

# How types of universities may fare under the new Commonwealth policy

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Thank you for this opportunity to open this session's discussion of Australian higher education policy. I will try to analyse the effects on university groups of some key policies: student entitlements, the equity enrolment loading, increase in the research infrastructure block grant scheme, the change of the institutional grant scheme into a joint research engagement scheme, and my campaign of the moment, the effect of the discipline based excellence in research for Australia assessments. Many key aspects of these policies are yet to be decided and announced, so much of my discussion is rather speculative.

## **Student entitlements**

I suggest the effect of student entitlements will depend on the behaviour of the subject university, the behaviour of other universities with a campus within commuting distance of the subject university's campuses and on student demand. Each of these in turn is related to location. We know, for example, that the higher education participation rate differs markedly from one city to another and from one part of a city to another. So the effect of student entitlements will have to be analysed separately for each place. I doubt whether at this stage one can safely posit any generalisation.

I doubt, for example, that there will be a general shift of students from the country to the city. Over the last 5 years universities in all capital cities have either returned unfilled places to the Commonwealth or have only just managed to fill their quota. All students who wished to relocate from the country to the city could get a place in the city if they had a tertiary entrance rank above the minimum that the least selective city university was willing to admit students. There is no reason to think that universities will lower their minimum entry scores for student entitlement places below that at which they have been willing to fill quota places. That is not to deny that some regional campuses may (continue to) lose student load, but other regional campuses will continue to expand.

Neither do I think there will be a general shift of students from low demand to high demand institutions. Some high demand institutions such as the University of Western Australia and the University of Adelaide may use student entitlements to expand, but most other high demand universities are already big enough and should concentrate on increasing their resource intensity, not size. Some lower ranked institutions may use student entitlements to expand. For example, Central Queensland University has campuses in Noosa, Brisbane, the Gold Coast, Sydney and Melbourne. These currently enrol international students, but are obvious sites for an expansion of domestic students with student entitlements.

Since I am arguing that student entitlements' effects will depend on place, to consider scale and thus prospects for expansion with student entitlements I examined the size of each university's biggest campus. Unfortunately the latest figures I have readily available are for 2004, but they are recent enough to give an idea of the relative size of universities' biggest campus. The Group of 8 universities have the biggest mean size of their biggest campus, at 23,000 efts. We have noted that UWA (13,300 efts at Nedlands) and the University of Adelaide (13,400 at North Terrace) may use entitlements to expand, and this is consistent with their biggest campus being of relatively modest size for the Group of 8.

The mean at the ATN-like universities is the next biggest at 14,500 efts. Some of these campuses are quite big. For example, Curtin's Bentley campus at 19,000 and UTS' Haymarket campus at 18,000 are similar in size to Monash's Clayton campus with 19,000 efts. On the other hand, UniSA's city campus is rather smaller with 9,000 and the ATN-like Swinburne's Hawthorn campus is 7,500 efts. Many of the IRUA-like universities seem to have the capacity to expand should they wish and student demand recovers sufficiently. While the IRUA-like Macquarie University's North Ryde campus has 19,000 efts and La Trobe's Bundoora campus has 15,000 efts, Griffith's, Flinders' and James Cook's biggest campuses are well below the mean of 12,300 efts. All of the new generation and rural universities have considerable scope for expansion and I expect most would wish to do so, but their aspirations will probably be limited by flat student demand and competition from other universities for some time. I set out these figures for university types in table 1 below. The figures for all universities are in appendix 1.

Table 1: mean size of universities' biggest campus, by university type, 2004

<b>Type</b>	<b>Efts</b>
Go8	23,000
ATN-like	14,500
IRUA-like	10,100
New generation	6,000
Rural	5,800
<b>Mean</b>	<b>12,300</b>

Source: special data request from Dest, 2005

I note that Deakin University (2009) will offer associate degrees 'in conjunction with' 3 Tafe institutes in 2010 and student entitlements may encourage similar joint arrangements and perhaps even franchising, where students who are enrolled and awarded their qualification at one institution are taught by another. While there is currently only a little franchising in Australia, it is quite common in England, where typically higher education colleges franchise some of their undergraduate programs to a further education college, the British analogue of Tafe institutes. Universities could franchise (part of) some baccalaureates to preparatory colleges which are their subsidiaries or with which they are associated.

