STUDENTS IN AUSTRALIAN HIGHER EDUCATION:
A STUDY OF THEIR SOCIAL COMPOSITION
SINCE THE ABOLITION OF FEES

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In 1973 the Australian Labor Government announced that tuition fees for tertiary education would be abolished from 1974 as a new aspect of its assumption of the financial responsibility for tertiary education. It also established the Tertiary Education Assistance Scheme under which grants became available to all students (subject to a means test) who were accepted for tertiary study at an approved tertiary institution. All universities and C.A.E.s were approved for this purpose.

These two changes - the abolition of tuition fees and the principle of universal student allowances - seemed to provide a radically new prospect for the Australian public concerning tertiary education. The only sector of public education that had required substantial fees was now apparently as open, on economic grounds, as primary, secondary and technical education.

It is not surprising that the Australian Vice-Chancellors' Committee (A.V.C.C.) should have considered this new situation worthy of systematic investigation. The A.V.C.C. decided that a study of the effect of fee abolition on the universities be undertaken, and provided funds to its Sub-Committee for Educational Research and Development (S.C.E.R.D.) for this purpose. In turn, a project committee (Fensham, Anderson and Katz) was invited to undertake the study. This committee suggested a pilot survey of students entering in 1974 those universities which were able to participate at short notice. The project was based in the Tertiary Education Research Centre (T.E.R.C.) at the University of New South Wales since it had excellent resources for the collection and processing of such a large body of data. Dr J.P. Powell, the Acting Director of the Centre, joined the project committee in May 1975 when Professor F.M. Katz left T.E.R.C.

Eight universities took part and grouped data was reported to the A.V.C.C. Each institution was provided with the results for its own students. This 1974 study assisted the project committee to define more clearly the purposes of the study and the data which should be collected. It also became evident that Colleges of Advanced Education (C.A.E.s) should be included as well as universities. A decade earlier in 1964 the Martin Committee had recommended a binary structure for Australian higher

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1 Report No. 1 Student Opinions on the Influence of Tuition Fee Abolition upon their Choice of Course, Carmen Moran and Denis Kelly, T.E.R.C., University of N.S.W., August 1975; Report No. 2 The Effect of the Abolition of Fees on Commencing Students in 1974, Carmen Moran and Denis Kelly, T.E.R.C., University of N.S.W., January 1976; Report No. 3 Socio-economic Background and Enrolment Characteristics of Commencing Students in 1974, Clift Barnard and Denis Kelly, T.E.R.C., University of N.S.W., April 1976.
education that could by 1974 be said to have been finally achieved with the transfer of the last State Teachers Colleges into the C.A.E. system so that both types of institution provided the operation of higher education in each state and territory of the country. It was therefore now very appropriate to conduct a national audit of the characteristics of the approximately one quarter of a million students in the nearly 100 institutions of Australian higher education. Indeed, no such national survey of the social composition of even the university students had ever been undertaken. A general base line to assess the effects of the changes in funding and structure on the social composition of higher education was thus not available.

Technical and Further Education (T.A.F.E.), formerly entirely the province of the States, had been recognised by the Australian Government in 1974 for the purpose of supplementary funding. This provided for the beginning of a national system of post-secondary education in which the States and Commonwealth had shared responsibilities. The present study was, however, limited to the higher education sectors of tertiary education, so it was decided that a survey of all universities and C.A.E.s in 1975 and 1976 would be attempted in order to establish at last a firm set of base data. In our analysis, it was clear that we would have to draw on the limited studies and sets of data that were available for the years before 1974.

In 1975 all the universities and a large number of C.A.E.s took part. A progress report on some of these 1975 data was distributed to the sponsoring bodies and the participating institutions. For 1976 a proposal was put to the Australian Advisory Committee for Research and Development in Education (A.A.C.R.D.E.) for tripartite funding involving that Committee, the A.V.C.C. and the C.A.E.s through the emerging Conference of their Principals. All three bodies supported the study for 1976 in which year a suitable level of institutional and individual participation was achieved so that the data collected could be used to represent the entire system of higher education.

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2 Report No. 4 Profile of a Student: College and University Entrants, 1975, Clift Barnard, T.E.R.C., University of N.S.W., June 1976.

