

**Paper for the *Educators and Planners: Symphony or Discord* Conference
AAIR Conference 1 – 3 December 1999**

**PLUS ÇA CHANGE....
FURTHER INVESTIGATION OF ACCESS AND PARTICIPATION
OF DISADVANTAGED STUDENTS**

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ABSTRACT

The paper examines the access and participation of students from various disadvantaged backgrounds at the University of Technology, Sydney over the period 1991 to 1999. It finds that, although there were some improvements in representation of disadvantaged students in the early part of the decade, for many disadvantaged groups the position in 1999 is much the same as it was in 1991. Possible reasons for this are discussed.

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INTRODUCTION

An earlier paper (Booth, 1993) discussed the access and success of disadvantaged students at the University of Technology, Sydney (UTS) over the period 1991-93. This study extends the previous work to cover the period 1991-99.

The Australian Department of Education, Training & Youth Affairs (DETYA) and its predecessors have collected detailed statistics on higher education students since 1987. This statistical collection allows DETYA to monitor the participation and performance of students with certain kinds of disadvantage. The disadvantaged groups defined by DETYA are:

Aboriginal and Torres Strait Islander descent: defined as those students who indicate in a questionnaire that they are of Aboriginal or Torres Strait Islander descent;

Non-English-speaking background: defined as those students who indicate in a questionnaire that they speak a language other than English at home and that they have been resident in Australia for ten years or less;

Women in non-traditional areas of study and in research degrees;

Low socio-economic status: defined as those students whose permanent home address is in a Postcode area which is classified by the Australian Bureau of Statistics (ABS) as being in the bottom 25% of a measure of socio-economic status;

Rural and isolated residents: defined as those students whose permanent home address is in a Postcode area which is classified by ABS as being either rural or isolated;

Disability: defined as those students who indicate in a questionnaire that they have a disability which is likely to affect their studies.

Because UTS has very limited student accommodation, it does not include rural and isolated residents as a target group in its equity plans. They have therefore not been included in this study. This study also omits students with disabilities, partly because of definitional difficulties and partly because there is reason to doubt the accuracy of the information held by UTS.

There is one group of disadvantaged students who can be identified from UTS records but not from the standard statistical collection. These are students admitted under the inpUTS special admissions scheme, which provides concessional admission to applicants who can show that they have encountered significant educational disadvantage.

Although overseas students are not regarded as a disadvantaged group, information about overseas students has been included to provide an additional perspective to the study.

MEASURES USED

This study examines the access, participation, and success of students from disadvantaged backgrounds. These terms are defined as follows.

Access: Commencing students from a disadvantaged group as a proportion of all local commencing students.

Participation: Total students from a disadvantaged group as a proportion of all local students.

Success: The Student Progress Unit (SPU) score of students from a disadvantaged group compared with other local students, expressed as a *t* score.

Student Progress Unit is defined as the EFTSU load passed by each student as a proportion of the EFTSU load attempted. This study ignores units of study which are incomplete at the reporting date, or from which the student withdrew without academic penalty.

In the case of low SES students, ABS provides three measures, based on Australia, each State, and the urban area in each State. As UTS regards itself as serving the Sydney metropolitan area, this study examines only those students (disadvantaged or not) whose permanent home Postcodes are classified by ABS as being in the Sydney urban area.

For overseas students, the study compares overseas students with local students.

To be useful for management purposes within UTS, the research provided information for each year from 1991 to 1999 for each of the nine UTS Faculties.¹ To provide this level of detail in this paper would require either very large tables or very confusing graphs. The graphs therefore show the position for UTS as a whole and for a few Faculties selected for their interest. More detailed information is available from the author on request.

ACCESS

Aboriginals and Torres Strait Islanders

Figure 1 shows the proportion of commencing Aboriginal and Torres Strait Islanders in undergraduate courses as a proportion of all local commencing undergraduate students. There is wide variation between Faculties, and from year to year.

The Faculty of Education is interesting. In the first half of the decade, it developed a number of courses specifically for Aborigines. These had a block release pattern of attendance, allowing the students to spend most of their time with their communities. At the time, such an attendance pattern was encouraged by the rules of the Aboriginal education assistance program Abstudy, which provided support for travel to block release studies and accommodation during them. This strategy was clearly successful, with 8.3% of the Faculty's 1995 local undergraduate intake being of Aboriginal descent. However, the 1995 Budget removed the special provisions for block release support, and consequently the proportion of Aboriginal students declined. The Faculty then developed alternative strategies, and the numbers are again increasing.

For UTS as a whole, 1.7% of the 1991 local undergraduate intake were of Aboriginal descent, compared with 1.8% of the 1999 local undergraduate intake. There has been little improvement in access.

Non-English-speaking background

Figure 2 shows the proportion of commencing local students of non-English-speaking background in undergraduate courses as a proportion of all local commencing undergraduate students. Again there are wide variations between the Faculties, but less from year to year.

The Faculties of Engineering and of Mathematical & Computing Sciences have consistently had NESB intakes of over 25% of their local undergraduate intake. The reasons are unclear, although there may be a view in the community that ability in mathematics, rather than English, is needed in these areas.

