Participation in Higher Education in South Australia by People from Socio-economically Disadvantaged Backgrounds

Gavin Moodie and Lynette Swift

Abstract

This paper reports a study of the socio-economic background of students admitted to South Australian universities in 1996 We describe briefly the scope and methodology of the study and then present our findings in a series of tables which, we believe, clearly demonstrate the effect of socio-economic background on university preferences and enrolments. This confirms and somewhat elaborates the findings of several previous studies of higher education admissions by socio-economic background We conclude by speculating on the mechanisms resulting in biased participation by socio-economic status and some measures that might be taken to address it.

Historical Inequities

A university education greatly enriches one's life. It also confers upon graduates social prestige, higher levels of employment and higher incomes than those who do not benefit from higher education. Higher education is a substantial social benefit with a substantial public subsidy since, even with the students' Higher Education Contribution Scheme (HECS), approximately 80% of the cost of providing higher education is borne by the taxpayer. A fair society would distribute these benefits equally amongst those who wished and had the ability to obtain them. It might also be argued that an economically rational society would recruit students into higher education independent of social origin since this would use the society's human capital most efficiently.

But as numerous studies have found, participation in higher education is heavily biased in favour of people from privileged social backgrounds and against those from poorer backgrounds. Anderson and Vervoorn reported (1983, page 170):

The conclusion from this review of research covering a period of 50 years is that higher education in general and universities in particular remain socially elite institutions. The over-representation of students of high socio-economic backgrounds has remained constant at least since 1950, as has the under-representation of those of lower socio-economic background.

In a later survey Anderson (1990) reported one study that ranked samples of school leavers by their father's occupational status, divided them into three equal parts and compared participation in university from each part. His analysis of the survey of 1983-84 school-leavers by the Australian Council for Educational Research showed that school-leavers from the top third of the social order had a participation rate of just under 34%, those from the middle third had a participation rate of just under 15%, and those from the lowest third had a participation rate of just over 10% (Anderson, 1990, page 43). In the same paper (also on page 43) Anderson reported that:

Young people who were [...] living in the working class suburbs of Bankstown or Sunshine at the time of the 1986 Census were about 6 times less likely to have been at university than residents of more salubrious Woollabra and Kew, and about 6 times less likely to attend non-Catholic private school.

Other studies have used type of school attended as a surrogate for socio-economic status - the types being non-Catholic private schools, Catholic private schools and public schools - and have found similar results (Goldring, 1977). We have used a more accurate method which unfortunately doesn't show any

improvement in the socio-economic representation of higher education, but it does give us a more detailed view of the incidence of under-representation, suggesting improved explanations and strategies for understanding and dealing with it.

Three Levels of Socio-economic Status

In this study each postcode is categorised as of high, medium or low socio-economic status according to the mean educational and occupational index of its residents. The educational and occupational index is calculated by the Australian Bureau of Statistics from information it collects in the Census.

The methodology for this categorisation is explained and justified in detail by Martin (1994), and Jones (1993) demonstrated its statistical validity. But briefly, while we know that there are some scholars from poor backgrounds at Prince Alfred College, and presumably some scholars from wealthy backgrounds attend Salisbury High School, for example, we would be worried if we found that students from PAC were significantly over-represented in law courses and that scholars from Salisbury High were significantly under-represented in these courses. Such a finding would at least raise questions for further study. Similar generalisations can be drawn from the categorisation of postcodes by socio-economic status (SES).

Rather than divide postcodes into groups with populations of three equal sizes as was done by Anderson (1990) we have followed Martin (1994) and divided the groups thus:

- high 25%
- medium 50%
- low 25%

A representative higher education sector would enrol students in similar proportions from high, medium and low SES groups, but as we shall soon see, this is far from the case.

Scope of the Study

For this study we concentrated on people with South Australian postcodes who applied through the South Australian Tertiary Admissions Centre (SATAC) for admission to undergraduate courses in 1996. This is a comprehensive if not complete coverage of undergraduate commencing students in South Australia, for in addition to the normal applicants studying by conventional means, SATAC handles all applications for study by distance education and most applications for admission by the various special entry schemes.

