities formed in the 1960/70s (1960s–70s)	29,781	154,191	19.3
Universities formed after 1988 (Post-1988)	28,027	134,318	20.9
Australia	86,581	532,503	16.3

Table 3: Levels of low SES participation by state and territory, 2008

State	Low SES	All students	Low SES per cent
New South Wales	28,563	170,051	16.8
Victoria	17,436	126,444	13.8
Queensland	20,367	104,965	19.4
Western Australia	5,848	52,349	11.2
South Australia	8,041	38,970	20.6
Tasmania	3,795	12,107	31.3
Northern Territory	694	4469	15.5
ACT	664	14094	4.7
Multi-state	1,173	9,054	13.0
Australia	86,581	532,503	16.3

nation's low SES students. In Figure 1, the 38 institutions are also categorised into four clusters, identified here as Bands A, B, C and D, reflecting their current enrolment patterns of low SES students. These Bands form the basis for one of the scenarios analysed and discussed later in this article.

There is considerable variation in low SES participation in higher education between institutional groupings, and between states and territories.

Table 2 shows the situation using the four common university groupings. It shows the Go8 has the lowest participation levels for low SES students, at 9.9 per cent. Not one university in the Go8 has a participation rate above the national average, with the University of Queensland having the highest at 15 per cent.

The ATN group has a participation level for low SES students of 14.7 per cent. Only one ATN university, the University of South Australia, with 24.7 per cent of its students coming from low SES postcodes, has low SES participation above the national average of 16.3 per cent. The universities in the 1960–70s and Post-1988 groups have similar levels of low SES student participation at 19.3 per cent and 20.9 per cent respectively. However, this masks a divergence of performance across universities in both groups. For instance, Macquarie University (from the 1960s–70s group) has 5.9 per cent low SES enrolments, while the University of Canberra (from the Post-1988 group) has 5.1 per cent. In total, 14 out of the 25 institutions in these two groups have low SES enrolment shares in excess of 20 per cent.

Table 3 shows that some states and territories have a much higher percentage of low SES students than others. For instance, 31.3 per cent of students in Tasmania (all attending the University of Tasmania) lived in low SES postcodes, while the next highest ranked state, South Australia, had 20.6 per cent of all students coming from low SES

postcodes. Queensland, with 19.4 per cent low SES enrolments, is already close to the proposed target of 20 per cent.

By contrast, the other states and territories have much lower levels of low SES representation, particularly Victoria (13.8 per cent), Western Australia (11.2 per cent) and the Australian Capital Territory (4.7 per cent) who all have levels of low SES participation well below the current national average, to say nothing of the proposed target level.

There has been little overall change in low SES participation levels since 2003. Nationally, there was a dip from 16.5 per cent in 2003 to a low of 16.0 per cent in 2005, before a slight increase in the past three years to 16.3 per cent in 2008. Most states and territories and university groupings have followed this same pattern.

The postcode measure: differences between the states and territories

The divergence in performance between universities is highly dependent on the measure of what constitutes low SES students. As noted above, low SES status is based on the postcode of undergraduates, not on their actual circumstances. Hence the distribution of the low SES undergraduate population is influenced by the overall state indices of education and occupation.

The incidence of disadvantage as measured by the ABS SEIFA Index of Education and Occupation is not evenly distributed across states and territories. Some states and territories have high proportions of low socio-economic conditions compared to others. This is important in the context of understanding university enrolments of low SES students as measured by this index, particularly in a situation where students tend to remain within their own jurisdiction to attend university. Logically, those states and territories with lower socio-economic conditions should have larger proportions of university-aged people living in areas

defined as low SES and therefore a larger proportion of students from this category.

Table 4 shows how the current measure of low SES participation affects the distribution of each state’s population defined as being in the low SES category. The table shows the percentage of the population in each state and territory which is found in the lowest 25 per cent of the national population based on postcodes, as measured by the SEIFA, and compares it to the share of undergraduates who come from this low SES undergraduate population.

At the extreme, the Australian Capital Territory has no postcode in the lowest 25 per cent, and therefore zero per cent of population in the bottom quartile of population measured by SEIFA. By contrast, Tasmania (54.1 per cent), South Australia (35.7 per cent) and Queensland (30.5 per cent) all have shares of low SES population which are markedly above the national average—by definition set at 25 per cent. The Northern Territory (26.4 per cent) and New South Wales (23.5 per cent) are proximate to the national average while Victoria (19.9 per

cent) and Western Australia (19.8 per cent) have relatively small SES populations, as defined by the postcode measure.