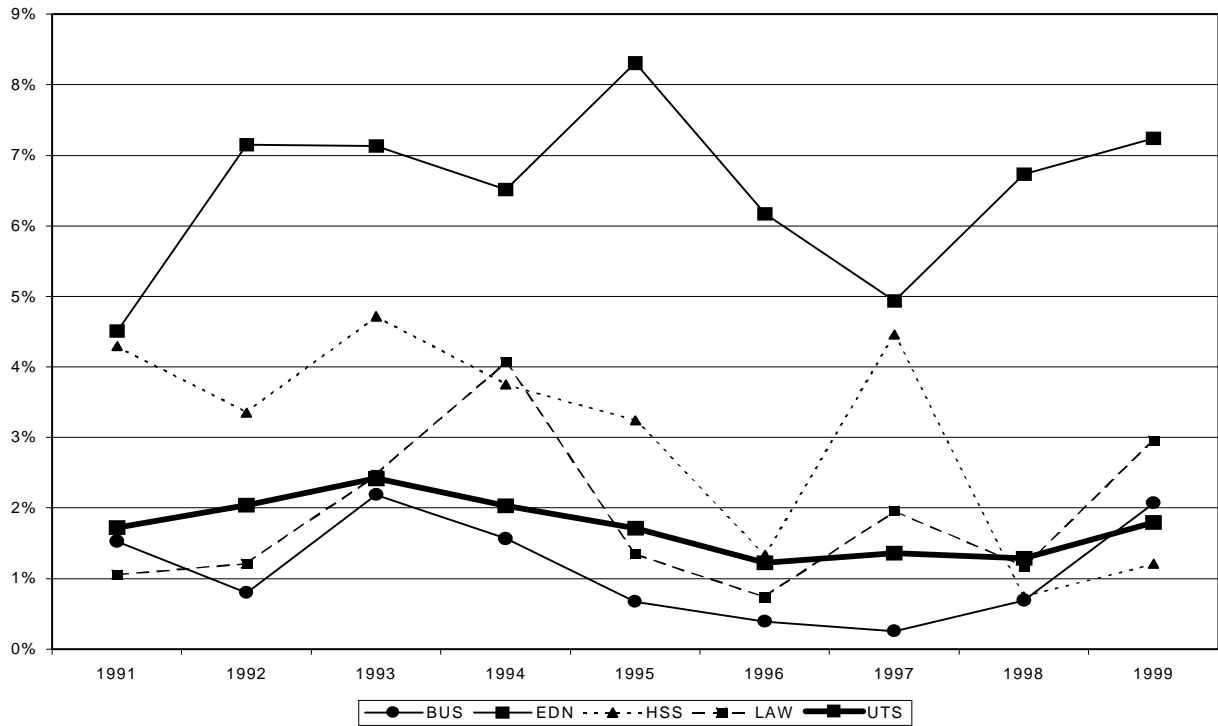


Figure 1. Aboriginals and Torres Strait Islanders: Undergraduate Access

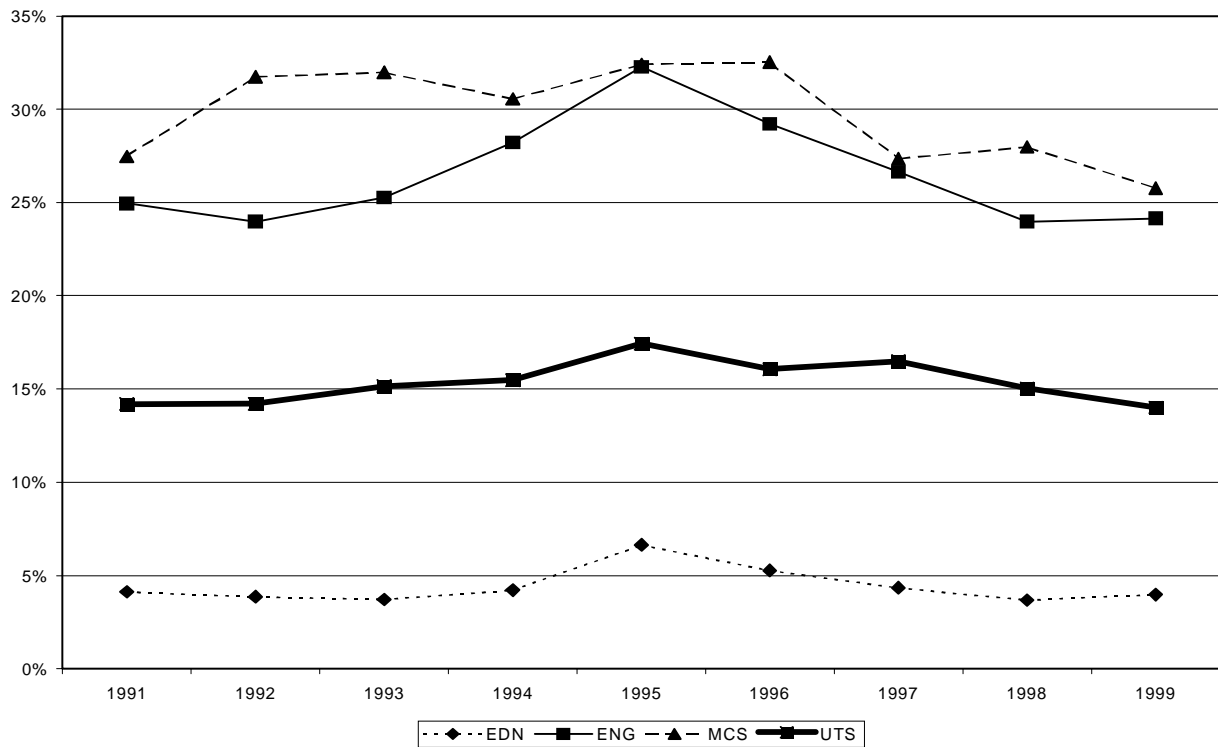


Figure 2. Non-English-speaking background: Undergraduate Access

On the other hand, NESB intakes to the Faculty of Education have consistently been at or below 5% of the local undergraduate intake. For UTS as a whole, the proportion of NESB students in the local undergraduate intake was 14.2% in 1991 and 14.0% in 1999. Again, there has been no improvement.

Women

Figure 3 shows the proportion of women in the local undergraduate intake. Unsurprisingly, it shows that women are grossly under-represented in the Faculty of Engineering and over-represented in the Faculties of Nursing Midwifery & Health, Humanities & Social Sciences, and Education. Universities tend to reflect the society in which they exist. For UTS as a whole, the proportion of women commencing undergraduate courses has increased from 50.3% in 1991 to 58.1% in 1999.

Figure 4 shows the proportion of women in the local research intake. The pattern by Faculty is essentially random, due to the small numbers of students. For example, in 1997 Mathematical & Computing Sciences admitted two research students, both of whom were women. In 1998 it again admitted two research students, but one was a man.

For UTS as a whole there is less volatility, and there has been a fairly steady increase in the proportion of women in commencing research students from 39.0% in 1991 to 56.8% in 1999.

Low socio-economic status

Figure 5 shows the proportion of low SES urban postcode students in the local urban undergraduate intake. In the Faculties of Engineering and Mathematical & Computing Sciences, these students are being admitted in roughly their proportion in the population (25%). It is notable that these are also the Faculties with a high proportion of NESB students. It may be that recent arrivals tend to settle in areas that are classified by ABS as being of low SES.

For UTS as a whole, the proportion of commencing students from low SES areas has risen from 12.8% in 1991 to 14.9% in 1999.

inpUTS Admission Scheme

Figure 6 shows commencing students assessed as eligible for inpUTS admission as a proportion of all local commencing undergraduates. There is again considerable variation between Faculties and years. It is notable that Engineering and Mathematical & Computing Sciences again show the highest proportions of disadvantaged entrants. There was a considerable decline in inpUTS numbers in 1999, arising from a reduction in the number of applications. The reason for this is not clear.

