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THE MYTH OF TOO MANY UNIVERSITY STUDENTS

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The Coalition Government has recently asserted that too many young Australians are training to become professionals and not enough as traditional tradespersons. By implication, there is a surfeit of young professionals. This article challenges these assertions. It shows that there has been a substantial increase in the employment of professionals since the Coalition came to power in 1996. Yet over the same period, the number of domestic students in Australian universities at the undergraduate level has hardly increased at all. All of the increase in professional training at the undergraduate level in Australian universities has been directed at overseas students. Partly as a consequence, there has been a rapid increase in the intake of professional migrants to satisfy employer needs. The article concludes that there is a need for more training of domestic undergraduate students, not less.

INTRODUCTION

The revelation that the boom conditions of the early twenty first century in Australia are threatened by skilled labour shortages has generated some remarkable commentary from our political leaders. In particular, the emphasis on trade-based skills shortages in the most recent debate has made it suddenly possible to air long-held prejudices about Australia's training priorities. Foremost is the view that there has been too much emphasis on university training. As the Prime Minister recently expressed it, 'Thirty years ago, we started getting this foolish bind that everybody had to go to university'.¹

The Coalition Government came to power in March 1996, and since that time has enforced a cap on Government funding for domestic university students. As a consequence, there has been relatively little growth in the number of domestic undergraduate students commencing university courses, which has had an adverse impact on the training of professionals. Clearly, this is not a sensible policy, as the demand for professional-level workers has grown rapidly since 1996. Consequently, the Coalition's university training policies have contributed to serious shortages of university-trained

professionals. The Coalition's response has been to expand immigration.

Given these circumstances, why is the Coalition Government ignoring the higher education situation? It is partly because there is little public awareness of the fact that growth in domestic undergraduate training stalled in the mid-1990s. In turn, one reason for this has to do with the limited availability of data. It is very difficult to put together trend data on university enrolments which can adequately document the situation from the published government statistics. The figures are usually published in aggregated form so that it is difficult to differentiate enrolments of overseas and domestic students by field of education, and as explained shortly, there was a major break in the series in 2001. The data that are published indicate that there has been an increase in the amount of training provided by Australian universities in recent years, but this is almost entirely attributable to growth in the number of overseas students.

THE DOMESTIC UNIVERSITY TRAINING REALITY

Table 1 shows the pattern of university training at the commencing undergradu-

Table 1: Student load[#] for commencing undergraduate students by citizenship 1996 to 2003

Commencing undergraduates	1996	1997	1998	1999	2000	2001	2002	2003
Total Domestic	132,036	135,014	134,839	137,822	138,237	142,690	141,326	135,185
Total Overseas	15,988	19,073	20,664	23,895	27,903	31,726	32,806	36,132
Total all commencements*	148,022	154,086	155,502	161,717	166,141	174,416	174,132	171,317

Source: Department of Education Science and Training, *Higher Education Statistics Collection: 2003* and 2001, Canberra. Available at <http://www.dest.gov.au/highered/statpubs.htm>

[#] ‘Student load’ is measured by the number of equivalent full-time students (EFTSU).

* Numbers may not add due to rounding of EFTSU.

ate level in Australia since the mid-1990s up to 2003. Comparable data for 2004 have not yet been release by the Department of Education Science and Training (DEST). The focus in the table is on numbers of equivalent full-time commencing undergraduates because these data give the best indication of the numbers of potential professionals eventually available to the Australian workforce.

The stabilisation of domestic commencements, as shown in Table 1, reflects a deliberate Coalition Government policy. Domestic enrolments are basically determined by the number of Government-subsidised places, for which students pay partial fees in the form of the Higher Education Contribution Scheme (HECS).² The Coalition decision to expand full fee-paying domestic enrolments has had only a minor impact to date. Domestic full fee-paying students are included in the commencing numbers shown in Table 1.