As most students remain in their state and territory to go to university,¹² one would therefore expect that universities in Tasmania and SA would have a higher percentage of low SES students, while those in Victoria and WA (and the ACT, of course) would have fewer such students—and indeed this is the case. It is important then to compare the extent to which the universities in each state and territory reflect the socio-economic composition of their state’s population when measured by the postcode proxy.

As stated, nationally, 16.26 per cent of undergraduates are low SES, compared to 25 per cent of the general population, as measured by the postcode method—a ratio of 0.65 (that is 16.26/25). We call this the ‘effort–opportunity ratio’—that is it measures the extent to which universities are enrolling low SES students (their effort) in proportion to the low SES population found in their natural catchment area (their opportunity)—defined here as the state or territory.¹³ By

Table 4: Low SES population and university participation comparisons, 2008

State/territory	2008 Low SES: Share of state population per cent	Low SES: Share of university enrolment per cent	Effort–opportunity ratio
New South Wales (NSW)	23.5	16.8	0.71
Victoria (VIC)	19.9	13.8	0.69
Queensland (QLD)	30.5	19.4	0.63
South Australia (SA)	35.7	20.6	0.58
Western Australia (WA)	19.8	11.2	0.57
Tasmania	54.1	31.3	0.58
Northern Territory (NT)	26.4	15.4	0.59
Australian Capital Territory (ACT)	0.0	4.7	—
Australia	25.0	16.3	0.65

comparison, the Rudd Government's target for 20 per cent low SES enrolments implies an effort–opportunity ratio of 0.80 (that is, 20 per cent of enrolments divided by 25 per cent of the population). If low SES undergraduates enrolled in universities evenly across Australia, then we would expect the ratio of low SES student to low SES general population in each state/territory to be the same, that is 0.65 (currently) and 0.80 (in 2020). However, this is not the case.

Table 4 shows, for example, that WA universities have 11.2 per cent of their undergraduates who are low SES, compared to 19.8 per cent of WA's general population who are in low SES postcodes, a ratio of 0.56. This is well below the national effort–opportunity ratio of 0.65 and compares to a ratio of 0.71 in NSW. Although Tasmania and South Australia have an apparently high percentage of low SES undergraduates, they could actually be seen to be underperforming, once the high proportion of low SES postcodes in those states and territories is taken into account. For example, 35.7 per cent of South Australia's population is deemed to be low SES, but only 20.6 per cent of its domestic undergraduates are low SES—a ratio of 0.58.

NSW and Victoria have ratios of low SES undergraduates to low SES population

above the national average, with Queensland just under the national average. WA and the NT perform on a par with SA and Tasmania—well below the national average.

Finally, by way of comparing the state and institutional grouping effects, we examine the data on the low SES proportions of students in the five ATN universities compared with their respective state's low SES population averages (see Table 5).

Table 5 reports that the ATN group as a whole have an enrolment of 14.7 per cent of students from low SES postcodes which, against a theoretical 25 per cent level in the general population, equates to equal to an effort–opportunity ratio of 0.59 per cent, below the current national ratio of 0.65.

There is considerable divergence across state lines. For instance, RMIT University has a low SES enrolment of only 13.7 per cent of its domestic undergraduate intake, while the University of South Australia draws nearly one quarter of its intake from low SES postcodes. However, after allowing for the socio-demographic differences between Victoria and South Australia, both institutions take similar shares of low SES students in comparison with their state's low SES population estimate (a ratio of around 0.69). QUT, by contrast, with an almost identical share of low SES students (13.4

Table 5: Low SES participation: ATN and state comparisons, 2008

State/territory	2008 Low SES: Share of state population per cent	Low SES: Share of university enrolment per cent	Effort–opportunity ratio
New South Wales/UTS	23.5	10.4	0.44
Victoria/RMIT	19.9	13.7	0.69
Queensland/QUT	30.5	13.4	0.44
Western Australia/Curtin	19.8	11.2	0.57
South Australia/UniSA	35.7	24.7	0.69
Australia/ATN	25.0	14.7	0.59

per cent) as RMIT (13.7 per cent), is actually performing more poorly than RMIT once the state effect is taken into account. There are relatively more low SES postcodes in Queensland than in Victoria, therefore, QUT should have a significantly higher proportion of low SES students than RMIT, all things being equal. Instead, QUT is on a par with UTS with a ratio of around 0.44 (compared to RMIT's 0.69), which is well below the ATN and national average ratios of 0.59 and 0.65 respectively.