The study divided applicants into two groups. One group of applicants were candidates for the South Australian Certificate of Education in the year immediately preceding the year of higher education entry, and thus applied on the S form. This group was just over half the applicants in the study, 53%. The balance of applicants included in the study applied on the R form. Because of the way in which data is collected and reported we can't be precise, but we present the following estimate of these highest qualifications of R form applicants:

Table 1: Estimates of Highest Qualifications of R Form Applicants

Highest qualification	Approximate %
Earlier Year 12	44%
Some higher education study	41%
Some TAFE study	10%
Special entry	5%

Broad Findings

We found, first, that enrolments in undergraduate courses are not representative of socio-economic status over all.

Table 2 shows that people with high SES took up 42% of undergraduate places in South Australia, considerably above their representation in the total population of 25%. This was at the expense of people

from low SES backgrounds who filled only 14% of places, well below their share of 25%, and also at the expense of people from medium SES who were only 44% of enrolments, below their share of 50%.

T T	Hig	h SES	Mediı	ım SES	Lov	Tatal	
Form Type –	No	%	No	%	No	%	lotal
S	2,106	41.16%	2,241	43.80%	770	15.05%	5,117
R	3,159	42.63%	3,300	44.53%	951	12.83%	7,410
Total	5,265	42.03%	5,541	44.23%	1,721	13.74%	12,527

Table 2: SA Enrolments in Undergraduate Courses in SA by Form and SES, 1996

There was no significant difference between S and R form enrolments for people from high and medium SES. However, there was a somewhat better representation of low SES enrolments on S forms (15%) than on R forms (13%), although even at its best it was still significantly below proportional representation.

Higher education has expanded massively in the last decade. One of the aims of this expansion was to improve opportunities for people from disadvantaged groups, including people from socio-economically disadvantaged backgrounds (Dawkins, 1988:21). While higher education may not be very representative of the total population now, it might have improved from an even less representative base a decade ago. An examination of comparable statistics for 1986 shows that this is not the case.

Table 3: SA Enrolments in Undergrade	ate Courses in SA by Form and SES, 19	86
--------------------------------------	---------------------------------------	----

E	Hig	h SES	Mediı	ım SES	Lov	V SES	Tetel
Form Type –	No	%	No	%	No	%	1 otai
S	1,255	39.34%	1,520	47.65%	415	13.01%	3,190
R	1,947	42.20%	2,068	44.82%	599	12.98%	4,614
Total	3,020	41.03%	3,588	45.98%	1,014	12.99%	7,804

The pattern shown in table 3 for 1986 is strikingly similar to the current pattern.

The Transition Process as a Filter

It appears that the transition to higher education - the process of applying, gaining selection and enrolling in a course - accentuates bias by socio-economic status. Table 4 and the following tables show preferences as well as enrolments, and an additional piece of explanation is needed to avoid possible misunderstandings. In South Australia applicants may express preferences for up to five courses. Applicants list an average of 3.3 preferences per application. Some 77% of enrolments were in courses listed as applicants' first preference and just over 14% of enrolments were in courses listed as applicants' second preference.

Table 4: SA Preferences and Enrolments in Undergraduate Courses in SA by Form and SES, 1996

Form		High	SES			Mediu	m SES		Low SES					
Туре	Preferences Enrolments		lments	Preferences		Enrolments		Preferences		Enrolments				
S	13,819	36.87%	2,106	41.16%	16,939	45.19%	2,241	43.80%	6,726	17.94%	770	15.05%		
R	13,798	41.23%	3,159	42.63%	14,977	44.76%	3,300	44.53%	4,689	14.01%	951	12.83%		
Total	27,617	38.93%	5,265	42.03%	31,916	44.99%	5,541	44.23%	11,415	16.09%	1,721	13.74%		

For admission in 1996 the preferences of high SES applicants were 37% of all preferences of S form applicants, well above their expected share of 25%. However, the transition process further increased their share of enrolments, to 41%. This may have been because high SES applicants expressed fewer preferences on average than medium and low SES applicants, a possible explanation that we haven't tested. However, assuming that high, medium and low SES applicants express the same number of preferences on average, the transition process further advantages the already advantaged high SES applicants. The transition process did not advantage R form applicants with high SES, since their share of preferences and enrolments remained largely unchanged at about 42%.