3 In 1977 the data were further strengthened when Melbourne and Monash universities - the only two institutions that had been collecting this type of data on a regular basis prior to our study - were able to collect data for us in exactly the form we had used elsewhere. We are grateful to these two institutions for their co-operation throughout the project particularly as they had their own ongoing studies - a most valuable source of base data for us.
Throughout the project the data on particular institutions have been made available to them alone. The full bank of data resulting from the project is now available to other research workers on computer tape, but it may also be possible to provide data in forms more suited to the needs of individual users. The data for particular institutions can only be made available with the permission of that body. All enquiries concerning access to the data bank, and its associated costs, should be addressed to the Director, T.E.R.C., University of New South Wales, P.O. Box 1, Kensington N.S.W., Australia 2033.

Acknowledgments

Several bodies have provided the funds for the study of which this book is a report. We are grateful to the A.V.C.C., the E.R.D.C. (formerly A.A.C.R.D.E.), and the Conference of Principals of C.A.E.s. The co-operation of the Australian Universities Commission and the Commission on Advanced Education (now both within the Tertiary Education Commission) has been of great assistance to us on numerous occasions. Without the agreement of the universities and C.A.E.s throughout Australia there would, of course, have been no study. We are particularly appreciative of the help of the liaison persons in each institution through whom we worked.

The University of New South Wales provided many tangible and intangible supports to us because of our base in its T.E.R.C. We would like to record our gratitude to all those persons in the Centre and within the University of N.S.W. who have helped in our data collection and their subsequent computation, and in encouraging us over four years.

Evelyn Greenblat at the Centre for the Study of Higher Education and Melbourne University, and Leo West of H.E.A.R.U. at Monash University were particularly important and helpful in enabling us to link our study with their on-going projects in 1975 and 1976, and then in the collection of our data in 1977 at their respective institutions.
Several research assistants have worked with us on the project. Each brought particular strengths to the project but they also cheerfully accepted its many humdrum aspects. Carmen Moran and Denis Kelly worked in 1974 and 1975. In 1975 Clift Barnard joined us and he carried out in 1976 the collection of the data on which this report is so largely based. In 1977 Rick Boven joined the project and he has been invaluable in the rather complex tasks associated with the final analysis of the data. Tim Sowerbutts assisted us in 1976 with the application of discriminant analysis to some of the data. Aat Vervon assisted with the literature review which is reported in Chapter 2 and Mathew Anderson computed the reconstruction of many of the tables. We thank each of these assistants most sincerely for their professional and personal contributions to the study.

Thanks are also due to Marijke Saltet for assistance with data collection; to Ian Maclean and Ian Shannon for help with data processing; and to Joan Binks, Trish Borger, Ursula Crow and Vivienne Bristow for typing and printing services, and Martin Nichol for diagrams.

Peter J. Fensham
Don S. Anderson
John P. Powell
(Project Directors)
INTRODUCTION

Who gets into higher education? Is the social composition of the student body changing? What differences are there between the sectors? The focus of the study to be reported is the type of enrolment which students made in higher education: whether university or college, country or city, part time or full time; which faculty or course; and whether the enrolment follows directly after secondary school or after a delay, perhaps due to employment. The decision to enrol is seen as the outcome of various sociological, psychological and educational conditions in the students' life history. This study examines several aspects of the students' social background via various parental and family characteristics and the type of secondary school attended. The list of questions used to elicit the information necessary to explore the paths to various types of enrolment is in Appendix 1.

The objectives of the study were:

1 (a) to establish the social composition of the student population in Australian higher education.
   (b) to determine what differences exist in the social composition by type of institution, by faculty and by type of course.
   (c) to establish what trends (if any) in social composition emerged over the period 1974-76.