MODELLING ALTERNATIVE PARTICIPATION SCENARIOS

Some idea of the magnitude of the government's policy target can be indicated by looking at its implications in terms of current and projected enrolments.

Deputy Prime Minister Gillard's announcement of the 20 per cent target noted that it would require an increase of 55,000 positions for low SES students by 2020 from a current level of 92,000 students. This implies an enrolment of low SES students of around 147,000 by that date.¹⁴ This figure was derived from modelling that suggests an overall target for total student enrolments of 735,000 in 2020. For Table A providers, we assume a constant share of enrolments (94.78 per cent), which means an estimated domestic undergraduate enrolment in 2020 of 696,633—a growth in enrolments of 31 per cent over the period.

Simply to retain the current 16.26 per cent level of low SES participation of this larger enrolment figure would require a low SES enrolment of 113,273 students in 2020, compared to the current figure of 86,581. If low SES participation levels increase to 20 per cent, as per the government target, then a further 25,775 low SES students are needed, for a total low SES enrolment of 139,327. This is almost 53,000 more than in 2008 and implies growth of 61 per cent, compared to 31 per cent growth for total enrolments. In terms of access rates, 32.1 per cent of all new

enrolments will need to be low SES. This is double the access rate of around 16 per cent experienced over the past six years.

If this target can be reached, how is it to be distributed across the university system?

One way would be for all universities to be set a target of 20 per cent for low SES participation. However, this would make little practical or policy sense, given that 15 universities already have low SES participation levels above 20 per cent. It is inconceivable that the government would wish to reduce the rate of low SES participation in these institutions, at least not to any significant degree. Nor is it feasible that institutions with current participation levels for low SES students of less than 10 per cent will be able to reach 20 per cent within a decade, particularly within a context where the undergraduate population is expected to grow rapidly. As it stands, the government has already indicated that it 'is not expected that all universities will increase low SES enrolments by the same proportion or at the same rate'.¹⁵

However, there are other pathways by which the increased participation of low SES students can be distributed between universities. We report on three such scenarios:

- Scenario 1—Stable Shares: Although each university increases the share of low SES students within its student population, the distribution of low SES students between universities does not change. Each university achieves an equal percentage increase in low SES enrolments from their current base in 2008, in order to reach a higher system-wide target of 20 per cent by 2020.
- Scenario 2—Band-weighted: A differential progressive increase in low SES participation is applied by university band (defined below), so that participation increases more for those universities with lower levels in 2008.

- Scenario 3—State-weighted: Each state and territory is assigned a percentage increase target which sums to a national participation level of 20 per cent low SES enrolment by 2020. Each state's target is weighted on the basis of the percentage of the state's population which is living in the bottom 25 per cent of Australian postcodes compared to the national average. For ease of analysis, we assume that the distribution of total and low SES places between universities within each state remains the same as in 2008.

For all three scenarios, we assume uniform growth rates in total enrolments by all institutions to 2020. This is done for ease of exposition. However, changes in the overall enrolment mix across the system are another mechanism for accounting for differences between the states and territories and institutional groupings.

Divergence in institutional enrolment patterns are likely due to a number of factors: relative disparities in state population growth rates, the move towards a student demand-led enrolment mode, and different enrolment strategies by individual institutions, some of which are likely to cap domestic undergraduate growth. The relative strength of these factors and their impact on low SES distribution is not straightforward, and is therefore not modelled here.

Each scenario is described below and results presented for each institutional grouping and by state and territory.

Scenario 1—Stable shares

Under this scenario, the 20 per cent target is achieved through a uniform increase in the low SES enrolment shares of each university. In other words, the 2008 distribution of low SES students across the system remains unaltered to 2020 as overall enrolments increase.

The impact of this scenario on institutions and across states and territories is reported in Table 6. Under this scenario, all states and territories experience increases in their low SES participation levels. Tasmania, in particular—with just one institution—raises its rate from 31.3 per cent to 38.6 per cent.