Conversely, the transition process filtered out applicants from low SES. Only 18% of S form preferences were from low SES, well below their expected share of 25%. However, the transition process further reduced their share of enrolments to 15%. R form applicants were also filtered out by the transition process, but only by just over 1%, which may be too small to be significant. People from medium SES show the same but less pronounced trends as for low SES.

We found similar results for 1986.

Table 5: SA Preferences and Enrolments in Undergraduate Courses in SA by Form and SES, 1986

Form		High	SES			Mediu	m SES		Low SES					
Туре	Preferences Enrolments		lments	Prefe	rences	Enrol	lments	Prefe	rences	Enrolments				
S	10,146	33.70%	1,255	39.34%	14,807	49.18%	1,520	47.65%	5,157	17.13%	415	13.01%		
R	8,176	40.56%	1,947	42.20%	9,094	45.11%	2,068	44.82%	2,890	14.34%	599	12.98%		
Total	18,322	36.45%	3,202	41.03%	23,901	47.55%	3,588	45.98%	8,047	16.01%	1,014	12.99%		

S form (school-leaver) and R form (other undergraduate) Applicants

It is interesting that both for the over-represented high SES prospective students and the under-represented low SES prospective students, the transition process had little effect on the composition of R form applicants, but it accentuated the biases of S form applicants, bringing S form enrolments closer to the shares of both preferences and enrolments obtained by R form applicants. We should first give a methodological caveat, but then we would like to suggest two inferences.

S form applicants are school-leavers, almost all of whom are from 17 to 19 years old and almost all of whom were living at home and were supported by their parents. They are therefore ascribed the socioeconomic status of their parents. Some R form applicants are under 21, are not in the full-time labour force and still live at home. They may therefore appropriately be ascribed the solo-economic status of their parents. But most R form applicants are over 21, are or have been in the full-time labour force and live in households established by themselves. They therefore establish their own socio-economic status. S form applicants are therefore a differently defined social group to R form applicants.

It is for this reason that in his pilot study confirming the validity of the postcode SES methodology, Jones (1993) specified that people in the 15 - 24 age group should be considered separately from people who are 25 and above. Our study largely satisfies that requirement, but not completely because there are some R form applicants who are under 25 and are probably living with their parents. Even so, the different results for R and S form applicants may be caused by differences in the groups as much as by differences in the way they interact with the higher education admissions process.

Notwithstanding that caveat, we believe it is worth a least suggesting two inferences from the different observations of R and S form preference and enrolment shares. R form applicants apply very largely on their own initiative and with their own support. There is therefore considerable self-selection amongst R form applicants. If this is right, R form preference and enrolment rates are more of a reflection of social factors outside higher education, and the transition process does little to change them.

In contrast, S form applicants have the considerable institutional support of their secondary schools. Applying for tertiary education is well known and accepted within high schools, application forms and guides are provided unsolicited to all year 12 candidates, many schools keep class sets for year 11 students, year 12 co-ordinators and careers advisors are available to help and support applicants, and every senior secondary student would know well several fellow students who are applying for admission to tertiary study. Increased retention to year 12 and the institutional support provided by secondary schools support preference and presumably application rates that are somewhat more representative of the socio-economic composition of the community than prospective students who are left largely to their own resources.

However, the more representative preference rates for S form applicants are lost in the transition process which seems to accentuate an underlying socio-economic bias in favour of people from high SES and against people from low SES. This may be a result of differential year 12 achievement by socioeconomic status, the operation of universities' selection criteria, differential rates of acceptance of offers that are made, or of a combination of these and perhaps other factors.

Differentiation by Institution

Each institution has an equity policy and a plan to improve access, participation and outcomes for members of disadvantaged groups, one of which is people from socio-economically disadvantaged backgrounds. Thus, for some years now the University of Adelaide has operated a 'fairway' scheme that automatically awards bonus points to applicants attending schools that have been under-represented at that university. Flinders University has a long-standing foundation program to prepare people without extensive formal education for university entry, and more recently it introduced a scheme to encourage and support applications from the outer suburbs and regions South of Adelaide that are under-represented in higher education. The University of South Australia has a broad and long-standing commitment to student equity; it recently focussed efforts for people from socio-economically disadvantaged backgrounds in 'USANet', a program for schools and the university to co-operate in selecting and supporting target prospective higher education students.

Table 6 shows shares of preferences and enrolments by institution.