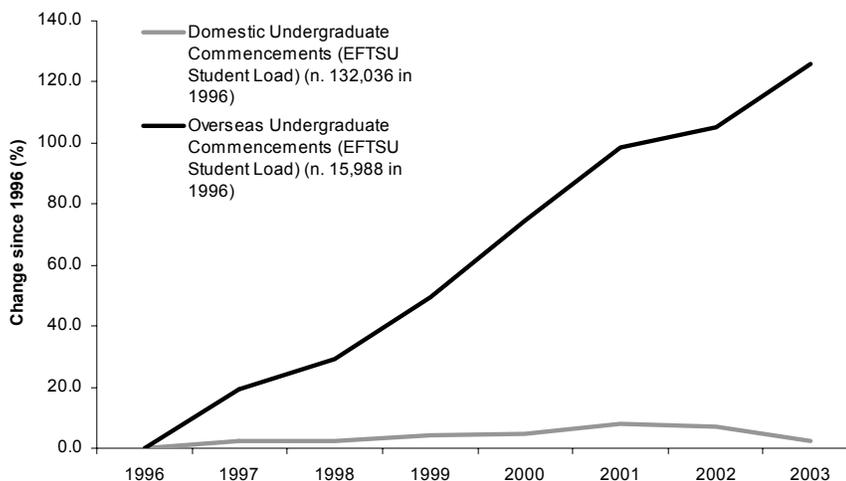
A complication with these figures is that over the past decade the number of university students ‘over-enrolled’ relative to the number of HECS places allocated increased substantially. The two main reasons for this are that first, the government’s funding formula assumed a greater ‘drop out’ rate than has actually been experienced at many universities. Second, there has been a deliberate over-enrolment of students in some uni-

versities. The funding provided for an over-enrolled student was equivalent to discounted HECS, averaging (according to the government) about \$2,706, well below the full costs of tuition.³ Such has been the universities’ anxiety to find additional funding that they have been prepared to take on students at a rate which only covered the marginal costs of education. If it had not been for this over-enrolment, actual training levels would have been even lower.

The Coalition government has recently acted to constrain the practice of over enrolling and as a consequence the number of commencing undergraduates has begun to fall following a peak in 2001. As part of this plan, by 2008 the Commonwealth proposes to penalise universities in which over enrolment exceeds five per cent with specific restrictions on enrolments by discipline.⁴

In recent years, virtually all of the growth in commencing undergraduate numbers has been amongst full fee-paying overseas students. As Table 1 records, undergraduate commencements by overseas students in Australian universities increased by 20,000 — from 16,000 equivalent full-time students (EFTSU) in 1996, to 36,000 by 2003 (a 125 per cent increase). By comparison, domestic undergraduate commencements increased by 3,000 from 132,000 to 135,000 (a two per cent increase) during

Figure 1: Cumulative percentage change in student load[#] for commencing undergraduate students, 1996 to 2003



Source: Department of Education Science and Training, *Higher Education Statistics Collection: 2003 and 2001*, Canberra, Available at <http://www.dest.gov.au/highered/statpubs.htm>
[#] 'Student load' is a measure of the number of equivalent full-time students (EFTSU).

the same period. Figure 1, in which the cumulative percentage change in domestic and overseas undergraduate commencements over this eight year time-frame is plotted, dramatically highlights the different enrolment pattern of these two cohorts.

This difference in the pattern of undergraduate commencement is even more striking when it is recognised that the proportion of the total student population represented by overseas students has doubled from 10.8 per cent in 1996 to 21.1 per cent in 2003.