### **Equity enrolment loading**

The equity enrolment loading for students from low socio economic status backgrounds will be 2.6% of Commonwealth grant scheme funding in 2012-13. Presumably each institution's equity enrolment loading will depend on the size of their low socio economic status student load and the funding cluster in which they are enrolled. In 2009 Commonwealth Grant Scheme amounts range from \$1,709 per efts for business and law to \$ 18,610 per efts for agriculture, dentistry, medicine and veterinary science, and had a mean of \$11,402 efts. Unfortunately the Department hasn't yet been able to fulfil my special data request for the socio economic status profile of each narrow field of education, but I expect that high numbers of low socio economic status students are enrolled in nursing (\$11,517 per efts), education (\$8,389), business (\$1,709) and agriculture (\$18,610). Let us assume that low socio economic students are enrolled in programs that attract an average Commonwealth grant scheme amount of \$10,000 per efts. The 2.6% enrolment loading for low socio economic status students would therefore be \$2,600 per efts when it is fully phased in.

I have from the Department the number of low socio economic status students commencing at each university in 2007 and assumed that universities have the same proportion of low socio economic status total students. From this I calculated an estimated equity enrolment loading for each institution. Expressing this estimated loading as a proportion of total Commonwealth grant scheme amounts shows that Innovative Research Universities Australia and similar universities do relatively well, second only to rural universities. I include Macquarie as an IRUA-like university. Macquarie has a very low proportion of low socio economic status students, only 6% and would win an equity enrolment loading of only 2.5% of its total Commonwealth grant scheme amount. Excluding Macquarie from IRUA-like universities improves their mean equity performance and loading to be just a little better than rural universities. I set out these figures for university types in table 2. The figures for all universities are in appendix 2.

Table 2: university types' % of commencing low socio economic status students and estimated equity enrolment loading as % of Commonwealth grant scheme amount, 2007

<b>Type</b>	<b>% low SES commencing</b>	<b>Estimated loading as % of CGS</b>
ATN-like	16	5.3
Go8	9	2.8
IRUA-like	19	6.2
IRUA (without Macquarie)	22	7.0
New generation	15	5.2
Rural	22	6.8
<b>All</b>	<b>17</b>	<b>5.5</b>

While the enrolment loading is welcome, it is dwarfed by institutional performance funding for research, which will be 28% of Commonwealth grant scheme funding in 2012-13. The English 'postcode premium' of 2.5% did not influence institutions' behaviour and it was recently increased to 10%, which was still considered insufficient to influence institutions' behaviour. I therefore suggest that the equity enrolment loading will be useful additional funding for institutions that win it but that it is not nearly big enough to change institutions' behaviour.

### **Increase in research infrastructure block grant scheme**

The Government announced an additional \$201 million in 2012-13 for 'sustainable research excellence in universities'. On page 363 of budget paper 2 the Government says that 20% or \$40 million of the additional funds will be allocated according to institutions' success in attracting research income, the current formula for allocating the research infrastructure block grant. Almost 75% of this will be allocated to the Group of 8 universities. Next, a long way behind, are the IRUA-like universities by both estimated sustainable research excellence grants for national competitive research grants and as a proportion of the Commonwealth grant scheme amount. I set out these figures for university types in table 3. The figures for all universities are in appendix 3.

Table 3: universities' share of the 'sustainable research excellence in universities' (SRE) funding allocated for share of national competitive research grants as a proportion of Commonwealth grant scheme (CGS) amounts, grouped in similar types, 2007

Type	Share of competitive grants %	Estimated SRE \$	SRE as % of CGS
ATN	6.28	2,511,935	0.4
Go8	74.59	29,834,976	2.8
IRUA	11.22	4,488,362	0.6
NewGen	2.36	944,582	0.2
Rural	5.55	2,220,146	0.4
<b>Total</b>	<b>100.00</b>	<b>40,000,000</b>	<b>1.2</b>

### Institutional grant scheme changed into joint research engagement

The Government says that 'Existing funding from the Institutional Grants Scheme (IGS) will be redirected into this new [joint research engagement] program, which aims to give greater emphasis to end-user research by encouraging and supporting collaborative research activities between universities, industries and end users' (*Transforming Australia's higher education system*, page 25) and elsewhere the Government says that joint research engagement funding will be allocated according to 'demonstrated research excellence and demonstrated ability to attract funding from other sources' (*Powering ideas*, page 34).