Table 6	: SA	Preferences	and	Enrolments	in	Undergraduate	Courses	in	SA	by	Form,	SES
and Un	iversi	ity, 1996				-				-		

F T	Hig	h SES	Mediı	ım SES	Low	V SES	T (1
Form Type –	No	%	No	%	No	%	1 otal
University of A	delaide						
S	771	45.89%	706	42.02%	203	12.08%	1,680
R	660	48.97%	564	40.03%	155	11.00%	1,409
Total	1,461	47.30%	1,270	41.10%	358	11.59%	3,089
Flinders Univer	sity						
S	479	47.76%	396	39.48%	128	12.76%	1,003
R	842	47.62%	736	41.63%	190	10.75%	1,768
Total	1,321	47.67%	1,132	40.85%	318	11.48%	2,771
University of So	outh Australia						
S	712	36.00%	904	45.70%	362	18.30%	1,978
R	1,485	38.70%	1,801	46.94%	551	14.36%	3,837
Total	2,197	37.78%	2,705	46.52%	913	15.70%	5,815
ALL UNIVERS	ITIES						
S	1,962	42.09%	2,006	43.04%	693	14.87%	4,661
R	3,017	43.01%	3,101	44.21%	896	12.77%	7,014
Total	4,979	42.65%	5,107	43.74%	1,589	13.61%	11,675

It will be noted that the shares of preferences and enrolments by SES are very similar for the University of Adelaide and Flinders University. In contrast, preferences and enrolments are clearly more representative at the University of South Australia, although they are still significantly biased in favour of applicants with a high SES background.

We have also examined preference and enrolment rates for applicants for the Department for Employment, Training and Further Education (DETAFE) 's associate diplomas by full-time study. While these are a small proportion of DETAFE's total intake, they are clearly more representative again than the University of South Australia's rates, a finding that is consistent with earlier, more comprehensive studies of TAFE's student population.

Differentiation by Campus Location

The University of Adelaide's main campus is on the periphery of Adelaide's central business district, and thus is readily accessible from most of Adelaide. Flinders University's campus is South of Adelaide, similarly located to Monash University in Melbourne and Macquarie University in Sydney: on the comfortable side of town but outside the inner suburbs and surrounded by light industrial estates and suburbs of mixed but mostly middle and high socio-economic status. The University of South Australia has a campus in the city, one in the wealthy Eastern suburbs and one in a mixed but predominantly middle SES area.

The University of South Australia also has two campuses in the industrial Northern suburbs of Adelaide at Salisbury and The Levels, similarly located to the University of Western Sydney and the Victoria University of Technology in Melbourne's Western suburbs. As one might expect, the only two campuses located in Adelaide's industrial area of generally low socio-economic status have a more balanced SES representation than that for South Australian universities as a whole.

Table 7: SA F	Preferences	and	Enrolments	in	Undergraduate	Courses	in	SA	by	Form,	SES
And Location,	, 1996				-				-		

Form		High	SES			Mediu	m SES		Low SES				
Туре	Prefe	rences	Enro	lments	Prefe	rences	Enrol	lments	Prefe	rences	Enro	lments	
Levels Ca	mpus (Uni ⁻	versity of SA)										
S	644	29.68%	84	29.68%	1,020	47.00%	141	49.82%	506	23.32%	58	20.49%	
R	566	35.18%	132	33.59%	706	43.88%	160	40.71%	337	20.94%	101	25.70%	
Total	1,210	32.02%	216	31.95%	1,726	45.67%	301	44.53%	843	22.31%	159	23.52%	
Salisbury	Campus (U	Jniversity of	SA)										
S	337	29.76%	32	35.56%	539	47.45%	36	40.00%	260	22.89%	22	24.44%	
R	298	32.75%	59	30.10%	418	45.93%	89	45.41%	194	21.32%	48	24.49%	
Total	635	31.04%	91	31.82%	957	46.77%	125	43.71%	454	22.19%	70	24.48%	
ALL UNI	VERSITIES	5											
S	12,030	38.65%	1,962	42.09%	13,795	44.32%	2,006	43.04%	5,302	17.03%	693	14.87%	
R	12,900	41.72%	3,017	43.01%	13,764	44.51%	3,101	44.21%	4,258	13.77%	896	12.77%	
Total	24,930	40.18%	4,979	42.65%	27,559	44.41%	5,107	43.74%	9,560	15.41%	1,589	13.61%	