2 to establish the effects of the new funding arrangements for students introduced in 1974 on
   (i) the ability of students to enrol who would otherwise not attend tertiary institutions.
   (ii) the pattern of full time/part time enrolments.
   (iii) the pattern of choice of institution and course.
   (iv) the decisions made by students about higher education
   (v) the pattern of delayed entry to higher education.
   (vi) the mobility and residential patterns of students.
   (vii) special sectional groups of students.
   (viii) the amount of tertiary education sought by students, and
   (ix) the forms of support for tertiary education.
A Model Showing the Inter-relation of Factors Leading to Entry

Some further discussion is necessary of the particular role which socio-economic status (s.e.s.) plays, along with other factors, in the process leading to a student being admitted to higher education. In order to clarify the contribution of s.e.s. we have developed a model which, in its simplest form, portrays the relationship between four conditions, each of which must be met, if a student is to enter higher education. These are: the availability of places in higher education, the accessibility of available places to qualified individuals, the level of academic achievement necessary to qualify for entry, and the aspiration or determination of the student to seek a place.

Figure 0.1 FOUR NECESSARY CONDITIONS FOR ENTRY TO HIGHER EDUCATION

Availability
Accessibility
Aspiration
Achievement

Parental Occupation

The importance of parental occupation to the concept of social background requires some discussion. The literature review in Chapter 2 indicates that social class, as measured by a status ordering of father's occupation, has been the focus of a large number of studies of students, particularly in the last 15 years. Social policy makers and reformers have also used parental occupation as a measure of the equality with which educational opportunities are distributed through the community. The Schools Commission and the Poverty Commission, for instance, give considerable attention to findings which showed that children from working class families have low participation rates in the upper levels of education. The Labor government, in abolishing tuition fees for higher education in 1974, expressed the belief that this would facilitate the entry to universities and colleges of more children from working class backgrounds.
The assumption is made in this study:

(i) that occupations may be arranged in a status hierarchy.
(ii) that this hierarchy is correlated with level of income and level of education.
(iii) that the position of a family in the hierarchy provides an indication of its life-style, access to resources and aspirations for the children.

The assumptions approximate to those theorists of social class who assume that positions in society are arranged like a pyramidal ladder with opportunity for those in the lower levels to improve their standing. This is opposed to the conflict theorists who assert that class positions are related to access to the means of production and distribution and that, in a very broad sense, there is a conflict of interest between those who control society's resources and the working class whose only resource is their labour. It is not our intention to elaborate these theories of class. For our purpose it is sufficient to note that it is virtually impossible to distinguish the majority of occupations in Australia according to the conflict theory. The differences of autonomy and power of a tradesman and a manager in a large industrial organisation are a matter of degree. In support of the hierarchical theory there is abundant evidence of differences in attitude, aspiration and behaviour associated with position. In education we find that expenditure, performance, participation and aspiration are all associated with social position.

Measures of position in the status hierarchy provide a most useful instrument for the exploration of higher education: who gets into the system and who misses out. To avoid confusion with conflict theories we avoid the term social class and use the more cumbersome but accurate socio-economic status (s.e.s.).

The more technical details of the s.e.s. measure (which embraces father's occupation, education and income) are given in Appendix 1.

Each of these is a necessary condition for entry. An individual cannot be admitted to higher education if there is no place available. He or she must have sufficient means of support during his or her study and must be able to pay any fees. He must aspire for a higher education or he would not get into the system.

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2 Hereafter in this report where 'his' is used it implies both male and female students except where context demands 'his (he)' meaning male only and 'her (she)' meaning female only.
not submit an application. Finally, he must satisfy the requirements for admission which means that his achievement must be above the cut-off level for admission. Each of these conditions is, however, also related to one or more of the others; and some are more amenable to influence by policy decisions than others. Obviously it is impossible for a student to enrol in higher education if a place is not available. The availability of places is determined by decisions of government coordinating agencies with respect to expanding or contracting the number of institutions and expanding or contracting particular institutions. There is competition for places when the number of qualified aspirants exceeds the number of places. In Australia the competition is settled by selecting students according to their level of academic achievement or potential. Thus alteration of the availability of places influences the level of achievement required for entry.

Academic achievement, the second necessary condition for entry, has been measured by students' marks in an external matriculation or higher school certificate examination. In Queensland and the Australian Capital Territory, assessment is now school-based with the level of academic achievement being based on teachers' assessments, which are subsequently modified in an attempt to cancel out differences between schools and subject areas. In general, gaining entry has at least two and sometimes three components.