The Government has not announced any further details so calculating the effect of its change requires guesses. I started with each university's institutional grant scheme amount for 2007. I then considered how much institutions would have got from the 2007 institutional grant scheme had all funds been allocated by institutions' share of research funding from 'end users'. I counted these as 'end user' research grants:

- Other public sector income - local government
- Other public sector income - State government
- Other public sector income - other Commonwealth government
- Industry and other income - Australian contracts
- Industry and other income - Australian grants
- Cooperative research centre income - non-university participants
- Cooperative research centre income - third party contributions.

I therefore didn't include these as 'end user' grants:

- Competitive grant income
- Industry and other income - donations, bequests and foundations
- Industry and other income - international funding
- Industry and other income - syndicated research and development
- Cooperative research centre income - Commonwealth grants to CRCs.

I took the mean of 'end user' grants for 2005 and 2006 since the block funding formulae currently uses the mean of the 2 most recent years' data available and I assume that the mean of 2005 and 2006 data were used to allocate the 2007 institutional grant scheme. Since I had access only to Universities Australia data I considered only Universities Australia members. This omits Notre Dame Australia, the Australian Maritime College and Batchelor Institute

which are included in the institutional grant scheme. I calculated each university's share of 'end user' income and allocated the 2007 institutional grant scheme amount of \$301,573,711 to each Universities Australia member according to its share of 'end user' income. I then compared each university's share of its guesstimated joint research engagement allocation for 2007 with its allocation of institutional grant scheme funds in 2007.

This results in a big increase of 23% for the ATN-like universities, small increases of around 5% for Rural and IRUA-like universities, and small falls of around 5% for Go8 and NewGen universities. The same exercise using the mean of 2006-07 'end user' research income again produced a big increase of 24% for the ATN-like universities and a small increase of 5% for the rural universities, small falls of around 5% for the IRUA-like and Go8 universities, but a big fall of 16% for the NewGens.

This modelling is sensitive to the assumptions made. My colleague Tony Shiel, who is an expert in university research policy, made different assumptions and reached somewhat different results. However, Tony reassures me that we have found similar broad patterns: the ATN-like universities will be the main beneficiaries of a shift in emphasis to 'end user' research since they have a higher proportion of industry funding are less successful at winning Australian competitive grants, and the outcomes for the other university types is mixed according to each university's relative success in attracting industry research funding and winning Australian competitive grants. For what they are worth, the results for university types are sent out in table 4 and the results for all universities are in appendix 4.

Table 4: difference between actual allocations of 2007 institutional grant scheme funds and notional allocations of 2007 funds according to share of the mean of 'end user' funds earned from 2005 to 2006, by university type.

Type	Share of 2007 IGS %	Share of 'end user' income %	'End user' - actual IGS	% change
ATN-like	9.9	12.2	6,912,028	23.2
Go8	63.5	60.3	-9,551,013	-5.0
IRUA-like	15.3	15.9	1,760,191	3.8
NewGen	4.6	4.5	-572,906	-4.1
Rural	6.5	7.1	1,674,175	8.5
All	100.0	100.0	0	0.0

### **Research assessment: change emphasis from multi disciplinary to disciplinary research?**

My last modelling is of an issue that has been concerning me for the last little while, the effect of the excellence in research in Australia assessment's disciplinary silos on the construction of multi disciplinary problem based research. I sought to test whether different types of universities constructed their research concentrations differently by examining the top research page on each university's web site.

Five universities didn't state any research concentration on their main research web page: ANU, Bond and the universities of Melbourne, NSW and WA. This could be because they have no research concentration because their research is of uniform intensity across all their academic areas, because they have research concentrations but have not taken the trouble to state them on their main research page, or because they haven't done the hard work of analysing their research strengths and potential and built internal agreement on their concentrations. As the University of Melbourne (2009: 8) observed of itself in a recent

publication: ‘In research there has been a slow and incomplete process to achieve consensus on priority areas for cross-disciplinary research funding’. This is not because of its universally high research performance -

Despite the expectation that all academic staff will be research active, recent analysis demonstrates that some 12% of level B and above academic staff have not produced an eligible publication in the last three years, while 51% have produced one or less.

(University of Melbourne, 2009: 49).

Most universities referred to at least university research centres on their research home page. Many, like the University of Newcastle link their research concentrations to international prominence -

The University has established research centres and institutes in key focus areas. Some, such as the Priority Research Centres, are major research groupings with an international reputation for their research activities. Research Institutes are cross-disciplinary areas of excellence in research and development. University Centres are established or emerging research groups recognised by the University. . .

. . . The 12 Priority Research Centres focus the University's resources into areas of existing and potential research strength, and promote cross-faculty and cross disciplinary research.