Differentiation by Field of Study

Finally, we examined differentiation by field of study. This analysis is qualified by two considerations. First, Jones (1993) advised that to avoid possible misinterpretations of what may be no more than statistical fluctuations, care should be taken in applying the postcode SES methodology to populations of less than 200. Thus, in table 6 above the figures for S and R form enrolments of high SES students at the University of Adelaide are well above 200 and can be accepted with reasonable confidence without applying any further statistical tests. However, there were only 155 enrolments of R form applicants from low SES at that university, and therefore this figure should be interpreted with care.

We have included in some of our tables groups with fewer than 200 people. But because the results for these groups have followed a consistent pattern we are reasonably confident that the rather broad inferences we have drawn are safe. You will note, for example, that we haven't relied on differences of 1% or 2%, but are generally suggesting inferences from differences that are considerably greater. However, because of this limitation we haven't been able to analyse differences in university courses' SES composition in as much detail as we would have liked.

It would have been interesting, for example, to compare the Bachelor of Arts intakes of the University of Adelaide, Flinders University, the University of South Australia's Magill campus in the Eastern suburbs of Adelaide and of the Levels and Salisbury campuses in the low SES middle and outer Northern suburbs. It would have also been interesting to compare the generalist economics and commerce courses of the University of Adelaide with the vocationally oriented accounting and business courses offered in the adjacent city campus of the University of South Australia. But intakes for many of these courses are well below 200 and once they are split into S and R form applications to reflect their different demographic characteristics and are further divided into high, medium and low SES groups, the populations in each group are far too small to support reliable inferences.

We have therefore aggregated courses by DEETYA's classification of broad field of study. The results are given in table 8 at the end of the paper. While this aggregates a reasonable number of groups to 200 and above, it unfortunately masks many effects of campus location and vocational orientation that might affect SES composition. Many of the groups are still well below 200 and the results should be interpreted with caution. Despite these qualifications, some inferences may be drawn.

Of all the fields of study represented in South Australian universities, agriculture, engineering and nursing seem to have a better representation of people from low SES, both in preferences and enrolments, although with enrolments at under 20% even these fields are still well below their proportional share of 25%. Health includes nursing, medicine, the therapies and general health sciences. We have analysed preferences and enrolments at that level of detail. Although some of the figures are rather small, it seems safe to suggest that there is some socio-economic differentiation between the fields of study within the broad field of health. While nursing appears to be more representative than most other fields, medicine seems to be one of the least representative fields, although again we note that the numbers are small for this level of analysis.

Broadly, medicine seems to be extremely biased in favour of high SES students, who take up over 55% of the places, more than twice their proportionate share of 25%. This is at the expense of people from low SES who were only 16% of enrolments, considerably below their proportionate share of 25%, but particularly at the expense of medium SES who were only 29% of enrolments, only somewhat more than half their expected share of 50% of enrolments.

Law is even more biased in favour of high SES with almost 60% of enrolments, largely at the expense of low SES who had only 9% of enrolments, although medium SES were also seriously under-represented with only 32% of enrolments. The figures are so small - only 9 school-leavers from low SES were enrolled in law out of a total enrolment of 386 - that we would doubt these results, were they not consistent with several earlier studies (Goldring, 1986: 42; Linke and others, 1988: 228).

We can offer no definite explanation of the heavy SES bias of law intakes. From our own reflection and discussions with colleagues we offer the tentative suggestion that people perceive the practice of law in rather vague terms, suspecting (rightly, in our view) that social connections are important for advancement. Lawyers are also seen as authority figures closely allied to the rich and powerful, which could discourage interest from people from low socio-economic backgrounds who are turned off by authority figures.

Informal Social Structures, Cultures and Formal Social Structures

The results we have presented in this paper demonstrate the extent of solo-economic bias in university participation, and to some extent its nature. They are consistent with earlier, less detailed studies in other States and nationally we referred to earlier. They do not give us much of a lead on its cause, and still less on the policies and programs that might successfully address it. It seems, though, that the patterns of over-representation of people with high socio-economic status and the under-representation of people with medium and low SES reflect the effects of informal and formal social structures.