The low proportion of inpUTS eligible students in Education and Nursing Midwifery & Health probably arises from the population served by these Faculties. All of Nursing Midwifery & Health and about half of Education are taught at the UTS Kuring-gai Campus, which is in the affluent North Shore area of Sydney. Students interested in studying there are less likely to be able to demonstrate significant educational disadvantage. The other half of Education is taught at the City campus, but offers courses in TAFE teacher education and adult education. Students entering these courses are typically adults with employment experience, and previous educational disadvantage is less relevant.

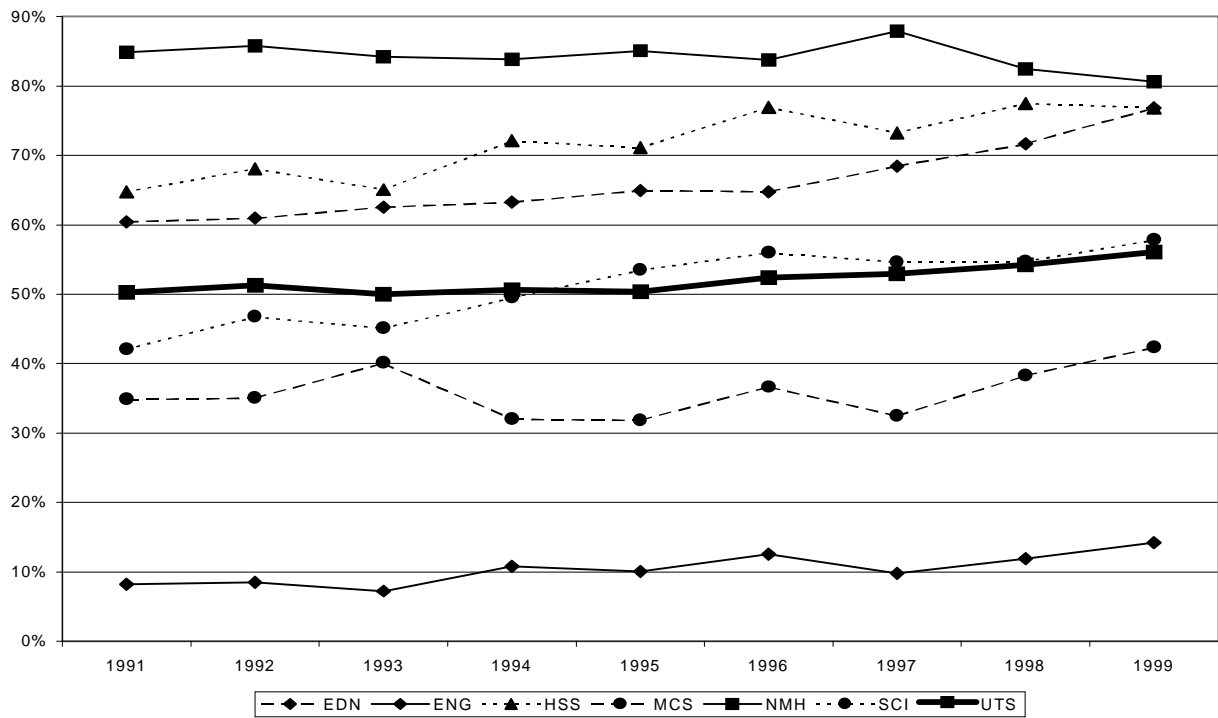


Figure 3. Female Undergraduate Access

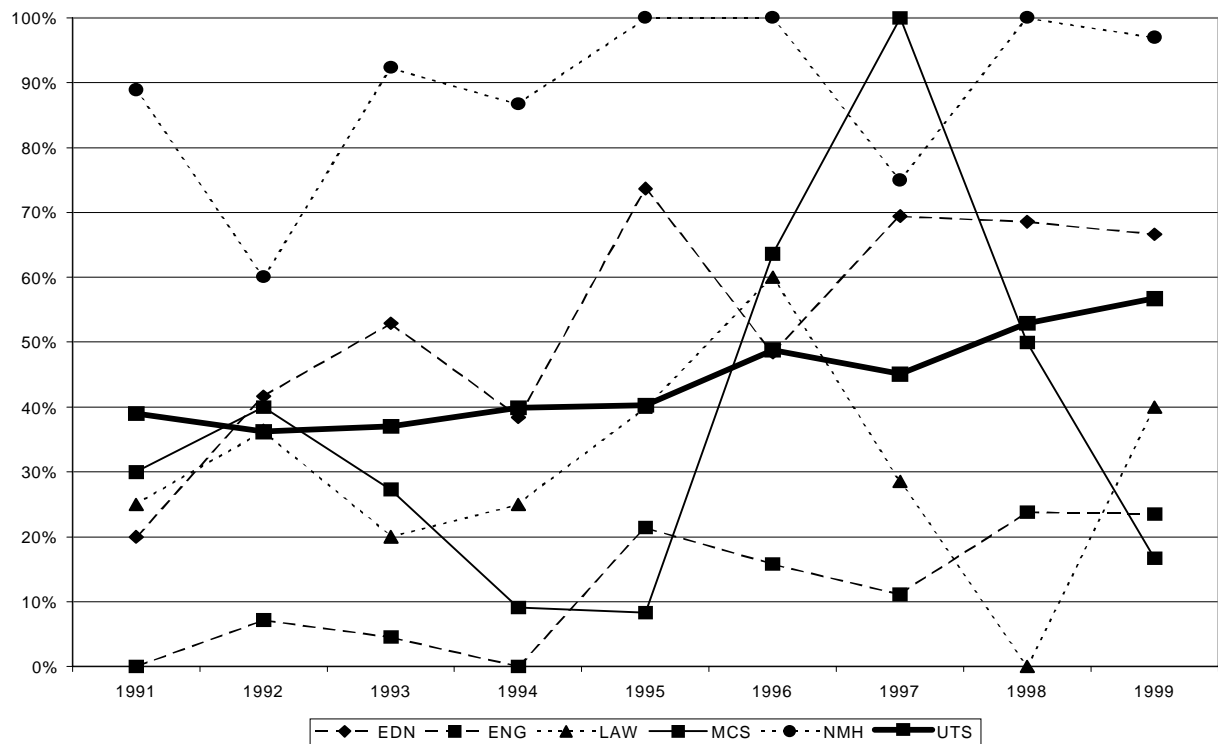


Figure 4. Female Research Access

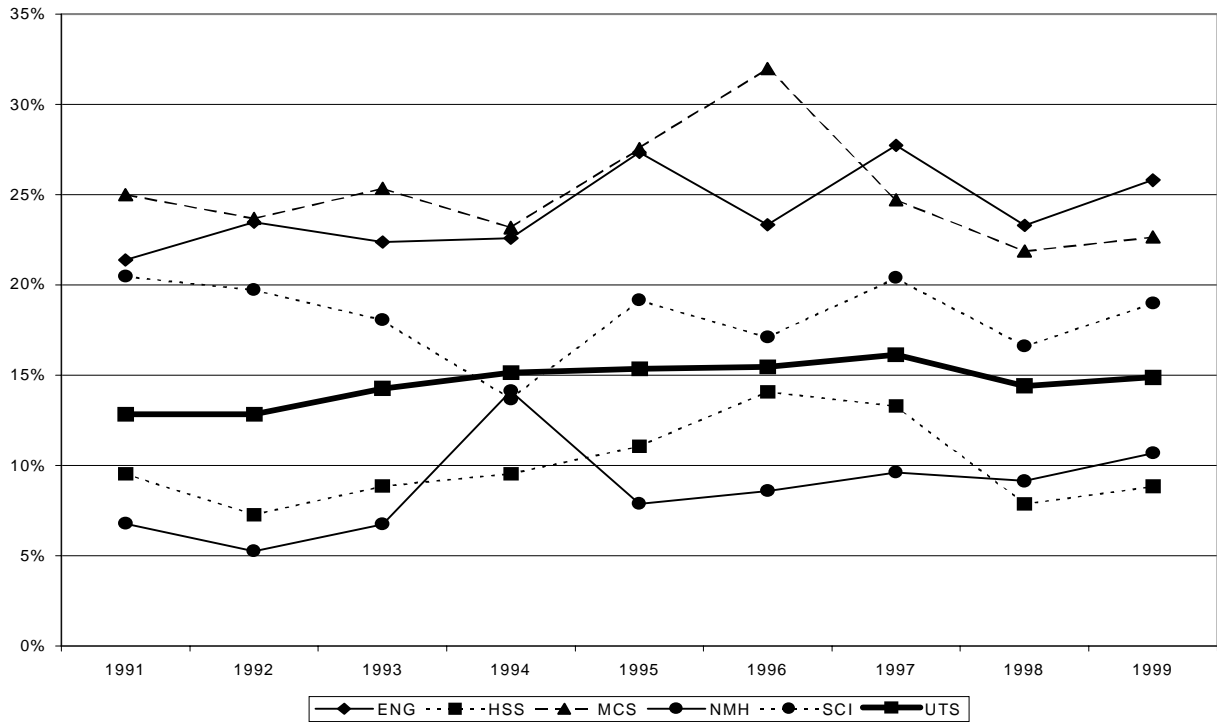


Figure 5. Low Socio-Economic Status: Undergraduate Access

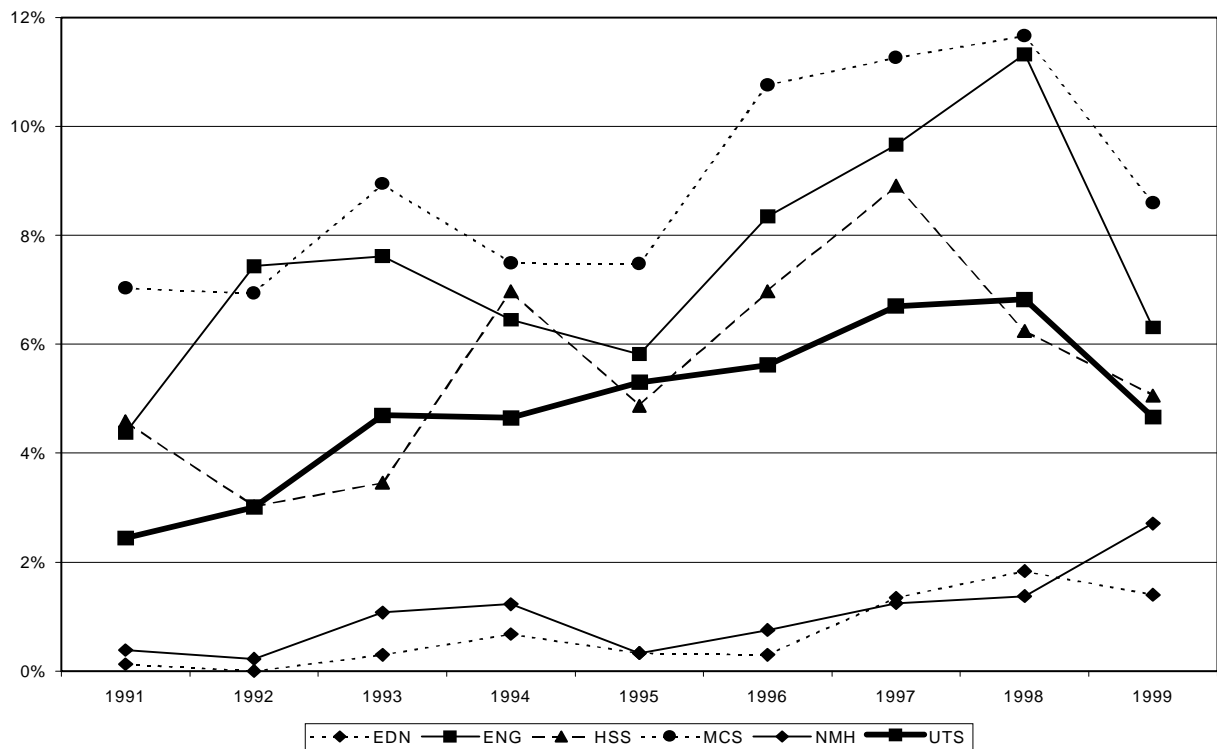


Figure 6. inpUTS Undergraduate Access

PARTICIPATION

In general, the pattern for participation is similar to that for access, but with less variation between years because of smoothing.

Aboriginals and Torres Strait Islanders

Figure 7 shows undergraduate students of Aboriginal or Torres Strait Islander descent as a proportion of all local undergraduate students. The pattern by Faculty is much the same as that shown for access. A likely reason for the decline in participation since 1996 is the changes to the Abstudy assistance scheme, although competition from other universities may also be a factor.

For UTS as a whole, the proportion of Aboriginal and Torres Strait Islander students in undergraduate courses has increased from 1.7% in 1991 to 1.8% in 1999. This is not a marked increase.

Non-English-speaking Background

Figure 8 shows undergraduate students of non-English-speaking background as a proportion of all local undergraduate students. It is notable that the proportion in Mathematical & Computing Sciences has declined from 29.8% in 1991 to 23.6% in 1999. However, if one were to include all students who speak a language other than English at home, without considering the time since arrival in Australia, the proportion would be roughly constant at about 50%.