(University of Newcastle, 2008)

RMIT neatly expresses a research strategy which seemed common to many universities with a medium level of research intensity -

In 2006 RMIT established four research institutes representing areas of research excellence and scale - and demonstrating RMIT's capabilities at nationally and internationally leading levels. The Research Institutes form the university-wide component in the hierarchy of research clusters at RMIT and will provide complementary opportunities for researchers alongside RMIT Research Centres and other research groupings within the various Schools.

(RMIT, 2009)

Some universities state a modest number of research concentrations at the cost of stating their concentrations in very general or broad terms. Monash University was the most striking example of this tendency. It says ‘Monash has identified six priorities addressing the most important 21st century challenges. Research teams that transcend traditional disciplinary boundaries examine issues holistically’ (Monash University, 2009). Monash’s research priorities are:

sustainability  
peace and security  
economic development  
innovation  
health and disease  
community cohesion.

A few universities specified some of their research concentrations more narrowly, but most stated most concentrations broadly. Thus, both Flinders and La Trobe have concentrations in ‘health and society’ and 10 other universities had similarly broadly stated concentrations in health.

I examined the extent to which universities state their concentrations in disciplinary terms by identifying the key words in each concentration and searching for the key words in the Australian and New Zealand Standard Research Classification (ANZSRC) of fields of research. I scored each concentration from 0 to 6. 0 indicated a concentration with no research disciplinary classification, mostly because it was multi disciplinary but possibly also partly because it was stated so broadly that I couldn’t identify any discipline. 1 indicated a concentration with a very broad discipline such as ‘water’ and ‘health’. 2 indicated a concentration that matched one of the Australian and New Zealand Standard Research Classification’s 2 digit classification of divisions. 4 indicated a concentration that mapped to an ANZSRC 4 digit classification of groups and 6 indicated a concentration that mapped to a 6 digit field of research.

Table 5: classification of research concentrations

Score	Classification	Example
0	No disciplinary classification	Peoples and societies in the tropics, James Cook
1	Very broad discipline	Water science, Adelaide, Griffith, UNE
2	ANZSRC division	Earth systems science, Southern Cross
4	ANZSRC group	Applied cognitive psychology, Flinders
6	ANZSRC field	Asthma and respiratory diseases, Newcastle

I found 368 research concentrations listed on universities’ research home pages, most multidisciplinary although I mapped just over 41% to 4 or 6 digit ANZSRC codes.

Table 6: mapping of universities’ concentrations to disciplines

Score	Number of concentrations	% of concentrations
0	194	53%
1	16	4%
2	5	1%
4	90	24%
6	63	17%
<b>Total</b>	<b>368</b>	<b>100%</b>

Aggregating these by university type shows an apparently greater disciplinary orientation of research concentrations at IRUA-like and Go8 universities. I attach my classification of all universities’ concentrations in appendix 5. However, I don’t think these results are very informative for 3 reasons. First, universities are at very different stages of identifying their research strengths and potential and organising them into concentrations. For example, Wollongong and Macquarie have identified research concentrations for several years and have achieved much more progress than, for example, Monash which started more recently and has at this stage identified broad research themes. Secondly, universities’ research home pages serve very different roles: while many are directed to external audiences, some are the research

office's home page directed to internal processing of their researchers' grants, ethics clearances, etc. The web pages do not hold similar information assembled for a similar purpose. Thirdly, my categorisation of research concentrations was rough.

Table 7: universities' research concentrations' disciplinary orientation by university type

<b>Type</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>Total</b>	<b>Mean</b>
ATN	33	1	3	6	7	50	1.2
Go8	40	5	0	23	25	93	2.0
IRUA	32	5	2	31	17	87	2.4
NewGen	35	3	2	9	10	59	1.5
Rural	54	2	1	18	4	79	1.3
All	194	16	8	87	63	368	1.7

## Conclusion

From this analysis I conclude that either the new Australian Government's policies on higher education are unlikely to systematically advantage or disadvantage any university type, or that this typology of universities isn't very useful in analysing the broad effects of the new policies. The Group of 8 universities has also concluded that the Government's policies don't advantage their members and argues that this is a failure of the policies.

The lack of systemic university winners and losers from the new policies could also reflect the incoherence of the Government's policies. For example, the Government's excellence in research for Australia assessment of research in disciplinary silos is inconsistent with the multi disciplinary and problem based research of the national research priorities and the Government's allocations of major capital grants for research. And the present Government's continuation of previous governments' preoccupation with university research and its concentration is inconsistent with its avowed commitment to innovation, which argues for research to be proximate to the sites of social and economic production.