Informal social structures - our financial and cultural wealth, our local environment and our friends and family - shape our self-perception, our expectations, and our perception of the costs and benefits of various career options. Those informal structures direct people who do not have many if any financial reserves to career paths that lead most quickly and most certainly to paid employment (Swift, 1989), although the long-term financial benefits and job security are almost certainly less than for generalist graduates. It is as unusual for a year 10 student of Salisbury High School to contemplate studying arts or sciences at the University of Adelaide or Flinders University as it is for a student at Prince Alfred College to consider leaving school at year 11 to start an apprenticeship.

The effects of informal social structures seem to be reinforced by the different cultural orientations of solo-economic groups and groupings. As we have seen, universities mostly comprise people with high and medium socio-economic status. The forms of behaviour, dress and language on university campuses

are those of the wealthy and well-off. They are quite different to those found, for example, in the pokies lounge of the Elizabeth Tavern. Consequently the courses and teaching-learning styles provided by universities do not engage the skills, interests and outlooks of people from socio-economically disadvantaged backgrounds (Connell and others 1982, page 185).

Interestingly, participants in a national workshop in which we first presented these findings reported that students who had been supported by universities' special admissions schemes for people from socio-economically disadvantaged backgrounds did not want to be identified as clients of those schemes. Similarly, the preliminary findings from systematic market research conducted for the Victorian University of Technology in Melbourne's industrial Western suburbs are that students do not support the university's identification as the university of the Western suburbs, and this view was put as strongly by students who themselves are from the west.

This suggests that students understand all too well the social reproduction of class, and at least those who are upwardly mobile in the current system do not wish to be identified with the class of their origins.

Formal structures seem to be able to ameliorate the effects of culture and informal social structures and processes (Moodie, 1995). School-leavers applying on an S form are somewhat more representative of general society than others, due to the more inclusive composition and approach of secondary education, we suggest. However, the transition process is regressive: it filters out the more representative preferences of applicants with low SES and accentuates the bias in favour of applicants with high SES.

We have suggested that this may be a result of differential year 12 achievement by socio-economic status, the operation of universities' selection criteria, differential rates of acceptance of offers that are made, or of a combination of these and perhaps other factors. Not all of these factors are within the direct control of universities. But some are, and others can at least be influenced by universities. We have noted that all South Australian universities have formal policies and programs to redress the under-representation of low SES students. Some of these have been operating for several years, others are more recent. None seems to have changed patterns we found in 1986, patterns that Anderson (1990) found to be long standing and are presumably deeply embedded in the sector.

Unfortunately this study does not go far enough to suggest possible measure to correct the socioeconomic bias in university admissions. We are grateful to this journal's reviewers for two suggestions. One suggestion is for universities to conduct focus groups from members of the equity group to explore the factors that inhibit and encourage participation from the group. A second suggestion is to establish role models from members of the equity group to act as leaders and mentors for other group members.

Instrumental Orientation to Higher Education

As Brecht said, first comes food, then comes morality. For a person with no financial reserves who cannot call on family or friends for financial support getting an income, preferably full-time paid employment, must be an initial and overriding priority. Universities promote the benefits of an education to be an enriched understanding of science and culture, the development of general conceptual and analytic skills and the opportunity of a rewarding career that we usually describe in vague or general terms. However greatly we as graduates may appreciate those benefits, they won't attract people whose first and primary need is for income and income security.

And yet, of course, graduates have better income and employment prospects than the general community, even taking into account the income foregone during the period of extended education (Gregory, 1995: 8). Furthermore, graduates of generalist courses are arguably likely to have better long and medium term prospects than graduates of the vocationally oriented courses that appear to have greater proportions of people from low SES backgrounds (Swift, 1989).

One way of increasing the participation of people from low SES backgrounds might be to state rather more clearly the income and employment benefits of a university education. We envisage a simple table in each course information brochure comparing the employment rates and incomes of the course's graduates with

that of the general population. The table could show relative income levels and the cumulative total incomes of graduates and non-graduates at the ages of, say, 18, 28 and 58. We expect that such an instrumentalist account of the benefits of a university of education would be resisted by those who hold the cultural value of education most highly, who have a comfortable indifference to monetary gain. Nothing could more clearly demonstrate the cultural gap between the rich in universities and the poor on the outer, and the socio-economic barriers that separate them.