For UTS as a whole, the proportion of local NESB students in undergraduate courses has increased from 12.3% in 1991 to 12.5% in 1999. Again, this is not a marked increase.

Women

Figure 9 shows local undergraduate female students as a proportion of all local undergraduate students. It can be seen that there has been some reduction in the extremes of representation, with Nursing Midwifery and Health decreasing from 86.4% in 1991 to 83.7% in 1999 and Engineering increasing from 6.4% to 11.9%. For UTS as a whole, the proportion of females in the local undergraduate population has risen from 45.4% in 1991 to 50.1% in 1999.

From comparison with Figure 3, it can be seen that female participation is consistently about 5% less than female access. There are two main reasons for this. Firstly, female students on average perform better than male students, which means that more of them complete their courses in minimum time. Secondly, the Faculty of Engineering is a large Faculty with predominantly male students, in which the courses typically take six years to complete, compared with three years in the predominantly female of Nursing, Humanities, and Education.

Figure 10 shows local female research students as a proportion of all local research students. The variations between years are less extreme than those shown for access, but still exist. It is interesting to note that the proportion of female research students in Engineering had risen to 20.9% in 1999, although the proportion of undergraduate students was only 11.9%. Can it be that female Engineering graduates find it difficult to get work, and so go on to further study?

For UTS as a whole, the proportion of female research students has risen from 35.3% in 1991 to 48.2% in 1999. There has thus been some improvement, particularly as the number of research students at UTS has increased from 346 to 705 over this period.

Low Socio-economic Status

Figure 11 shows the proportion of low SES urban postcode students in the local urban undergraduate population. The Faculty of Mathematical & Computing Sciences has consistently had a participation of over 25% which, by the ABS definition, is the proportion of low SES in the urban population. As noted in the discussion on access, this may relate to the high proportion in this Faculty of students of non-English-speaking background.