In this scenario, the 1960s/70s and Post-1988 institutional groupings carry more of the task of enrolling low SES students. This is a reflection of their current high participation levels of low SES students. For

Table 6: Scenario 1—Stable shares target for low SES enrolment, 2020

	2020 Low SES per cent under Scenario 1	2008 Low SES per cent
Institutional grouping		
GO8	12.2	9.9
ATN	18.1	14.7
1960-70s	23.8	19.3
Post-1988	25.7	20.9
State/territory		
NSW	20.7	16.8
VIC	17.0	13.8
QLD	23.9	19.4
WA	13.7	11.2
SA	25.4	20.6
TAS	38.6	31.3
NT	19.1	15.5
ACT	5.8	4.7
Multi-state	15.9	13.0
Australia	20.0	16.3

instance, across all Post-1988 universities, the low SES participation rises to 25.7 per cent of the total student population. As a result, as shown in a comparison with other scenarios in Table 11, 41.2 per cent of new enrolments (their access rate) will have to come from low SES backgrounds in order to retain their current share of the national low SES load.

Of the three scenarios, Scenario 1 can be seen as a status quo scenario, at least in terms of relative effort by universities in enrolling low SES students. Under this scenario, the 2008 distribution pattern of low SES enrolments across universities is retained in 2020, but at a higher overall system level of SES participation (that is 20 per cent rather than the current rate of 16.3 per cent). All universities increase their low SES enrolments by the same percentage, thus retaining their existing share of the (now larger) number of low SES students. Therefore, those institutions currently with the highest participation levels for low SES students continue to have the highest levels, while those with the lowest remain so.

Scenario 1 may be attractive if it is considered that the current distribution of enrolments across the system is efficient—for example, that it makes sense for regional or newer universities to have a greater share of low SES students than it does for the Go8 or the ATN universities. All that is required then under Scenario 1 is for the system as a whole to shift the participation curve up, without any individual institution being asked to do disproportionately more or less than any other, compared to current participation levels. This may be attractive to Go8 universities who believe that increasing their participation levels too much may require them to lower entry standards and thus undermine their reputations.

However, this outcome is unlikely to be acceptable to those institutions currently with higher shares of low SES students,

who may consider that they are already doing their bit and thus expect more effort from universities with lower shares.

Scenario 2—Band-weighted target

One way of equalising effort by universities is to apply a differential progressive increase in low SES participation, so that participation effort increases more for those universities with lower levels in 2008. In Scenario 2, progressively steeper increases to the number of low SES enrolments were demanded of universities within each band identified in Figure 1, to achieve an overall system-wide low SES participation level in 2020 of 20 per cent. This was determined as follows:

- Band A (10 per cent increase in low SES enrolments), for universities currently with more than 30 per cent low SES participation in 2008 (four universities in descending order: CQU, Batchelor Institute, USQ, Tasmania)
- Band B (20 per cent increase), for universities with greater than 15 per cent but lower than 30 per cent low SES participation (13 universities: Newcastle, UNE, UniSA, SCU, Wollongong, CSU, UWS, Victoria, Ballarat, Flinders, JCU, La Trobe, Murdoch)
- Band C (30 per cent increase), for universities with between 10 per cent and 15 per cent low SES participation (14 universities: UQ, Griffith, Adelaide, QUT, Deakin, RMIT, USC, ACU, CDU, Monash, ECU, Curtin, UTS, Swinburne)
- Band D (40 per cent increase), for universities with less than 10 per cent low SES participation (seven universities: UNSW, Sydney, Melbourne, UWA, Macquarie, Canberra, ANU).

The impact of this arrangement is summarised in Table 7.

Because most states contain a variety of universities (that is from different bands),

the ranking of jurisdictions in terms of shares of low SES does not alter—that is the ACT and WA retain the lowest shares, Tasmania and South Australia retain the highest. However, the spread between jurisdictions is less.

Scenario 2 would enable the Commonwealth Department of Education, Employment and Workplace Relations (DEEWR) to deal directly with individual institutions in discussing their future low SES targets (for example, in forthcoming compact negotiations) without the need to refer to other institutions or to state or territory governments (as required in Scenario 3—see below). Whether this is advisable is another matter, of course, but it may have appeal for the Department, and would be clearly preferable to a blanket 20 per cent target for all. Scenario 2 also has intuitive public appeal in requiring institutions currently with lower SES shares to make a proportionately greater effort than those currently with higher shares.