The applicant must first 'pass' in a specified number and combination of subjects to qualify him for general entry to a particular institution. He must then pass in any particular subjects which may have been nominated as prerequisites for entry to certain courses. Finally, if the number of qualified applicants exceeds the number of places available the applicant must score sufficiently well in his entry examination or assessment to be above the cut-off point for admission. There is no direct way in which policy changes can affect the achievement of students except that the allocation of additional resources to the schools may raise levels of achievement, but this would not influence the number entering if the number of places remained unchanged. Level of achievement has an influence on both aspiration and accessibility. High achievement may raise a student's level of aspiration; it may also improve accessibility by helping him gain a scholarship or simply by increasing his determination to overcome obstacles to accessibility.

The third condition necessary for entry to higher education is its accessibility to qualified aspirants. This means that the student must have financial support while he is studying, be able to travel from his
place of residence to the institution, and be able to pay any fees and other essential costs. Policy decisions can influence accessibility by providing scholarships, living allowances, loans, creches and residential facilities.

The final condition is a motivational one: a student must aspire to higher education if he is to enter. There are always a number of qualified students for whom places are available and accessible, but who choose not to enrol. Aspirations are not particularly amenable to policy decisions although the provision of guidance services or the structuring of schools according to academic and non-academic streams may have some effect. Of much greater importance for the development of aspirations for higher education, particularly for younger students, is the influence of parents and their family environment. Level of aspiration can influence both achievement and accessibility. A high level of aspiration is likely to lead to better achievement and to greater determination to gain access.

Thus these four conditions are clearly not independent of one another, and before s.e.s. is introduced into the model it will be helpful to elaborate the model to show how these four constructs interact with one another. Figure 0.2 shows the model so far with the four necessary conditions for entry, and the relation of aspiration and achievement to accessibility. The arrows represent causal associations. Three types of arrow are shown. The double arrows indicate the four necessary conditions which have already been discussed. The straight single arrows indicate that there is some influence of achievement and aspiration on accessibility, and of availability on achievement. The curved arrow indicates the mutual influence of aspiration and achievement.

Figure 0.2 NECESSARY CONDITIONS FOR ENTRY TO HIGHER EDUCATION AND THEIR INTER-RELATIONSHIPS
Two additional constructs can now be introduced into the model. They are socio-economic status (s.e.s.) and intellectual ability. Both influence admission to higher education but unlike aspiration, accessibility and availability, they are not in themselves necessary conditions. At the lower levels of social class and ability entry to higher education becomes increasingly unlikely. A second way in which s.e.s. and ability differ from the others is that the individual has no influence over them: they are part of his social and genetic inheritance.

S.e.s. and ability are not independent of one another. More able individuals are more likely to be successful in their study and work and as a result of success attain a higher s.e.s. Their children will also possess more than average ability, assuming that there is genetic inheritance of ability. Furthermore, more able and higher s.e.s. individuals will tend to provide a family environment favouring the development of ability, assuming now that ability is influenced by environment. (Empirical studies of intelligence conclude that both genetic inheritance and environment are influential.) Thus in the expanded model there is an arrow from the student's s.e.s.

Since s.e.s. and ability precede the other constructs in time they are shown at the top of the model: their influence on entry is indirect, being mediated through aspiration, achievement and accessibility. S.e.s. influences all of these: a student from a high s.e.s. family is likely to have a higher level of aspiration, to have fewer obstacles in the way of accessibility and to achieve better results from his school work. Intellectual ability, on the other hand, influences admission only through achievement. The elaborated model is set out in Figure 0.3.

The model of factors determining entry to higher education presented in Figure 0.3 shows no less than 13 pathways in which the s.e.s. background of an individual can influence the likelihood that he will enter. In each of these the effect of the relationships is such as to increase the likelihood that individuals of high s.e.s. backgrounds will enter. No attempt has been made here to establish the relative importance of the various ways in which s.e.s. affects the likelihood of entry since this is an empirical question and the data which could provide an answer are not available.