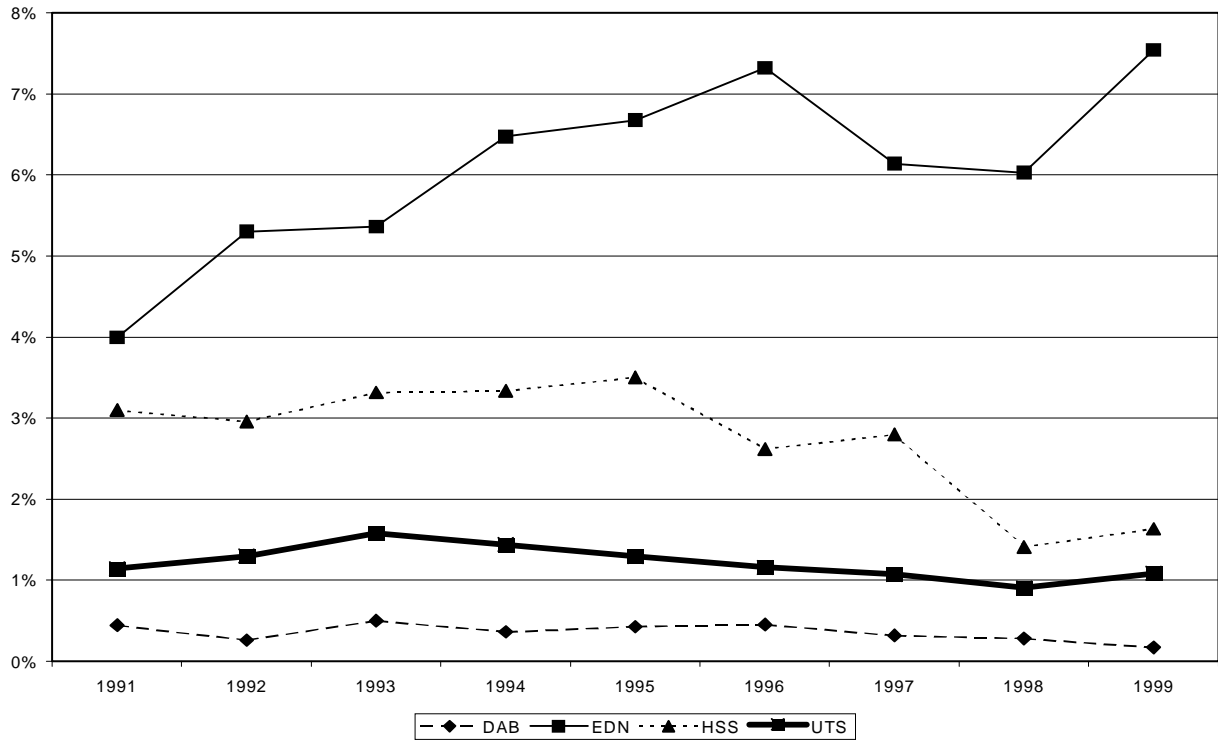


Figure 7. Aboriginals and Torres Strait Islanders: Undergraduate Participation

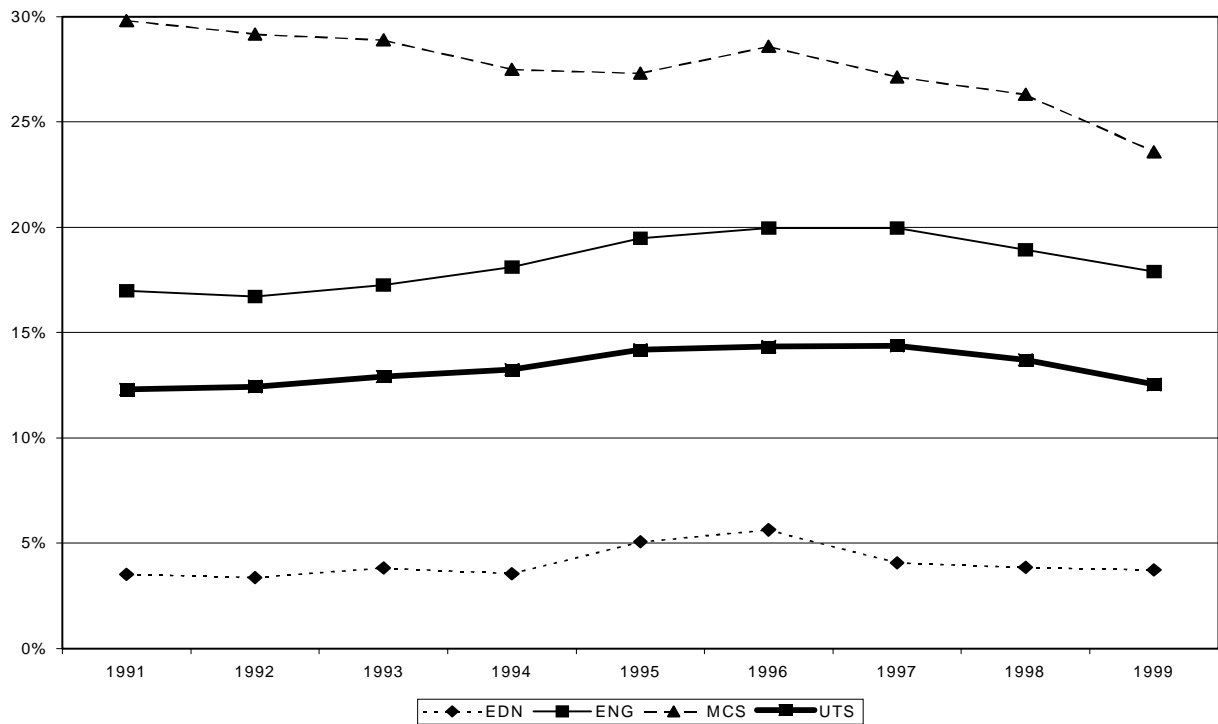


Figure 8. Non-English-speaking Background: Undergraduate Participation

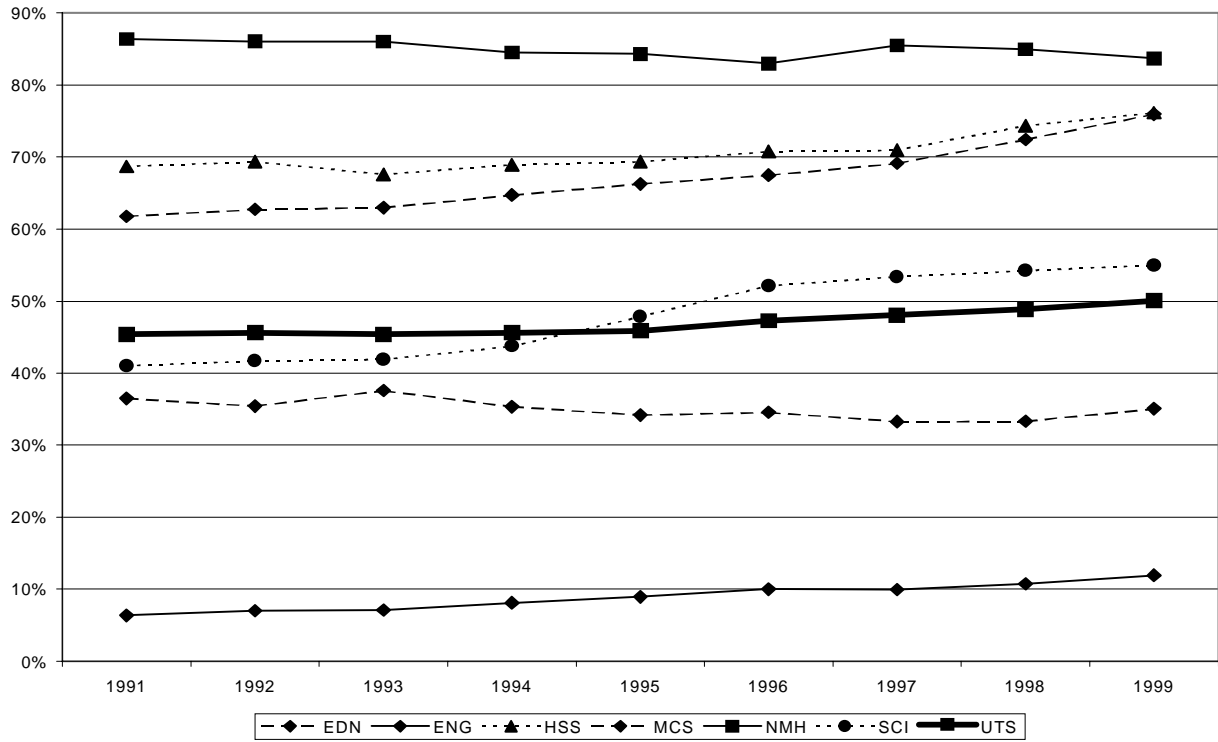


Figure 9. Women: Undergraduate Participation

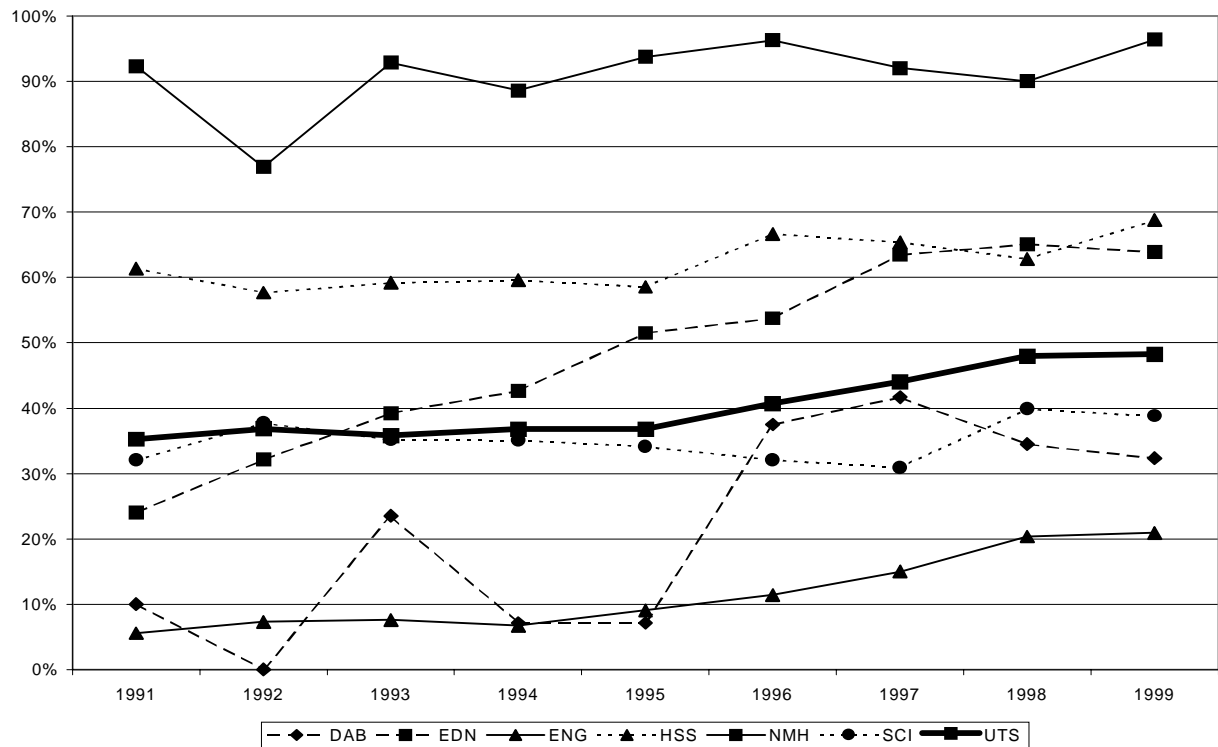


Figure 10. Women: Research Participation

InpUTS Admissions Scheme

Figure 12 shows students eligible for consideration under the inpUTS scheme as a proportion of all local undergraduate students. As this scheme was started in 1989, one would expect the proportion of these students would increase. If the proportion admitted each year were constant, one would expect that the proportion enrolled would level out after some five or six years. However, as shown in Figure 6, the proportion admitted increased each year until 1998. The proportion enrolled therefore increased fairly steadily from 1.4% in 1991 to 6.8% in 1998. It then declined slightly in 1999 because of the reduced intake.

Overseas Students

Although overseas students are not a disadvantaged group, a different perspective is gained by examining them. Figure 13 shows overseas undergraduate students as a proportion of all undergraduate students. The pattern is startlingly different from that shown for local disadvantaged students: in the Faculty of Business, overseas students have increased from 5.5% of the undergraduate population in 1991 to 19.5% in 1999. Even the Faculty of Law, which has only 1.2% overseas students in its undergraduate courses in 1999, gains significant income from its teaching to Business students. For UTS as a whole, the proportion of overseas undergraduate students has increased from 2.6% in 1991 to 8.3% in 1999.

CONCLUSION

The material above is factual: what follows is opinion, albeit based on 25 years in higher education administration. There are a number of conclusions which might be drawn from the patterns that emerge.