However, Scenario 2 does not take state-based factors into account. As we have seen, these are crucial determinants of low SES shares. Setting an inflexible institutional target without taking state-based (and possibly even regional) factors into account could lead to a situation where institutions focus on poaching low SES students from nearby universities, without any overall increase in total low SES enrolment numbers. This

could conceivably occur in Sydney, for example, where the four Sydney-based universities (excluding the University of Western Sydney) all have low SES participation levels of less than 11 per cent. In such circumstances, it would be more appropriate to raise participation levels all round through a coordinated strategy.

Scenario 3—State-weighted target

As discussed above, there is strong evidence to suggest that low SES enrolment outcomes are in large part driven by the measure chosen—low SES postcodes—and so therefore reflect socio-economic differences between the states and territories.

Scenario 3 involves a participation pathway that accounts for these differences by weighting the 20 per cent national target by the ratio of the given state and territory's low SES population share to the national average

Table 7: Scenario 2—Band-weighted target for low SES enrolment, 2020

	2020 Low SES per cent under Scenario 2	2008 Low SES per cent
Institutional grouping		
GO8	13.3	9.9
ATN	18.7	14.7
1960-70s	23.4	19.3
Post-1988	24.9	20.9
State/territory		
New South Wales	20.8	16.8
Victoria	17.5	13.8
Queensland	23.6	19.4
Western Australia	14.3	11.2
South Australia	25.2	20.6
Tasmania	34.5	31.3
Northern Territory	19.4	15.5
Australian Capital Territory	6.6	4.7
Multi-state	16.8	13.0
Australia	20.0	16.3

of 25 per cent (that is, the lowest quartile). This means that each state/territory would be subject to an equal effort-opportunity ratio. This was defined above as the ratio of low SES participation level to low SES population share in the state/territory. In 2020, the government's national target ratio is 0.80 (that is 20 per cent/25 per cent = 0.80). This ratio is then applied to each state and territory to arrive at a target low SES participation figure.

Table 8 reports these relativities for each of the states and territories.

The rationale for choosing state-based targets is that there is considerable deviation between the states and territories with regard to the proportion of population living in low SES postcodes.

There are no low SES postcodes in the Australian Capital Territory. Thus the two local universities, the Australian National University and the University of Canberra, have necessarily low levels of low SES enrolment (4.7 per cent combined, which is the target they are assigned in this scenario). Aside from this, the states and territories' low SES population shares range from 19.8 per cent in WA to 54.1 per cent in Tasmania and this range is reflected in their calculated low SES student targets for 2020. For example, South Australia—with 35.7 per cent of its population living in low SES postcodes—has a state target for low SES participation of 28.6 per cent (that is, 35.7 per cent*0.80

= 28.6 per cent). By contrast, Victoria has a target of 16.0 per cent, based on its lower share of the low SES population.

Table 9 reports the outcomes in terms of enrolment targets across institutions and the states and territories under this scenario. For ease of analysis in calculating this scenario, we assume that the distribution of total and low SES places within each state and territory will remain unchanged from that prevailing in 2008, although of course this is unlikely in view of the marked regional differences in economic growth in Australia.

The overall findings are not dramatically different from those seen under Scenario 1, which saw a uniform increase in low SES participation levels. This reflects the predominance of state effects, and sees the 1960s-70s and Post-1988 universities again bearing the main costs of adjustment

Table 8: Scenario 3—state-weighted target, 2008

Grouping	2008 population in low SES postcodes per cent	Target 2020 low SES student share per cent
New South Wales	23.5	18.9
Victoria	19.9	16.0
Queensland	30.5	24.5
Western Australia	19.8	15.9
South Australia	35.7	28.6
Tasmania	54.1	43.4
Northern Territory	26.4	21.2
Australian Capital Territory ¹	0.0	4.7
Multi-state ²	—	13.0
Australia	25.0	20.0

Notes: The 2020 target for low SES student share is based on a uniform national effort-opportunity ratio of 80 per cent, which is calculated by dividing the state share of low SES population by the Australian (25 per cent) share and multiplying this by the overall low SES student enrolment target of 20 per cent.

¹ As there are no low SES postcodes in the ACT, the existing low SES share of 4.7 per cent has been assigned.