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3 There are numerous empirical studies confirming these associations. A study by Blandy and Goldsworthy (1975) for example, shows that at about age 15 almost half of the children in a large sample of secondary schools in South Australia aspire to professional occupations which would require higher education. By final year a large number of these students have dropped out of school due to poor motivation or poor achievement. Those who stay the distance are, in disproportionately large numbers, from high s.e.s. families.
It should be noted that the model omits many other factors which influence the entry of students to higher education. Examples are the type of school attended, quality of teachers, sex, migrant origin and peer group influences. For older persons seeking admission the influence of their occupation and the desire for qualifications for promotion would be important considerations. Most of these additional variables would operate through variables already in the model, for example, the type of school attended will influence achievement. The model comprises what may be called the primary framework governing entry to higher education.

Wolfle (1954), in discussing resources of specialised talent in the U.S.A., has similarly distinguished two categories of factors. His first group is not dissimilar from the ones we have just outlined and are readily re-labelled ability, achievement, accessibility and aspiration. His second group are essentially our s.e.s. factors.
Subsequent interpretations of the observed association between s.e.s. and entrance to higher education will take account of the relationships shown in the model and seek to avoid over-simplified explanations. For example, the association between high s.e.s. and high educational attainment sometimes leads to the conclusion that the education system favours people from higher s.e.s. backgrounds. While this may be the case (it is an empirical question) the model serves as a reminder that there are several ways in which s.e.s. and educational attainment can be associated involving aspirations and accessibility. Generally the pathways to entrance via achievement are not amenable to change through policy decisions; on the other hand, the pathways linking s.e.s. to entry via aspirations and accessibility would seem to provide some opportunity for counteracting the effects of low s.e.s.

The next chapter presents information about students which is available from Census data and from statistical returns of universities and colleges of advanced education to their co-ordinating bodies. Subsequent chapters report the detailed analysis of the 1976 data (1977 in the case of Melbourne and Monash Universities) focusing on entry to higher education and examining the effect of background variables.

References

Unfortunately, virtually nothing is known about the social background of students who attended Australian universities in the nineteenth century although we do know that egalitarian ideals were strongly evidenced in the deliberations which led to the foundation of the University of Sydney. On the initiative of W.C. Wentworth, the New South Wales Legislative Council established a Select Committee in 1849 to report on the desirability of establishing a university. This committee reported within a month and recommended the founding of 'a University which shall be accessible to all classes . . .' (Barff, 1902, p.4.)

Two weeks later Wentworth moved the second reading of a bill to incorporate and endow the University:

He saw in this measure the facility given to the child of every man, of every class, to become great and useful in the destinies of his country. He saw in this measure the path opened to the poor man to the highest position which the country could afford him. So far from this being an institution for the rich, he took it to be an institution for the poor . . . (Barff, quoted on p.6).

At the inauguration ceremony in 1852 Sir Charles Nicholson spoke of the need:

. . . to meet an allegation that has, I believe, been made, to the effect that the University has been founded as an institution for the benefit, and as an exclusive possession, of the rich . . . The terms of admission to our classes and the scholarships we have founded are calculated to afford every facility and encouragement to candidates of whatever degree, who may be desirous of participating in the advantages which are held out to them (Barff, quoted on p.25).

The extent to which the four nineteenth century universities in Australia achieved these egalitarian ideals is impossible to judge in the absence of adequate evidence, but Macmillan (1968) claims that students at the University of Sydney were in fact drawn from a wide range of social classes.

It was often alleged by critics of the early Australian universities that they were the preserves of the upper class and the toys of the official and political cliques which dominated the colonial scene. But analyses of the enrolments of the oldest of them, even for the earliest years of their existence, has shown that their students were,
in fact, drawn from a wide range of social groups. If the sons of landowners, professional men and high-ranking public servants were present in strength, so were the sons of small tradesmen, of draftsmen and of small farmers. The universities were never bastions of social privilege, and the egalitarian aspirations underlying Wentworth's original Report of 1849 were fulfilled to a degree remarkable in a nineteenth-century context (p.12).

In an earlier study of the fathers' occupations of 129 students enrolled at the University of Sydney between 1852 and 1862 Macmillan (1963) found that the largest group were merchants followed by lawyers, landowners or pastoralists, retailers and government officials. Nine of the students were sons of artisans.

Because of the significance of British traditions in the development of Australian cultural life it is worth looking briefly at United Kingdom studies of the social class characteristics of university students before considering in more detail recent developments in Australia.