Acknowledgments

We acknowledge the South Australian Tertiary Admissions Centre's granting of access to data reported in this study and we thank our colleague Martin Schumacher for extracting the data we requested.

References

Anderson, D (1990) "Access to university education in Australia 1852-1990: changes in the undergraduate social mix", *The Australian Universities' Review*, vol. 33 (1 & 2) pp. 37-50.

Anderson, DS and Vervoorn, AE (1983) *Access to Privilege: Patterns of Participation in Australian Post-Secondary Education.* Canberra: ANU Press.

Connell, R et al (1989) Making the Difference - Schools, Families and Social Division. Sydney: George Allen and Unwin.

Dawkins, J (1988) Higher Education. A Policy Statement (The White Paper). Canberra: AGPS.

Goldring, J (1977) "Admission to law schools in Australia", Vestes, vol. 20, p. 61.

Goldring, J (1986) "An updated social profile of students entering law courses", Australian Universities Review, vol. 29(2) pp. 38 - 44.

Gregory, RG (1995) "Higher education expansion and economic change". Conference on Efficiency and Equity in Education Policy, 6-7 September, Canberra.

Jones, R (1993) *Socio-economic Status of Higher Education Students - Stage 1 Report: Assessment of the Postcode SES Methodology.* Report submitted to DEET for evaluations and investigations project C90/630, Canberra.

Linke, RD, Oertel, LM (née Martin) and Kelsey, NJM (1988) *Regional Analysis of Socio-economic Trends in Educational Participation.* Department of Sociology, Research School of Social Sciences, Canberra: ANU.

Martin, LM (1994) Equity and General Performance Indicators in Higher Education. Canberra: AGPS.

Moodie, G (1995) "An instrumentalist approach to equity, quality and opportunities for learning", *Journal of Institutional Research in Australasia*, vol. 4(2) pp. 1-13.

Swift, L (1989) "Schooling as an instrument of economic policy", unpublished MS.

Form		High SES			Mediu	m SES			Low	SES		Total		
Туре	Prefe	erences	Enro	lments	Prefe	rences	Enro	lments	Prefe	rences	Enro	lments	Prefs	Enrols
	No	%	No	%	No	%	No	%	No	%	No	%	No	No
Agricultu	re, Animal	Husbandry												
S	277	26.95%	36	32.14%	504	49.03%	50	44.64%	247	24.03%	26	23.21%	1,028	112
R	263	40.84%	72	40.00%	291	45.19%	78	43.33%	90	13.98%	30	16.67%	644	180
Total	540	32.30%	108	36.99%	795	47.55%	128	43.84%	337	20.16%	56	19.18%	1,672	292
Architectu	ıre, Buildir	ng												
S	423	39.09%	70	38.04%	479	44.27%	85	46.20%	180	16.64%	29	15.76%	1,082	184
R	405	49.57%	112	56.28%	318	38.92%	77	38.69%	94	11.51%	10	5.03%	817	199
Total	828	43.60%	182	47.52%	797	41.97%	162	42.30%	274	14.43%	39	10.18%	1,899	383
Engineeri	ng, Survey	ing												
S	1,004	36.32%	193	41.15%	1,242	44.93%	204	43.50%	518	18.74%	72	15.35%	2,764	469
R	482	34.58%	99	35.11%	630	45.19%	121	42.91%	282	20.23%	62	21.99%	1,394	282
Total	1,486	35.74%	292	38.88%	1,872	45.02%	325	43.28%	800	19.24%	134	17.84%	4,158	751
Science														
S	2,525	37.82%	404	40.89%	3,090	46.29%	458	46.36%	1,061	15.89%	126	12.75%	6,676	988
R	1,715	42.22%	415	43.55%	1,827	44.98%	421	44.18%	520	12.80%	117	12.28%	4,062	953
Total	4,240	39.49%	819	42.19%	4,917	45.79%	879	45.29%	1,581	14.72%	243	15.52%	10,738	1,941
Arts, Hun	nanities, So	ocial Sciences												
S	3,958	38.63%	559	42.48%	4,550	44.40%	586	44.53%	1,739	16.97%	171	12.99%	10,247	1,316
R	4,250	42.33%	1,013	45.10%	4,440	44.22%	967	43.05%	1,350	13.45%	266	11.84%	10,040	2,246
Total	8,208	40.46%	1,572	44.13%	8,990	44.31%	1,553	43.60%	3,089	15.23%	437	12.27%	20,287	3,562
Business,	Administra	ation, Econon	nics											
S	2,890	36.88%	409	42.25%	3,492	44.56%	398	41.12%	1,455	18.57%	161	16.63%	7,837	968
R	3,243	41.23%	695	41.67%	3,590	45.65%	766	45.92%	1,032	13.12%	207	12.41%	7,865	1,668
Total	6,133	39.06%	1,104	41.88%	7,082	45.10%	1,164	44.16%	2,487	15.84%	368	13.96%	15,702	2,636
Education	1													
S	1,049	31.39%	128	36.47%	1,660	49.67%	171	48.72%	633	18.94%	52	14.81%	3,342	351
R	947	36.24%	211	36.32%	1,232	47.15%	287	49.40%	434	16.61%	83	14.29%	2,613	581
Total	1,996	33.52%	339	36.37%	2,892	48.56%	458	49.14%	1,067	17.92%	135	14.48%	5,955	932
Law, Lega	l Studies													
S	409	49.46%	74	61.67%	314	37.97%	37	30.83%	104	12.58%	9	7.50%	827	120
R	604	50.59%	155	58.27%	476	39.87%	86	32.33%	114	9.55%	25	9.40%	1,194	266
Total	1,013	50.12%	229	59.33%	790	39.09%	123	31.87%	218	10.79%	34	8.81%	2,021	386