² Likewise, in the case of the only multi-state university in Australia, the Australian Catholic University, given the uncertainty in relation to its catchment region, the pre-existing share of 13 per cent has been assigned to it.

as part of this process, with both being required to enrol 37 per cent of their projected increase to 2020 from low SES postcodes. Essentially, Scenario 3, like Scenario 1, shifts the focus towards those universities with pre-existing high levels of low SES enrolment.

Scenario 3 is perhaps the fairest method of apportioning effort. It recognises that most students (over 90 per cent) attend university within their own state, and thus the locational basis of the low SES measure (the postcode) is crucial. To assess relative effort (or success) among universities in attracting low SES students, the demographic characteristics of their primary catchment area (the state or territory) must be taken into account. So, states with a higher percentage of low SES population should be expected to have a higher share of low SES students.

A state-based target for increasing low SES students is likely to require policy innovation at several levels. First, it implies that it is state characteristics, rather than the policies of individual universities, which are the dominant influence over low SES enrolment levels. Therefore, cooperative rather than competitive approaches by universities within a state to increase overall low SES enrolments are likely to be needed. This implies a commitment from universities within a jurisdiction that they need to collectively increase the size of the pie within their jurisdiction (that is the number of low SES students in a state)

rather than merely increase the size of their slice of the existing pie.

A state-based approach is also likely to require universities and DEEWR to work closely with state and territory governments on this policy challenge. This is because sub-national governments have the greatest influence over the institutions (schools) from which large numbers of new low SES students are likely to come, although attracting mature-aged students from low SES backgrounds is also likely to play an important role. A state-based approach will also require state and territory governments themselves to take higher education policy and opportunity more seriously than many have done to date. These are formidable challenges given the Commonwealth's primary responsibility over the past half century for higher education and could

Table 9: Scenario 3—state-weighted target for low SES enrolment, 2020

	2020 Low SES per cent under Scenario 3	2008 Low SES per cent
<i>Institutional grouping</i>		
GO8	12.0	9.9
ATN	18.9	14.7
1960–70s	23.6	19.3
Post-1988	24.7	20.9
<i>State/territory</i>		
New South Wales	18.9	16.8
Victoria	16.0	13.8
Queensland	24.5	19.4
Western Australia	15.9	11.2
South Australia	28.6	20.6
Tasmania	43.4	31.3
Northern Territory	21.2	15.5
Australian Capital Territory	4.7	4.7
Multi-state	13.0	13.0
Australia	20.0	16.3

potentially meet resistance from Commonwealth policy makers.

SUMMARY

Table 10 provides an overview of the findings of the modelling in the case of each scenario, in terms of targeted low SES participation levels for universities (Table A providers) to 2020.

The impact of the different scenarios on university groupings does not vary greatly, although there is more variation for some individual institutions within each group. From a state/territory perspective, Scenario 3 magnifies the differences, with WA, SA and Tasmania being required to raise their low SES levels significantly, reflecting their current low effort-opportunity ratio.

Much of the discussion around low SES participation in higher education has focused

on current versus future levels of enrolments (participation). It does this without taking into consideration how this affects access, specifically in terms of the low SES share of the increase in enrolment between 2009 and 2020 which the targets for low SES enrolments imply. Table 11 provides this comparison by presenting the implied share of new enrolments that would have to be set aside for low SES students in order for the 20 per cent target to be met by 2020.

Across all scenarios, around 31 to 32 per cent of all new places created by Table A providers would need to go to students from low SES backgrounds should the 20 per cent target be reached. The distribution of this effort differs between institutional groupings, with Scenario 2 putting the most onus on the Group of 8 to increase its low SES enrolments.

Table 10: Participation levels: summary by scenario

	<i>2008 Low SES</i>	Projected Low SES per cent in 2020		
		Scenario 1: Stable shares per cent	Scenario 2: Band-weighted target per cent	Scenario 3: State target per cent
<i>Institutional grouping</i>				
GO8	9.9	12.2	13.3	12.0
ATN	14.7	18.1	18.7	18.9
1960–70s	19.3	23.8	23.4	23.6
Post-1988	20.9	25.7	24.9	24.7
<i>State/territory</i>				
New South Wales	16.8	20.7	20.8	18.9
Victoria	13.8	17.0	17.5	16.0
Queensland	19.4	23.9	23.6	24.5
Western Australia	11.2	13.7	14.3	15.9
South Australia	20.6	25.4	25.2	28.6
Tasmania	31.3	38.6	34.5	43.4
Northern Territory	15.5	19.1	19.4	21.2
Australian Capital Territory	4.7	5.8	6.6	4.7
Multi-state	13.0	15.9	16.8	13.0
Australia	16.3	20.0	20.0	20.0