Firstly, it seems that universities are pretty blunt instruments for social engineering. They reflect the society in which they exist, and have a limited ability to change that society and its values. No matter what their intentions may be, they cannot admit people who do not apply for admission; and there are many studies which show that applicants base their choices on factors that have little connection with the activities of universities' marketing departments (see, for example, reports in *The Australian Higher Education Supplement*, 18 August 1999).

Secondly, it seems that the policies of the Howard Government have achieved their (perhaps unstated) aim of making it more difficult for the disadvantaged to gain access to university education. This can be seen in the decline in participation by most disadvantaged groups over the past few years.

Thirdly, meaningful incentives are needed if there is to be effective positive discrimination for the disadvantaged. Although there is some funding attached to equity programs in universities, the amounts involved make equity peripheral to many decision-makers, particularly those in the Faculties who actually make decisions on admissions. This is illustrated by the trend in participation of overseas students compared with the trends for local disadvantaged students. The Faculties, especially Business, see overseas students as a significant source of additional income and devote considerable effort to attracting these students. Disadvantaged students may well be perceived as a cost to a Faculty, because of the additional support that may be required, so there is little incentive to attract them.

To give a hypothetical (and highly unlikely) example: if the Australian Government were to decide that students of Aboriginal or Torres Strait Islander descent would be funded at 150% of the normal rate, there would almost certainly be a significant increase in the number of Aboriginal and Torres Strait Islander students (or at least in the number of students reported as being of Aboriginal or Torres Strait Islander descent). Similar actions could be taken in respect of women in Engineering, or men in Nursing.