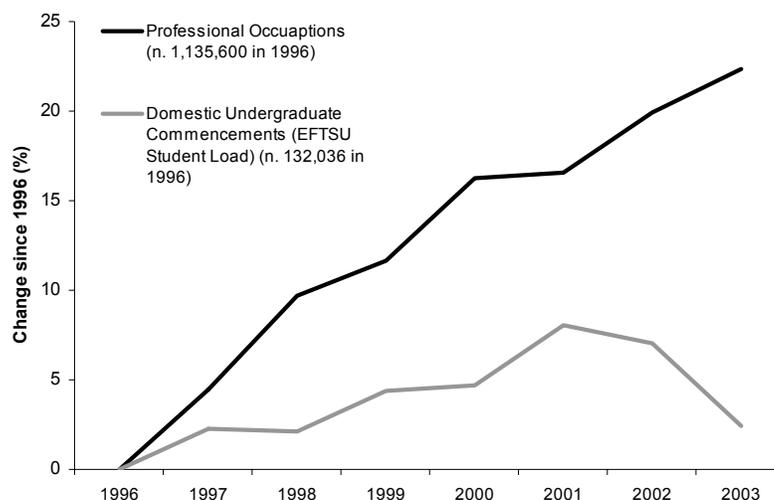
THE INCOMPATIBILITY BETWEEN WORKFORCE AND TRAINING TRENDS OF PROFESSIONALS

Figure 2 illustrates the percentage change in professional employment in Australia between 1996 and 2003, compared with the change in domestic undergraduate commencements over the same period. According to the Australian Bureau of

Statistics (ABS), persons in professional occupations accounted for more than half of all employed people in Australia with a higher education qualification in 2001 (a further 30 per cent of those with higher education qualifications were managers and administrators).⁵ Figure 2 shows a steady rise in the number of persons in professional employment, well above the rate of growth of commencements for domestic undergraduate university students. The number of persons employed full-time in a professional occupation in Australia grew from 1,136,000 in 1996 to 1,389,000 in 2003, yet as Figure 2 and Table 1 show, the number of equivalent full time domestic students commencing university training hardly changed over this period.

This growth in professional employment has occurred across the major professional fields, including science, building and engineering. The most buoyant field is that of business and information

Figure 2: Cumulative percentage change in full-time professional employment and domestic undergraduate commencements 1996 to 2003



Source: Department of Education Science and Training, *Higher Education Statistics Collection: 2003* and 2001, Canberra and ABS, *AusStats Labour Force Survey: 2004*, Canberra

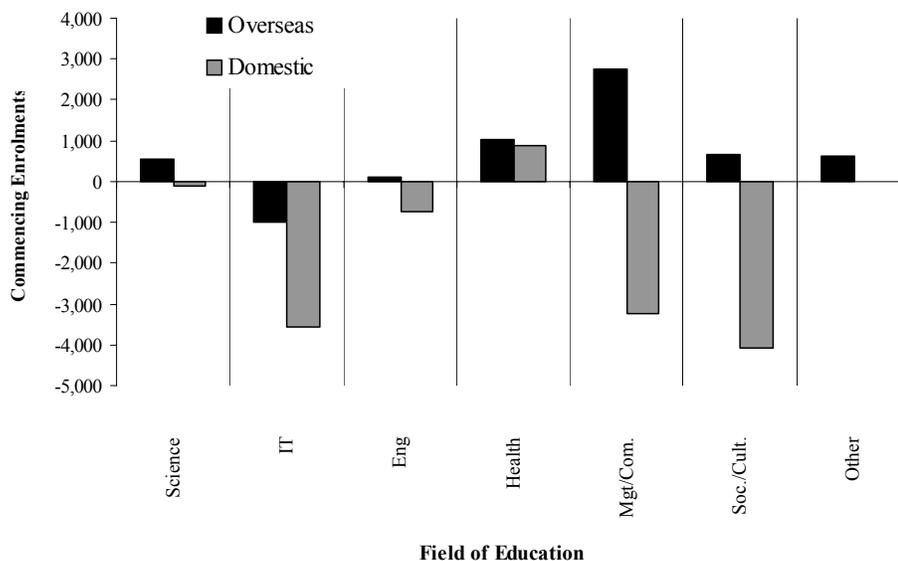
professionals, which grew by 40 per cent between 1996-1997 and the second half of 2003. Within this field, the number of computing professionals grew by 46 per cent and accountants by 27 per cent.⁶