But these inconsistencies could just reflect the complexity of government, which has multiple but not necessarily compatible goals. For example, a government that made a single-minded commitment to establish a 'Harvard here' as some Group of 8 advocates urge, or a government that made a single-minded commitment to equal participation in education as others of us urge, may achieve a great national success or it might end in glorious failure. That outcome would be the government's legacy to the next generation. In view of what is at stake and the long term consequences of government policy, it is perhaps safer for governments to have multiple if somewhat inconsistent policies rather than just one aim which could be magnificently right or gloriously wrong.

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Appendix 1: student load at universities' biggest campus, grouped in similar types, 2004

<b>Type</b>	<b>University</b>	<b>Biggest campus</b>	<b>Eftsu</b>
ATN	Curtin University of Technology	Bentley	19,033
ATN	University of Technology, Sydney	Haymarket	18,044
ATN	RMIT	City	17,438
ATN	QUT	Gardens Point	16,398
ATN	University of South Australia	City	8,987
ATN	Swinburne University of Technology	Hawthorn	7,432
<i>ATN</i>	<i>Mean</i>		<i>14,555</i>
Go8	The University of Melbourne	Parkville	32,202
Go8	The University of Sydney	Camperdown and Darlington	31,372
Go8	The University of Queensland	St Lucia	25,753
Go8	The University of New South Wales	Kensington	25,731
Go8	Monash University	Clayton	19,306
Go8	The University of Adelaide	North Terrace	13,364
Go8	The University of Western Australia	Crawley	13,274
Go8	Australian National University	Acton	11,051
<i>Go8</i>	<i>Mean</i>		<i>21,500</i>
IRUA	Macquarie University	North Ryde	19,086
IRUA	La Trobe University	Bundoora	15,251
IRUA	The University of Newcastle	Callaghan	13,937
IRUA	University of Wollongong	Wollongong	12,594
IRUA	Flinders University	Bedford Park	9,897
IRUA	Griffith University	Nathan	8,740
IRUA	Griffith University	Gold Coast	(8,115)
IRUA	Murdoch University	South Street	8,047
IRUA	James Cook University	Townsville	7,623
<i>IRUA</i>	<i>Mean</i>		<i>10,140</i>
NewGen	Deakin University	Burwood	10,894
NewGen	Victoria University (Melbourne)	Footscray	7,411
NewGen	University of Canberra	Bruce	7,176
NewGen	Edith Cowan University	Mount Lawley	6,196
NewGen	University of Western Sydney	Penrith	5,830
NewGen	Australian Catholic University	Melbourne	2,622
NewGen	Bond University	Robina	2,334
<i>NewGen</i>	<i>Mean</i>		<i>6,066</i>
Rural	University of Southern Queensland	Toowoomba	11,791
Rural	The University of New England	Armidale	9,118
Rural	University of Tasmania	Hobart	7,338
Rural	Charles Sturt University	Wagga Wagga	6,353
Rural	Southern Cross University	Lismore	5,602
Rural	Central Queensland University	Rockhampton	5,332
Rural	University of Ballarat	Mt Helen	3,838
Rural	Charles Darwin University	Darwin	2,883
<i>Rural</i>	<i>Mean</i>		<i>5,781</i>
<b>All</b>	<b>Mean</b>		<b>12,300</b>

Source: DEST data request, 18 August 2005.

Appendix 2: estimated universities' low socio economic status equity loading, grouped in similar types, 2012