Table 8: SA Preferences and Enrolments in Undergraduate Courses in SA by Form, SES, and Field of Study

Form		High SES				Mediu	m SES			Low	SES		Total		
Туре	Prefe	rences	Enro	ments	Prefe	rences	Enrol	ments	Prefe	rences	Enro	lments	Prefs	Enrols	
	No	%	No	%	No	%	No	%	No	%	No	%	No	No	
Health															
S	1,284	34.88%	233	38.26%	1,608	43.68%	252	41.38%	789	21.43%	124	20.36%	3,681	609	
R	1,889	39.07%	387	37.39%	2,173	44.94%	497	48.02%	773	15.99%	151	14.59%	4,835	1,035	
Total	3,173	37.26%	620	37.71%	3,781	44.40%	749	45.56%	1,562	18.34%	275	16.73%	8,516	1,644	
The broad	field of stud	dy "Health" i	includes th	e following fi	elds:										
1. Medici	ne														
S	186	48.56%	52	54.74%	118	30.81%	27	28.42%	79	20.63%	16	16.84%	383	95	
R	206	50.00%	14	58.33%	151	36.65%	7	29.17%	55	13.35%	3	12.50%	412	24	
Total	392	49.31%	66	55.46%	269	33.84%	34	28.57%	134	16.86%	19	15.97%	795	119	
2. Nursin	lg														
S	414	29.40%	72	31.17%	654	46.45%	103	44.59%	340	24.15%	56	24.24%	1,408	231	
R	794	34.49%	251	35.25%	1,122	48.74%	356	50.00%	386	16.77%	105	14.75%	2,302	712	
Total	1,208	32.56%	323	34.25%	1,776	47.87%	459	48.67%	726	19.57%	161	17.07%	3,710	943	
3. Health	(other than	Medicine an	nd Nursing)											
S	684	36.19%	109	38.52%	836	44.23%	122	43.11%	370	19.58%	52	18.37%	1,890	283	
R	889	41.91%	122	40.80%	900	42.43%	134	44.82%	332	15.65%	43	14.38%	2,121	299	
Total	1,573	39.22%	231	39.69%	1,736	43.28%	256	43.99%	702	17.50%	95	16.32%	4,011	582	
ALL FIEL	DS OF ST	UDY													
S	13,819	36.87%	2,106	41.16%	16,939	45.19%	2,241	43.80%	6,726	17.94%	770	15.05%	37,484	5,117	
R	13,798	41.23%	3,159	42.63%	14,977	44.76%	3,300	44.53%	4,689	14.01%	951	12.83%	33,464	7,410	
Total	27,617	38.93%	5,265	42.03%	31,916	44.99%	5,541	44.23%	11,415	16.09%	1,721	13.74%	70,948	12,527	