Further to this, Figure 3 shows the numbers of commencing domestic undergraduate students by major Field of Education between 2001 and 2004. The data are limited to first semester enrolments because the Government has yet to release 'whole of year' statistics for 2004. Direct comparisons before 2001 are not possible because of two fundamental changes in the Government's statistical methodology. First, from 2001, courses were aggregated for statistical purposes into different groupings than in earlier years, and the two sets of groups cannot be mapped one onto the other exactly. Second, from 2001, the Government changed from a census date methodology of collecting data to one whereby enrolments throughout the

year are counted. The new methodology produces a substantially higher student number count.⁷ The consequence is that it is difficult to provide comparative enrolment data before and after 2001.

Nonetheless, the 2001-2004 sequence based on semester one figures is very revealing. It shows that, as the economic boom engulfing Australia built to a peak in 2004 (with the inevitable ensuing demands for professional personnel), the numbers of commencing domestic undergraduates fell in some key occupational disciplines. Of particular note here is the reduction in numbers of domestic students commencing management and commerce, information technology and engineering courses. Commencing enrolments in the humanities and social science courses coded as 'society and culture' have also declined in number for domestic students. The contrast between commencing enrolments for overseas and domestic

Figure 3: Domestic and overseas undergraduate commencing enrolments by selected field of education: variation between 2001 and 2004, semester one figures



Source: DEST Customised Data Set

students is striking with information technology being the only Field of Education for which there was a decline in the number of overseas student commencements.

THE HUNGER FOR UNIVERSITY PLACES

The modern economy has an insatiable appetite for professionally-trained people. The unemployment rate in 2003 in Australia for people with higher education qualifications was significantly lower than those without such qualifications across all age groups. In particular, the difference in unemployment rates between those with, and those without higher education qualifications was the greatest among those who have recently graduated from university — the 25 to 34 year age group (three per cent for those with such qualifications compared to seven per cent

for those without).⁸ It is therefore perfectly understandable that parents would wish their children to have access to university training, with the likelihood of a well-paid job to follow. ABS figures show that the median gross weekly wage in 2001 for higher education graduates working in Australia was \$1,036 compared to \$727 for workers without a higher education qualification, a difference of 42.5 per cent. Despite comprising only 22 per cent of all employed persons in Australia, professionals made up 70 per cent of those in the highest income bracket (those earning \$1500 or more per week).⁹

The capping of the number of university places in the face of high demand for entry has led to increasing competition for university places. There was a six per cent increase in the number of 15 to 19 year olds in Australia between 1996 and

2001.¹⁰ This growth in population has been compounded as both parents and their children realise that university training is the key to valued professional employment. Consequently, competition to secure a government-subsidised HECS place has increased. This is a major reason why an increasing numbers of parents are sending their secondary school age children to Independent and Catholic fee-paying schools. Between 1997 and 2004, enrolments in Australian Independent secondary schools rose by nearly 50,000 students, or 27 per cent, and enrolments in Catholic schools rose 28,000 (10 per cent). In comparison, the secondary schools in the Government sector gained slightly more than 8,000 students, an increase of less than one per cent.¹¹

The Victorian experience illustrates the dilemmas parents face.¹² The number of university offers made to Victorian students completing Year 12 has declined since 1996. Slightly more than 24,250 students completing Year 12 in 1996 received a university offer, compared with about 22,750 in 2003. In addition, the number of Year 12 school applicants for university or Technical and Further Education (TAFE) courses in Victoria has risen since 1996. As a consequence, the proportion of Year 12 students gaining a university offer declined from 65 per cent of applicants in 1996 to 55 per cent in 2003.¹³ The data also show that Independent school students are much more likely than their Catholic or Government counterparts to receive a university offer. It is no wonder that since 1996 enrolments at Victorian Independent secondary schools have increased sharply relative to those in Government schools.¹⁴

THE IMMIGRATION ISSUE

As concern about skill shortages has mounted, (as at the time of the dot.com

boom in the late 1990s) employers have expressed alarm at what this means for their enterprises.¹⁵ Their concerns have prompted the Government to increase the skilled migration program, and in particular to encourage overseas students to stay on in Australia as immigrants after completion of their courses.