Type	University	% low SES commencing	Estimated low CGS load	Estimated loading \$	Estimated loading as % of CGS
ATN	University of South Australia	27	3,963	10,303,163	8.9
ATN	QUT	14	3,046	7,918,802	5.1
ATN	Curtin University	15	2,110	5,486,361	4.6
ATN	RMIT	17	2,369	6,159,884	5.1
ATN	UTS	8	1,110	2,886,183	2.9
ATN	Swinburne University	12	716	1,861,525	4.1
<i>ATN</i>	<i>Mean</i>	<i>16</i>	<i>13,287</i>	<i>34,547,471</i>	<i>5.3</i>
Go8	Monash University	14	3,166	8,232,454	4.6
Go8	The University of Queensland	15	2,982	7,753,845	4.3
Go8	The University of Adelaide	18	1,758	4,570,273	5.4
Go8	The University of Melbourne	10	1,922	4,998,252	3.0
Go8	UNSW	8	1,446	3,758,847	2.8
Go8	The University of Sydney	6	1,415	3,677,908	1.9
Go8	UWA	9	915	2,379,308	2.6
Go8	ANU	4	256	664,386	1.3
<i>Go8</i>	<i>Mean</i>	<i>9</i>	<i>7,645</i>	<i>19,876,443</i>	<i>2.8</i>
IRUA	The University of Newcastle	31	4,344	11,295,244	9.6
IRUA	Griffith University	15	2,751	7,151,832	5.0
IRUA	La Trobe University	19	2,875	7,476,265	6.4
IRUA	Flinders University	24	1,956	5,086,607	7.5
IRUA	James Cook University	28	2,158	5,610,016	7.3
IRUA	Murdoch University	25	1,768	4,595,805	7.7
IRUA	University of Wollongong	17	1,590	4,135,296	5.7
IRUA	Macquarie University	6	652	1,694,828	2.5
<i>IRUA</i>	<i>Mean</i>	<i>19</i>	<i>10,956</i>	<i>28,485,026</i>	<i>6.2</i>
NewGen	University of Western Sydney	16	3,065	7,970,009	5.6
NewGen	Victoria University	25	2,572	6,687,312	9.2
NewGen	Deakin University	14	2,089	5,431,228	5.0
NewGen	Edith Cowan University	15	1,510	3,926,330	4.5
NewGen	Australian Catholic University	12	886	2,304,293	3.9
NewGen	University of Canberra	4	201	522,929	1.3
<i>NewGen</i>	<i>Mean</i>	<i>15</i>	<i>10,305</i>	<i>26,793,040</i>	<i>5.2</i>
Rural	Central Queensland University	41	2,399	6,237,359	11.4
Rural	Charles Sturt University	21	2,509	6,522,241	6.8
Rural	University of Tasmania	40	3,351	8,713,054	9.4
Rural	USQ	28	2,147	5,581,529	8.8
Rural	Southern Cross University	22	1,277	3,319,401	7.5
Rural	University of New England	24	1,766	4,592,823	8.0
Rural	University of Ballarat	22	753	1,957,580	6.6
Rural	Uni of the Sunshine Coast	13	427	1,109,693	3.6
Rural	Charles Darwin University	12	364	946,319	3.3
<i>Rural</i>	<i>Mean</i>	<i>22</i>	<i>6,682</i>	<i>17,372,820</i>	<i>6.8</i>
<b>All</b>		<b>17</b>	<b>73,918</b>	<b>192,186,061</b>	<b>5.5</b>

Appendix 3: universities' estimated 'sustainable research excellence in universities' funding allocated for share of national competitive research grants as a proportion of Commonwealth competitive grants, grouped in similar types, 2007.

Type	University	Share of competitive grants %	Estimated SRE \$	SRE as % of CGS
ATN	QUT	1.47	589,391	0.4
ATN	Curtin University of Technology	1.23	492,351	0.4
ATN	University of Technology, Sydney	1.18	470,526	0.5
ATN	University of South Australia	1.10	439,019	0.4
ATN	RMIT	0.79	314,226	0.3
ATN	Swinburne University	0.52	206,421	0.5
<i>ATN</i>	<i>Sub total</i>	<i>6.28</i>	<i>2,511,935</i>	<i>0.4</i>
Go8	The University of Melbourne	13.95	5,580,196	3.3
Go8	The University of Sydney	11.94	4,777,020	2.5
Go8	The University of Queensland	11.25	4,499,540	2.5
Go8	Monash University	9.06	3,624,485	2.0
Go8	UNSW	8.54	3,415,545	2.5
Go8	Australian National University	7.33	2,931,931	5.8
Go8	UWA	6.75	2,701,807	3.0
Go8	The University of Adelaide	5.76	2,304,452	2.7
<i>Go8</i>	<i>Sub total</i>	<i>74.59</i>	<i>29,834,976</i>	<i>2.8</i>
IRUA	The University of Newcastle	2.26	904,788	0.8
IRUA	University of Wollongong	1.55	620,680	0.9
IRUA	Flinders University	1.41	565,231	0.8
IRUA	Macquarie University	1.36	543,099	0.8
IRUA	Griffith University	1.28	512,374	0.4
IRUA	La Trobe University	1.21	484,491	0.4
IRUA	James Cook University	1.17	468,662	0.6
IRUA	Murdoch University	0.97	389,038	0.6
<i>IRUA</i>	<i>Sub total</i>	<i>11.22</i>	<i>4,488,362</i>	<i>0.6</i>
NewGen	Deakin University	1.06	422,034	0.4
NewGen	University of Western Sydney	0.68	271,267	0.2
NewGen	University of Canberra	0.21	82,737	0.2
NewGen	Edith Cowan University	0.15	61,462	0.1
NewGen	Victoria University	0.12	49,042	0.1
NewGen	Bond University	0.07	29,334	
NewGen	Australian Catholic University	0.07	28,706	0.0
<i>NewGen</i>	<i>Sub total</i>	<i>2.36</i>	<i>944,582</i>	<i>0.2</i>
Rural	University of Tasmania	2.75	1,100,281	1.2
Rural	Charles Darwin University	0.85	338,453	1.2
Rural	Charles Sturt University	0.68	270,413	0.3
Rural	The University of New England	0.64	256,555	0.4
Rural	Southern Cross University	0.20	78,218	0.2
Rural	University of Southern Queensland	0.17	67,255	0.1
Rural	University of Ballarat	0.14	56,561	0.2
Rural	Central Queensland University	0.07	29,177	0.1
Rural	University of the Sunshine Coast	0.06	23,234	0.1
<i>Rural</i>	<i>Sub total</i>	<i>5.55</i>	<i>2,220,146</i>	<i>0.4</i>
<b>Total</b>	<b>Universities Australia members</b>	<b>100.00</b>	<b>40,000,000</b>	<b>1.2</b>