Britain

Knowledge of the social origins of students at the medieval English universities is extremely uneven although it now seems fairly clear that in the thirteenth and fourteenth centuries the universities were not aristocratic institutions but drew their students from all sections of society: 'Some were drawn from the humblest circumstances and went to university as proteges of local patrons' (Cobban, 1975, p.168). After examining research of this subject, Cobban concludes that the majority of students were of intermediate social status. During the later medieval period, however, the universities increasingly drew their students from the families of the aristocracy and during the seventeenth century they became more and more concerned with the task of providing an education fit for gentlemen. As Kearney (1970) has pointed out, with thousands of prosperous yeomen and merchants encouraging their sons to adopt this new life style '... a year or two at the university and the Inns of Court became the cheapest and easiest route' (p.27). Joan Simon (1963), in a study of the social origins of Cambridge students during the first half of the seventeenth century, examined the social status of the fathers of 294 entrants to St John's College, Cambridge, during the period 1630-1635. The largest group were gentlemen (35%), followed by clergy and professionals (21%), yeomen and husbandmen (18%), merchants and tradesmen (14%) and plebei (12%).
In another study of the social class origins of Cambridge graduates in the eighteenth and nineteenth centuries Jenkins and Jones (1950) concluded that a high proportion of fathers were members of the landowning class and about one-third were parsons. During the second half of the nineteenth century there was a steady fall in the proportion of students who were the sons of members of the non-earning land-owning class and an increasing proportion (rising to 82% by 1900) of students who had attended public schools. After 1900 this proportion declined to 68% by 1937 as the number of students drawn from Local Education Authority schools steadily grew. 'By 1937-8 a phenomenal expansion had taken place, among both fathers and sons, in the proportion of commercial and industrial occupations who entered with a corresponding decline under the headings of church and land-owning' (Jenkins and Jones, p.114).

The establishment of the provincial universities in the latter part of the nineteenth century, with curricula more closely aligned with the needs of industry and commerce, gave access to higher education to students drawn from a much broader social spectrum. The 1870 Education Act made primary education available to all and the 1944 Act extended this into secondary education by making it both free and compulsory. Concern about access to higher education, however, did not become a major social and political issue until the 1950s and there were many university people who viewed with alarm any suggestion that entry to higher education should be made more accessible and less elitist.

Barker (1949), writing soon after the end of World War II, argued that the university student body was a mixture of:

... the man from a home of old culture and manners and the man who has to start from scratch in making his own culture and manners ... If you make the poor and those who start from scratch the vast majority, you may be doing them an injustice ... you may make them too many to get the benefit of any real contact with the others, who will be reduced to a small minority - a minority too small to be able to give (p.36).

In similar vein, Jeffares claimed that by the late 1940s many students no longer came from cultured homes:

... and are not fit for University life in the old sense of the word, as it used to be lived in the traditions of Christian-Hellenism or Liberalism. They are a product of the desire for universal education, which logically carried out leads to a demand for higher education for those who are intellectually unfit for it.
As Joan Abbott (1971) has pointed out, however, it was hoped by many that one of the consequences of the 1944 Education Act would be a marked increase in the proportion of university students drawn from the lower socio-economic classes:

*By making available to all those of sufficient ability, a high school or grammar school education, it theoretically threw open the universities to the most gifted members of every social class. The kind of education which until then had been the prerogative of the 'privileged classes' of title and wealth was . . . to be enjoyed by all who should prove themselves academically to deserve it, irrespective of social origins or economic means (p.28).*

This hope, however, remained largely unfulfilled and the data on the social composition of the student body in higher education collected by the Robbins Committee came as a considerable surprise to those who had anticipated a shift in social composition twenty years after the implementation of the 1944 legislation. In 1960 about 26% of the population were classified as belonging to the non-manual socio-economic class (Jackson and Marsden, 1962) yet the data supplied in the Report of the Robbins Committee (1963a, p.4) showed that 71% of the 1961 undergraduates came from that group and only 25% came from the families of manual workers. The proportion of non-manual children who reached full-time higher education was about six times as great as that of the children of manual workers and their chances of entering degree-level courses was six times as great - and the differences were much greater for girls. Children from managerial/professional families were twenty times as likely to become full-time students in higher education as were children from unskilled and semi-skilled families (Report of the Robbins Committee, 1963b, p.38). The Robbins Report also presented data showing the effects of social class upon primary and secondary education and early withdrawal from the latter and concluded: *'The evidence presented so far has shown that whether a child of given ability qualifies for higher education seems to be closely related to the occupational position of his parents' (Appx. 1, p.52).*