Over the last couple of years, the pressure to further increase skilled migration has escalated such that by 2003-2004 the skilled migration program reached a fifteen year high. Professionals dominated the skilled program, with some 25,600 entering as settlers in 2003-2004. In addition, in 2003-2004 some 11,000 visas were issued to former overseas students on completion of their courses in Australia, most of whom held professional occupations, notably as computing professionals and accountants.¹⁶

At the time of writing, panic about skills shortages and their potential to inhibit the expansion of resource-based projects has prompted proposals to boost the migration program next year by a further 20,000.

Should this proposal be approved it will weight the source of new professionals even further away from domestic aspirants than is already the case. Table 2 provides a comparison of the contribution of domestic training at the undergraduate level (as indicated by undergraduate completions in 2002), and the draw on professional migrants. It distinguishes those entering Australia from overseas as settlers and former overseas students who succeeded in changing their status to permanent residence under the skilled visa categories available to such students on completion of professional studies in Australia. The migration figures are for 2002-2003 because these figures are the closest comparable match to domestic completions in 2002.

Table 2: Domestic undergraduate completion numbers, 2002 and the inflow of settlers with professional occupations, 2002-03 and former overseas students who obtained permanent residence under the skilled onshore student visa categories, 2002-03

Professional Occupation category	Course Completions, Domestic Undergraduates	Settler arrivals, professional occupations	Former overseas students gaining permanent residents following completion of course in Australia
	2002	2002-03	2002-03
Information Technology	5,609	3,338	3,011
Engineering	5,842	2,242	366
Accountancy	5,500*	2,568	1,176
Other	85,866	12,284	833
Total	102,817	20,432	5,386

Source: Department of Education, Science and Training (DEST), Aggregated Data Set UPAG2003 (Students completing in 2002); B. Birrell, I. R. Dobson, V. Rapson, T. F. Smith, *Skilled Movement in the New Century: Outcomes for Australia*, Centre for Population and Urban Research, 2004, and unpublished DIMIA data set.

*Accounting completions are not available from DEST data. They have been estimated from unpublished information provided by university accounting departments to CPA Australia

In the case of computing professionals, it is striking that the migration numbers are greater than the output from domestic training. For accounting, the migrant component is more than half the domestic undergraduate completion number. Overall, migration is obviously making a major contribution to Australia's professional workforce, with the migrant number equivalent to about 25 per cent of all undergraduate domestic completions. In 2003-2004 the migrant contribution would have increased significantly given the increase in the skilled migration program in that year and the stabilisation of domestic undergraduate completions discussed above.

IMPLICATIONS FOR DOMESTIC UNIVERSITY TRAINING

In the circumstances just described it seems obvious that there should be an increase in university training for domestic students. Immigration may be a short term stop-gap, but it is at the expense of opportunity for many Australians to improve their economic situation through

their acquisition of a university degree. There is no lack of potential amongst Australia's youth. The number of 15 to 19 year olds in Australia will increase from 1,375,500 in 2003 to about 1,436,600 in 2011 (assuming current fertility and migration levels are maintained), after which there will be a gradual decline.¹⁷

This is not to say that an increase in university enrolments will automatically lead to the filling of skilled gaps in the labour market. To this point universities have been slow to adjust their fields of training to employer needs. This is partly because they are under little prompting from the government to do so. Recent Commonwealth initiatives to expand places in science (part of the 'Backing Australia's Ability' initiative) are an example of what might be done. This initiative, announced in 2001, added an extra 2,000 science, mathematics and IT university places per year over five years.¹⁸

It is equally the case that recent expansion of skilled migration has only been loosely targeted to Australia's labour market needs. As noted above, by far the

largest influx of skilled professionals over the last couple of years has been amongst computing professionals. These are currently not in short supply except in certain specialised programming languages or system design skills.