Appendix 4: difference between actual allocations of 2007 institutional grant scheme funds and notional allocations of 2007 funds according to share of 'end user', by university type

Type	University	Share of 2007 IGS %	Share of 'end user' income %	'End user' - actual IGS	% change
ATN	Curtin University of Technology	2.0	3.2	3,495,279	56.6
ATN	University of South Australia	1.7	2.9	3,780,741	75.6
ATN	QUT	1.9	2.3	1,229,165	21.1
ATN	RMIT	1.8	2.0	520,815	9.7
ATN	University of Technology, Sydney	1.6	1.0	-1,788,269	-36.2
ATN	Swinburne University	0.8	0.7	-325,704	-13.0
<i>ATN</i>	<i>Sub total</i>	9.9	12.2	6,912,028	23.2
Go8	The University of Melbourne	11.8	14.5	8,191,757	23.0
Go8	The University of Queensland	9.6	8.7	-2,633,373	-9.1
Go8	The University of Sydney	10.1	8.6	-4,441,793	-14.6
Go8	Monash University	7.4	8.1	2,273,365	10.2
Go8	UNSW	7.6	6.4	-3,478,394	-15.3
Go8	UWA	5.6	5.8	488,270	2.9
Go8	The University of Adelaide	5.5	4.9	-1,838,600	-11.1
Go8	The Australian National University	6.0	3.3	-8,112,244	-44.9
<i>Go8</i>	<i>Sub total</i>	63.5	60.3	-9,551,013	-5.0
IRUA	The University of Newcastle	2.5	3.4	2,623,824	34.6
IRUA	Griffith University	2.0	2.6	1,689,576	27.4
IRUA	Flinders University	2.0	2.2	376,057	6.1
IRUA	Murdoch University	1.7	2.0	760,864	14.5
IRUA	Macquarie University	1.9	1.6	-1,055,329	-18.4
IRUA	University of Wollongong	1.9	1.5	-1,204,604	-20.6
IRUA	La Trobe University	1.8	1.4	-1,226,717	-22.3
IRUA	James Cook University	1.3	1.3	-203,479	-5.1
<i>IRUA</i>	<i>Sub total</i>	15.3	15.9	1,760,191	3.8
NewGen	Deakin University	1.5	1.4	-249,546	-5.7
NewGen	Edith Cowan University	0.6	1.0	1,189,780	61.2
NewGen	University of Western Sydney	1.1	0.7	-1,025,256	-31.8
NewGen	Victoria University	0.7	0.5	-457,733	-23.2
NewGen	University of Canberra	0.5	0.5	-290,150	-17.5
NewGen	Australian Catholic University	0.2	0.3	243,235	35.6
NewGen	Bond University	0.0	0.0	16,764	13.9
<i>NewGen</i>	<i>Sub total</i>	4.6	4.5	-572,906	-4.1
Rural	University of Tasmania	2.6	2.4	-556,551	-7.2
Rural	Charles Darwin University	0.6	1.2	1,528,996	78.3
Rural	The University of New England	1.1	1.0	-453,349	-13.5
Rural	Southern Cross University	0.5	0.7	506,977	32.9
Rural	Central Queensland University	0.4	0.6	407,733	31.0
Rural	University of Ballarat	0.3	0.5	730,160	84.4
Rural	Charles Sturt University	0.6	0.4	-409,189	-23.9
Rural	University of Southern Queensland	0.3	0.3	-105,482	-10.3
Rural	University of the Sunshine Coast	0.1	0.1	24,880	10.3
<i>Rural</i>	<i>Sub total</i>	6.5	7.1	1,674,175	8.5
<b>All</b>	<b>Universities Australia</b>	100.0	100.0	0	0.0