The Robbins Committee also considered whether there was any evidence that these effects of social class differences were diminishing. Comparing 1961 with 1953 they concluded that there had not been any marked change as far as the achievement of five 'O' levels was concerned. They also found that for male university entrants the relative chances of entering higher education had changed very little between 1928 and 1960: the percentage of eighteen-year old boys from families of manual workers
entering universities in the period 1928-1947 was 1.4% and by 1960 this had increased to 2.6% (Appx. 1, p.54).

Furneaux (1962) summarised the situation very clearly:

For every ten children in the grammar schools of the L.E.A. system whose fathers are in unskilled occupations, there are about sixty-three from the professional, managerial and clerical groups combined. Among university entrants the representation of the unskilled group is reduced by a factor of about ten. University entrants are thus selected in terms of social class membership, but the evidence shows that this reflects the comparatively poor educational standards achieved by the lower class children . . . Some 53% of entrants to Cambridge colleges in 1955 were educated in public schools, as were 42% of those at Oxford, as compared with only about 9% of those entering universities in the English provinces. As less than 6% of children enter any kind of independent school, and as those who do are predominantly from upper class homes, it is clear that Oxford and Cambridge students are selected in terms of social class background to an exceptionally high degree (p.209).

Many other British studies have supported the claim that access to higher education is closely related to social class characteristics and that this relationship has proved surprisingly resistant to all attempts to markedly reduce its strength. This was one of the major conclusions of Joan Abbott's work and in attempting to explain it she drew attention to the complexity of the factors involved in entry to higher education which involve little-understood interactions between the influences of home, school, community and individual characteristics.

Since it has so often been shown that it is cultural differences rather than purely economic under-privilege which influences educational achievement, it is small wonder that a number of writers suggest that it is the lower middle-class children who are beginning to flood into the universities rather than children of the working class. Now that financial restraints are removed it is those who aspire to higher education and whose cultural patterns are congruent with it who are able most to benefit from university expansion (Abbott, p.35).

1 See, for example: Brokington and Stein (1963), Furneaux (1961), Floud, Halsey and Martin (1956), Kelly (1976), Klingender (1955), Sandford, Couper and Griffin (1965).

2 For a recent attempt to explain why this is so see Lawton (1977).
The combined effects of many of these influences are apparent several years before the age of entry to higher education. Dale (1963), for example, discussed the findings of a number of studies which showed how social class forces operated to eliminate a disproportionate number of working-class children from the grammar school population: 'When the university is reached only the favoured few from the semi-skilled and unskilled classes have survived, and are being compared by researchers with, for example, the group of much less highly selected students from the homes of professional parents' (p.134).

A major investigation (Central Advisory Council for Education, 1954) of the phenomenon known as 'early leaving' found that the influence of home background was the major reason for one-third of the boys leaving grammar schools prematurely even though they were capable of achieving at least two 'A' level passes. It also showed that the 15% of all children from professional and managerial classes make up 25% of the grammar school population and 43% of those reaching the sixth form, but the 12% with parents who are unskilled-workers make up 5% of pupils in grammar schools and only 1.5% of sixth formers.

Oxford and Cambridge still exhibit a very skewed distribution of social class for undergraduates although this is gradually changing as more students are recruited from maintained grammar schools. Percentages showing the type of school attended by male undergraduate entrants to Oxford are set out in Table 1.1.