Recent Coalition Government enrolment decisions associated with the Nelson reforms of the universities will not improve the situation. The Commonwealth Government has stated that 'Approximately 34,000 new Commonwealth supported places will be phased in to the higher education sector from 2004 to 2008'.¹⁹ While welcome from the point of view of university finances, this will not

lead to significant increases in domestic university places because, despite recent Commonwealth Government efforts to clamp down, the sector is still heavily 'over-enrolled'. The current number of over-enrolled students roughly matches the number of newly funded places proposed.²⁰ There is too little domestic training at university level — not too much. The number of government-subsidised HECS places should be rising in line with demand and the professional employment pattern. This is sensible both from the point of view of employers and from the point of view of increasing opportunity for Australian youth.

References

- ¹ S. Morris, 'Too clever? Dumb question', *Australian Financial Review*, 8 March, 2005, p. 61
- ² HECS is Australia's fees system for students in university places subsidised by the Government. The scheme was established in 1989, and has gone through a number of changes over time, with major changes occurring for students commencing their studies in 2005. More details can be found at: <http://www.goingtouni.gov.au/>
- ³ *Our Universities: Backing Australia's Future. Fact Sheet No. 3*, Department of Education, Science and Training, Canberra, 2004. http://www.backingaustraliasfuture.gov.au/fact_sheets/pdf/fs3.pdf
- ⁴ *ibid.*
- ⁵ Australian Bureau of Statistics (ABS), *Australian Social Trends: 2004*, Cat. No. 4102.0., Canberra, 2004, p. 97
- ⁶ ABS, *AusStats Labour Force Survey: 2004*, Data Cube, Canberra
- ⁷ Therefore, the commencement figures recorded in this paper from 2001 onwards are not directly comparable to those from previous years. As a result of the new collection methodology, it would be expected that the figures for later years would be larger than in previous years. However, as seen in Figures 1 and 2, in the case of domestic students the rate of increase for commencements has actually tapered off in recent years.
- ⁸ ABS, *Australian Social Trends*, *op cit.*, p.96
- ⁹ *ibid.*, p. 97
- ¹⁰ ABS, *Census Basic Community Profile: Australia 1996 and 2001*, Cat. No. 2901.0, Canberra
- ¹¹ ABS, *Schools Australia: 1997 and 2004*, Cat. No. 4221.0, Canberra
- ¹² B. Birrell, V. Rapson, I. R. Dobson, D. Edwards and T. F. Smith *From Place to Place, School, location and access to university education in Victoria*, Centre for Population and Urban Research, Monash University, May 2002. Data quoted in this paper are an extension of this earlier report and will be published more extensively in 2005.
- ¹³ Victorian Tertiary Admissions Centre, 1997 and 2004, unpublished
- ¹⁴ Department of Education and Training, *Summary Statistics, Victorian Schools: 1996 and 2003*, Melbourne
- ¹⁵ B. Birrell, 'Information Technology and Australia's immigration program: Is Australia doing enough?', *People and Place*, vol. 8, no. 2, 2000, pp. 77-83
- ¹⁶ Department of Immigration, Multicultural and Indigenous Affairs (DIMIA), unpublished
- ¹⁷ ABS, *Population Projections of Australia: 2002-2101*, Cat. 3222.0, Canberra, Series B, p. 81
- ¹⁸ Department of Education Science and Training, *Backing Australia's Ability: An Innovation Action Plan for the Future*, Canberra, 2001, available at <http://backingaus.innovation.gov.au/2001/skills/uniplaces2001.htm>
- ¹⁹ Department of Education Science and Training, *Commonwealth Grant Scheme — Growth in University Places*, Fact Sheet No. 1, Canberra, available at www.backingaustraliasfuture.gov.au/fact_sheets/pdf/fs3.pdf
- ²⁰ Australian Vice-Chancellors' Committee, *University funding and expenditure*, Canberra, 2005. Available at www.avcc.edu.au/documents/publications/stats/Funding&Expenditure.pdf