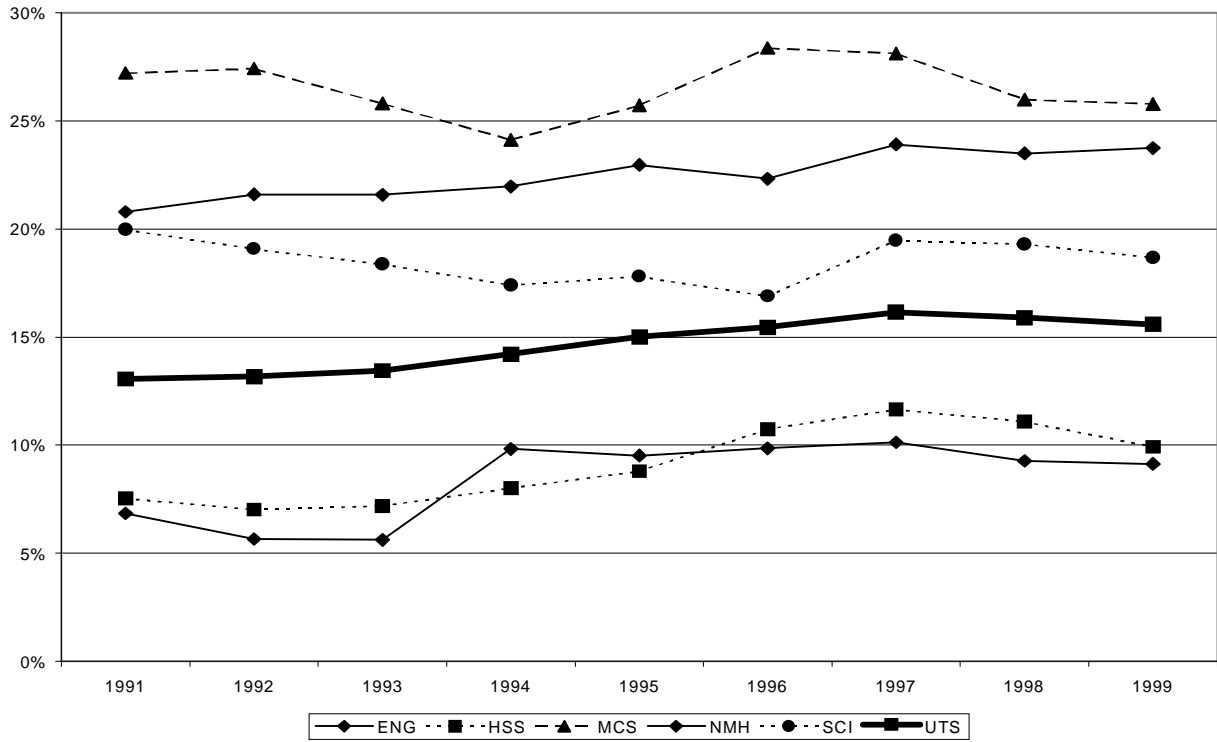


Figure 11. Low Socio-economic Status: Undergraduate Participation

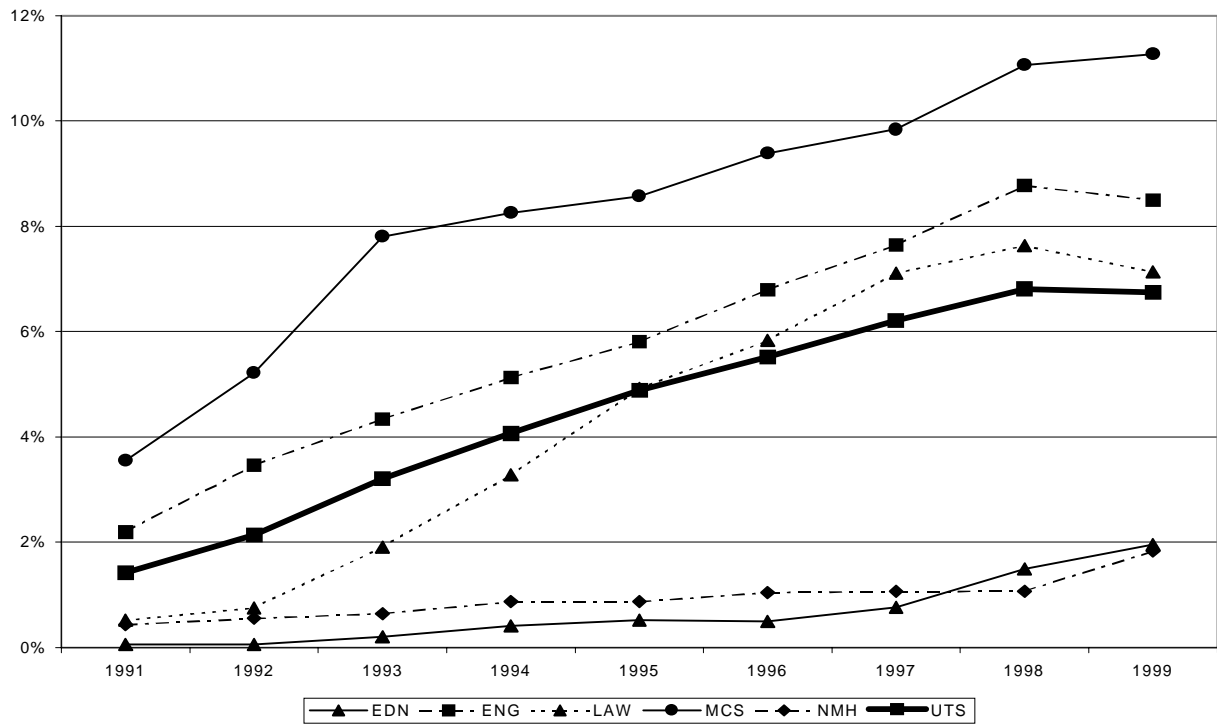


Figure 12. inpUTS Admissions: Undergraduate Participation

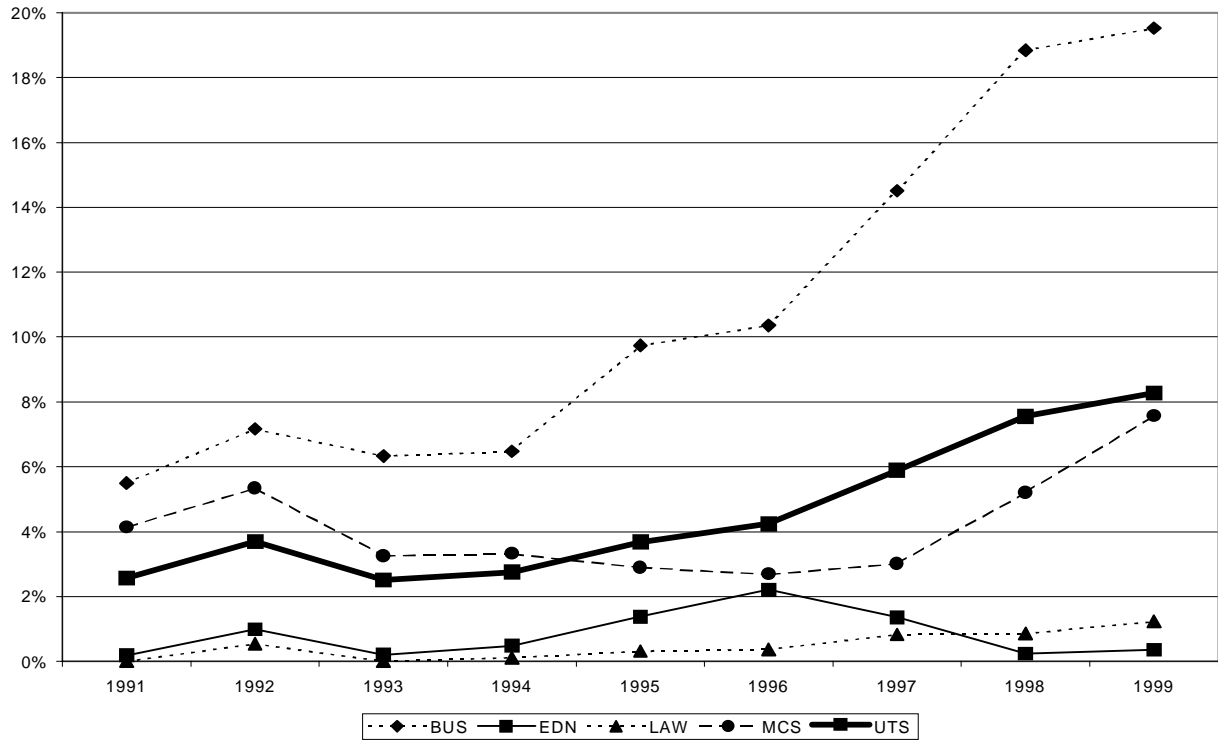


Figure 13. Overseas Students: Undergraduate Participation

However, it is unlikely that any Australian Government will take such actions. The likelihood, therefore, is that people of disadvantaged background will continue to be under-represented in the student population.

END NOTES

1. The nine UTS Faculties, and the abbreviations used for them in the graph legends, are:

BUS	Business
DAB	Design, Architecture & Building
EDN	Education
ENG	Engineering
HSS	Humanities & Social Sciences
LAW	Law
MCS	Mathematical & Computing Sciences
NMH	Nursing, Midwifery & Health
SCI	Science

Any opinions expressed are those of the author, and do not represent policy of the University of Technology, Sydney.

REFERENCE

Booth, Nick (1993). "Equality of Access? An investigation of the enrolment and performance of students affected by equity issues". *Proceedings of the Australasian Association for Institutional Research Conference, Sydney*.