

LSAY Research Report 33

Patterns of Participation in Year 12

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EXECUTIVE SUMMARY

Over the past 20 years there have been significant changes to the levels of participation in the senior secondary years of schooling in Australia. The percentage of students remaining to the final year of schooling rose from 35 per cent in 1980 to just over 73 per cent in 2001 (following a peak of 77 per cent in 1992). Since the Finn review of post compulsory education and training in 1992 there has been a push in educational policy to encourage young people to complete Year 12 or its vocational equivalent. Recent research has shown that those who obtain a Year 12 qualification or its vocational equivalent are more likely to continue their involvement in education and training, gain employment-related skills and generally fare better in the labour market compared to those who do not complete Year 12 or its equivalent.

Data gathered from a large nationally representative sample of young people who participated in Year 12 in 2001 provides the basis for the analysis of subject participation in this report. Information from their final year was linked to the accumulation of information about their educational and social background obtained as they progressed from Year 9. In addition, patterns of participation observed in this cohort of young Australians are compared with patterns observed in previous cohorts. The report also makes use of data from six cohorts of students who reached Year 12 from the late 1970s through to 2001 to examine changes in participation in Year 12 and influences on participation. Longitudinal data can make a distinctive contribution to understanding patterns of participation and subject selection in Year 12. Data on participation can be linked to information on student background characteristics collected at an earlier time and also to information about the schools they attended.

Participation in Year 12

The focus of this report is on participation in the final year of school. At present a little less than three-quarters of young Australians remain at school to Year 12. This report documents the differences in Year 12 participation rates between males and females (the gap is about ten percentage points in favour of females), socioeconomic background (the gap between the highest and the lowest of six socioeconomic groups in 2001 is 15 percentage points), cultural background (the participation rate for those of a non-English speaking background is about eight percentage points higher than other students) and earlier school achievement (the gap between the highest and lowest of four achievement groups is 31 percentage points). There are also differences associated with school sector (the gap between independent and government schools is 14 percentage points) and location (the gap between metropolitan and non-metropolitan home locations is eight percentage points). Multivariate analyses indicate that there are net effects of earlier achievement, gender, socioeconomic background and cultural background. There are also net differences between school sectors and between metropolitan and non-metropolitan locations.

As well as documenting these differences in participation for the group entering Year 12 in 2001, the report examines changes in those differences over time and the net effects of student and school background characteristics on participation. The comparisons over time indicate that many of the observed differences between groups in Year 12 participation declined during the expansion of the 1980s but remained stable from 1992 onwards.

The indicators of participation in Year 12 in this report are based on following the progress of individual students from Year 9. These indicators provide a different perspective than apparent retention rates. Apparent retention rates are computed as the ratio of the full-time enrolment in Year 12 to the enrolment in an earlier Year level, and are not able to take account of students who repeat a year, who are enrolled on a part-time basis or who transfer between states or sectors.

Subject Enrolment Patterns in Year 12

The subjects that students choose to study in their senior secondary years have an influence on their educational and career options after they leave school. Subject selection thus involves issues of equity between various social groups. Students from particular backgrounds are more likely to participate in courses that are avenues to higher education and the professions and students from other socioeconomic or ethnic backgrounds are more likely to participate in subjects or courses that lead either directly into vocational education and training or into the workforce without any further formal education or training.

Among the cohort of students who participated in Year 12 in 2001, four key learning areas accounted for 71 per cent of subject enrolments: 20 per cent in English, 17 per cent in mathematics, 20 per cent in studies of society and environment and 14 per cent in the sciences. The largest of the four remaining key learning areas was technology with 14 per cent of enrolments followed by the arts with 8 per cent, health and physical education with 5 per cent and languages other than English with just 2 per cent.

Differences associated with gender, earlier achievement and social background are evident in the patterns of subject participation. Males are more likely than females to be enrolled in advanced mathematics, physics, chemistry, technical studies and computer studies. Females are more likely than males to be enrolled in arts and home sciences. Students with higher levels of earlier achievement (even after allowing for the effect of other related influences), as well as those with aspirations to higher education, were more likely than other students to be enrolled in advanced mathematics, chemistry and physics. Their peers of lower earlier achievement levels were more likely to be enrolled in technical studies, computer studies and home sciences. Students from higher socioeconomic backgrounds were more likely to be enrolled in advanced mathematics, physics and chemistry and those from low socioeconomic status backgrounds were more likely to be enrolled in technical studies, computer studies, arts and home sciences. Those with an Asian background were more likely than any other cultural group to enrol in advanced mathematics, chemistry and physics.

There are three indications of a broadening of student subject selections during the past decade. The first was in the distribution of enrolments across key learning areas. In the early 1990s the four largest key learning areas (English, mathematics, society and environment and the sciences) accounted for 76 per cent of enrolments but by 2001 those

areas accounted for only 71 per cent of all subject enrolments. The second was a trend towards increasing enrolments in vocationally oriented studies. Over the period from 1990 to 2001 there have been declines in the humanities and social sciences, the biological sciences and the physical sciences. There has been growth in computer studies and technical studies, as well as the arts. Within economics and business there has been a substantial shift away from subjects such as economics and accounting and towards subjects such as business studies, although overall enrolments have remained steady. The third indication of broadening subject selections has been a decline in the proportion of students taking two subjects from traditional areas of specialisation: two mathematics subjects, the combination of physics and chemistry and two subjects from the humanities and social sciences field.

The Final Year of Secondary School

The final year of secondary school is important both as an outcome of earlier school experiences and as the foundation for future study and work. Patterns of participation in that year changed during the 1980s during a period of expansion, and stabilised during the 1990s. However, even during that period of stability of levels of participation there were changes in the subjects studied by Year 12 students. It is important to continue to monitor changes in these patterns over future years.