# Executive summary

# The definition of lost talent

'Lost talent' is a long-established term which describes the concept of the underutilisation or 'wastage' of human potential. Over time, however, the concept has been used to describe—at least empirically—four different processes in the transition of youth to adulthood, and specifically those related to educational and occupational attainments.

In this report, we follow Hanson (1994), and make use of the term 'lost talent' to refer to high-achieving students who, over time, do not maintain their high level of educational and occupational expectations and attainments. Prior literature assumed that talent loss occurs when students in the top 50% of the academic achievement distribution: lower their educational expectations; lower their occupational expectations; fail to realise their educational plans; or fail to realise their occupational plans. This study focuses specifically on the lowering of occupational expectations during secondary school. Our main interest is to establish whether ambitious occupational career plans help an early entry to high-status employment. We have chosen to focus on this area because of the shortage of Australian studies assessing the impact of occupational expectations on labour market outcomes.

# Data

This report uses data from the 1998 cohort of the Longitudinal Surveys of Australian Youth (LSAY). A representative sample of secondary education students, nationally stratified by state and sector of schooling, was first surveyed in 1998 when they were 14 years old. The students completed a numeracy and literacy test, as well as a survey with questions about their families, experiences, attitudes to school and expectations. They were then surveyed each year until 2008.

# Findings

#### The extent and determinants of lost talent

The proportion of LSAY respondents who represent 'talent loss' is low, although not negligible.

- ♦ About 15% of the top students changed their occupational expectations from highly skilled destinations to careers which required on-the-job training and less formal training. In this report highly skilled employment is defined as falling into major group 1 or 2 of the second edition of the Australian Standard Classification of Occupations (ASCO 2; ABS 1997b).
- ♦ Approximately 15% of students who 'showed early signs of talent'; that is, who were in the top 50% of academic achievers in their age group, abandoned their initial plans to complete university.
- ♦ All else being equal, students who came from lower socioeconomic backgrounds were significantly more likely to lower their educational and occupational expectations.
- ♦ Male students, as well as those with a low assessment of their academic ability, were more likely to lower their occupational expectations.

- ♦ Students whose satisfaction with their school environment was low, even if their academic performance placed them in the top 50% of the distribution, were also prone to lower their educational and occupational expectations.
- ♦ Students' perceptions of their teachers' expectations of their going onto university and peers' plans for university were also positively associated with maintaining ambitious occupational plans.

# The stability of occupational plans

Australian adolescents born around 1984 expected to work predominantly in professional occupations. These expectations were fairly stable, but with some variation.

- ❖ In 1999, 58% of students who could name their intended career hoped to enter some form of highly skilled professional employment. By 2001, 53% of the cohort had retained these or similar preferences.
- ♦ Of the top 50% students who in 1999 had planned to achieve a high-status job soon after completing their education, 83% retained their plans in 2001. A high-status job was defined as professional or managerial, falling into major group 1 or 2 of ASCO 2.
- ♦ However, within the professional categories, students' preferences for particular jobs were likely to change between Year 10 and 12, or between 1999 and 2001.
- ♦ About one-third of students planned to work in a professional job of a comparable status in 1999 and 2001, whereas another 33% switched their occupational plans to professional employment of somewhat lower status. Finally, the remaining 33% expected even higher-status employment.

This strong preference for professional employment is similar to the patterns found in the United States (Rindfuss, Cooksey & Sutterlin 1999), the United Kingdom (Croll 2008) and countries participating in the Programme of International Student Assessment (PISA; Sikora & Saha 2009). Therefore the causes for professional expectations are more likely to be of a global and macrocultural nature, rather than a local and time-specific one. While the accommodation rates for professional employment have been on the rise, a discrepancy between students' plans and labour market composition remains.

#### Gender differences

We found that adolescent occupational plans and attainments are gender-typed. Girls' and boys' occupational expectations still vary greatly in high school, although the degree of segregation of student expectations is lower than the segregation of employment in the labour market.

- ♦ Males chose professional employment less frequently than females, but when they did, they opted for different professions.
- ❖ In Year 10, the top three choices among girls were: designers and illustrators, legal professionals, and childcare workers. Boys were most likely to expect to work as computing support technicians, motor mechanics, or computing professionals.
- Girls who performed well in mathematics and had confidence in their numeracy skills were more likely to plan working in occupations with a higher representation of men. Conversely, boys who performed well in reading and had confidence in their literacy were more likely to choose occupations less dominated by men. These associations, however, were not particularly strong.

### The relevance of adolescent career expectations

The important finding of this report is that having a specific occupational plan in high school helps students to enter high-status employment, even after the differences in educational plans and rates of university completion are held constant.

- ❖ After we took into account students' academic achievement, the socioeconomic status (SES) of the family of origin, their university completion, as well as the number of children born to young respondents, we found that having ambitious career plans in high school was a good predictor of gaining higher-status employment. This was particularly the case when we only considered employment defined by respondents as their possible career.
- ♦ The absence of specific occupational plans was detrimental to young people's occupational attainment. This affected females more than males, since the attainments of the latter were more differentiated by early plans to attend university, rather than specific occupational plans.
- ❖ Up to 25% of all students reported schooling and career objectives which were inconsistent. We only considered inconsistencies in planning managerial and professional employment and in attending university, and found that the discrepancies between educational and occupational plans negatively affected the chances of securing high-status employment, even after we had taken a range of factors, such as university completion, into account.

# Conclusions

Ambitious occupational plans formed in adolescence are consequential to young adults' attainment, particularly for an early entry into high-status employment. While students' socioeconomic background facilitates the formation of ambitious goals which help attainment, the effect of adolescent plans is independent of parents' background. This means that there is an element of choice in the formation of student career plans. Therefore, our findings add weight to the studies which stress the vital importance of comprehensive career guidance services targeted to the different needs of student subpopulations. Students with fewer economic and cultural resources might need more counselling support in pursuing careers that diverge from the educational and occupational background of their families, as they are at a greater risk of abandoning their initial expectations, despite having the academic potential to fulfil them. Moreover, there is a need to reflect on the meaning and consequences of gender segregation of students' occupational expectations and attainments. Students' career expectations are not as strongly segregated by gender as later attainments, and the question that arises is whether this should be perceived as a policy concern.

On the positive side, only 15% of high achievers in the study experienced talent loss by lowering their initial expectations. Most students had specific career objectives while in high school and many of those who wanted to pursue professional and managerial employment succeeded in realising their goals.