CONCLUSION

The Rudd Government proposes that 20 per cent of university domestic undergraduate enrolments should be students from low SES backgrounds by 2020. This contrasts with the reality of participation levels for low SES students that have been stuck at around 16 per cent for many years. To reach a participation level of 20 per cent by 2020, access rates of 32 per cent will be required. In other words, at a system level, almost one in three of all new domestic undergraduate enrolments between now and 2020 will need to be low SES students. This is double recent access rates and constitutes a formidable challenge for universities and for policy makers alike.

Furthermore, the new target will apply in the context of a growing system, making the target even harder to achieve. Between 2003 and 2008, national domestic undergraduate enrolments grew only marginally (1.7 per cent), from 523,531 to 532,503. The government is assuming that domestic undergraduate enrolments in higher education (Table A providers only) in 2020 will be around 696,633—an increase of 31 per cent over 2008 levels. The 20 per cent low SES target of 139,327 students will therefore require a 60.9 per cent increase in low SES enrolments.

The Rudd Government has not given a firm indication of what it considers to be a likely or desirable distribution of low SES students across the higher education system. In fact, there are various pathways through which the increased participation of low SES students can be achieved. After rejecting a simple one-size-fits-all model requiring 20 per cent participation levels at all institutions, this article has analysed three participation options. These range from a stable shares distribution to two more nuanced scenarios which take into account current participation levels or state factors, in which lower low-SES participation universities and jurisdictions are required to make a greater effort than those currently with higher participation levels.

There is a wide divergence of participation levels for low SES students across the Australian higher education sector, as assessed on a state basis. The use of the current postcode measure ensures that universities in jurisdictions such as the ACT and WA appear to be less representative of the general population, as those jurisdictions have either no (as is the case with the ACT) or relatively few low SES postcodes when classed together in a national comparison. In addition to the divergence between the states and territories, there is also a noticeable di-

Table 11: Implied access levels: analysis by groupings by scenario

Grouping	Implied access levels (Share of increase in enrolment going to low SES students)		
	Scenario 1:	Scenario 2:	Scenario 3:
	Stable shares per cent	Band-weighted target per cent	State target per cent
GO8	19.6	24.4	18.6
ATN	29.1	31.5	32.7
1960-70s	38.2	36.8	37.6
Post-1988	41.2	37.9	37.1
Australia	32.1	32.7	31.3

vergence between the university groupings in terms of their low SES enrolment, even after taking state effects into consideration. The ATN group, for example, generally performs in the middle of the pack in low SES participation—higher than the Go8 but below the 1960s-70s and Post-1988 groups.

Finally, we must acknowledge that the true nature of the range and performance of Australian universities in terms of their enrolment of low SES students is dependent on the definition of low SES. Under the current measure, students are classified as low SES if they reside in the bottom 25 per cent of postcodes on the ABS's SES measure. However, the distribution of such postcodes is uneven among the states and territories, such that nationwide comparisons between universities do not appear to be robust. Our analysis allows for this problem to some extent and shows that a national target of 20 per cent enrolment can be achieved where differential targets at the institutional level

compensate for this problem. Alternatively, a state-weighted target can be applied which puts the onus on universities to at least reflect the low SES population within their own state or territory.

A more refined measure of low SES status—for instance, an individual student assessment on the basis of their parents' income—may overcome this problem as well as ensuring fairer outcomes for students who are disadvantaged by the current measure. Certainly, the development of a suitable measure of low SES status needs to be undertaken as a priority before targets can be set for individual institutions.

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- ¹² Data from DEEWR, 2009, indicate that universities source around 90% of their domestic undergraduate load from their own jurisdiction. Tasmania (86.8%), the Northern Territory (58.5%) and the Australian Capital Territory (67.6%) are the only states or territories with less than 90% own-jurisdictional enrolment.
- ¹³ To obtain a fully accurate picture of low SES effort related to opportunity, it may be necessary to further disaggregate the low SES population geographically, for example rural vs urban, or even by low SES incidence within cities. Defining a university's geographic catchment area this narrowly assumes that there is relatively limited mobility of low SES students within as well as across states.
- ¹⁴ Gillard, 2009, op. cit.
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