Appendix 5: universities' research concentrations' disciplinary orientation

Type	University	0	1	2	4	6	Total	Mean
ATN	Curtin University of Technology	5	0	0	5	2	12	2.7
ATN	QUT	8	0	0	0	0	8	0
ATN	RMIT	4	0	0	0	0	4	0
ATN	Swinburne University	7	1	3		4	15	2.5
ATN	University of South Australia	5	0	0	1	0	6	0.7
ATN	University of Technology, Sydney	4	0	0	0	1	5	1.2
<i>ATN</i>	<i>Sub total</i>	<i>33</i>	<i>1</i>	<i>3</i>	<i>6</i>	<i>7</i>	<i>50</i>	<i>1.2</i>
Go8	Australian National University						0	
Go8	Monash University	5	1	0	0	0	6	0.2
Go8	University of Adelaide	6	2	0	5	8	21	3.3
Go8	University of Melbourne						0	
Go8	University of New South Wales						0	
Go8	University of Queensland	3	1	0	2	0	6	1.5
Go8	University of Sydney	26	1	0	16	17	60	2.8
Go8	University of Western Australia						0	
<i>Go8</i>	<i>Sub total</i>	<i>40</i>	<i>5</i>	<i>0</i>	<i>23</i>	<i>25</i>	<i>93</i>	<i>2.0</i>
IRUA	Flinders University	7	2	0	6	2	17	2.2
IRUA	Griffith University	2	2	0	4	0	8	2.3
IRUA	James Cook University	4	0	0	0	0	4	0
IRUA	La Trobe University	3	0	0	4	0	7	2.3
IRUA	Macquarie University	3	0	0	7	7	17	4.1
IRUA	Murdoch University	1	1	0	4	1	7	3.3
IRUA	University of Newcastle	7	0	0	1	4	12	2.3
IRUA	University of Wollongong	5	0	2	5	3	15	2.8
<i>IRUA</i>	<i>Sub total</i>	<i>32</i>	<i>5</i>	<i>2</i>	<i>31</i>	<i>17</i>	<i>87</i>	<i>2.4</i>
NewGen	Australian Catholic University	7	0	0	2	2	11	1.8
NewGen	Deakin University	3	0	1	1	0	5	1.2
NewGen	Edith Cowan University	10	3	0	3	4	20	2
NewGen	Notre Dame Australia	3	0	0	0	0	3	0
NewGen	University of Canberra	1	0	0	1	0	2	2
NewGen	University of Western Sydney	5	0	1	1	2	9	2
NewGen	Victoria University (Melbourne)	6	0	0	1	2	9	1.8
<i>NewGen</i>	<i>Sub total</i>	<i>35</i>	<i>3</i>	<i>2</i>	<i>9</i>	<i>10</i>	<i>59</i>	<i>1.5</i>
Rural	Central Queensland University	3	1	0	0	1	5	1.4
Rural	Charles Darwin University	4	0	0	0	0	4	0
Rural	Charles Sturt University	15	0	0	2	0	17	0.5
Rural	Southern Cross University	15	0	1	8	0	24	1.4
Rural	University of Ballarat	4	0	0	0	0	4	0
Rural	University of New England	6	0	0	3	0	9	1.3
Rural	University of Southern Queensland	3	0	0	3	2	8	3
Rural	University of Tasmania	3	0	0	2	0	5	1.6
Rural	University of the Sunshine Coast	1	1	0	0	1	3	2.3
<i>Rural</i>	<i>Sub total</i>	<i>54</i>	<i>2</i>	<i>1</i>	<i>18</i>	<i>4</i>	<i>79</i>	<i>1.3</i>
<b>All</b>	<b>Total</b>	<b>194</b>	<b>16</b>	<b>8</b>	<b>87</b>	<b>63</b>	<b>368</b>	<b>1.7</b>