Table 1.1 TYPE OF SCHOOL ATTENDED BY MALE UNDERGRADUATE ENTRANTS TO OXFORD

<table>
<thead>
<tr>
<th>Type of School</th>
<th>1939</th>
<th>1954</th>
<th>1966</th>
<th>1976</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintained</td>
<td>19</td>
<td>30</td>
<td>40</td>
<td>44</td>
</tr>
<tr>
<td>Independent</td>
<td>62</td>
<td>53</td>
<td>41</td>
<td>37</td>
</tr>
<tr>
<td>Direct grant</td>
<td>13</td>
<td>15</td>
<td>17</td>
<td>16</td>
</tr>
<tr>
<td>Others</td>
<td>6</td>
<td>2</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>


3 If the 'pool of ability', which was used to justify the expansionary programme recommended by the Robbins Committee, has remained largely untapped then the higher participation rate of students from middle class families may have been achieved at the expense of more able working class children.

4 For more recent data see: Department of Education and Science (1977).
Data collected by the Robbins Committee showed that women were very much under-represented in the university population and Table 1.2 shows that as the universities expanded after 1945 the percentage of women students remained remarkably constant.

**Table 1.2 WOMEN AS A PERCENTAGE OF FULL-TIME UNIVERSITY STUDENTS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Full-time university students</th>
<th>Women as percentage of full-time students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>50,000</td>
<td>23.3</td>
</tr>
<tr>
<td>1955</td>
<td>85,000</td>
<td>25.0</td>
</tr>
<tr>
<td>1960</td>
<td>107,000</td>
<td>25.5</td>
</tr>
</tbody>
</table>


Since 1960, however, the proportion of women students has been steadily growing. In 1960 there were 89,000 full-time first degree students in universities and by 1976 this number had risen to 222,000; over that period the number of men students had increased by 114% and the number of women by 246% (Association of University Teachers, 1977). A recent report (Conference of University Administrators, 1977) which attempts to forecast student numbers for the remainder of this century also presents data revealing a strong trend for the proportion of women in higher education to increase. The fact remains, however, that for a considerable time to come, and for a great variety of reasons, women are likely to be very much under-represented in higher education. In this connection it is worth noting a paper by Crook (1968) presenting data from a survey, of universities only, carried out in 1965. This showed that the Councils of 39 universities (excluding Oxbridge and those in Scotland) had a total of 2,047 members of whom only 149 were women. At that time all British universities had a total of 2,050 professors of whom only 30 were women - and 17 of those were at the University of London. There is no reason to suppose that these figures have changed significantly since 1965.

We can sum up by saying that access to higher education in Britain, and especially in England and Wales, is much more difficult for children with working class parents than it is for those from managerial and professional families. Data available for the 1970s indicate that this situation shows little sign of changing: 51% of home university entrants in 1975 had parents who were managers or professionals even though these two occupational groups only include 16% of the males aged 45-59 in the population (Conference of University Administrators, 1977).
Before turning again to the Australian scene it is worth glancing quickly at the current situation in the United States - the other country from which information about educational patterns readily reaches Australia.

U.S.A.

A study of access to higher education by Crossland (1971) concludes as follows:

Since college costs are high and still rising and since there is considerable variation in family income, it is not surprising to discover that higher education enrolment is skewed. About half of all current students come from families in the top economic quarter; barely six or eight per cent come from families in the lowest quarter. . . . Unless and until American society decides to assume total public financial responsibility for higher education, it seems clear that enrolment will continue to be determined in large measure by parental income (pp.65-6).

But some commentators, such as Cross (1971), have argued that such a large proportion of the relevant age-group is now involved in post-secondary education that socio-economic factors no longer constitute a very significant barrier to access.

The egalitarian era is rapidly approaching; most young people are already pursuing postsecondary education. Although the major concern of educators at the present time is with access to higher education (the data) indicate that, for men at least, low academic ability is keeping more students from continuing their education than is the barrier of lack of financial resources.

This rather more optimistic view is supported by Peng (1977) who has compared 1961 and 1972 data on participation rates and entry characteristics. He found that during this period the participation rate in post-secondary education had declined from 59% to 54% and the decrease in four-year college entry rates was greater for higher ability groups than for lower ability groups - for men it amounted to a fall of 16%. Socio-economic background is still a factor in entry to college but its significance has fallen over this period and Peng concludes that federal government programmes aimed at helping needy students and minority groups have had an impact on enrolment patterns.

Despite the very great expansion in the number and range of institutions of higher education since 1945 socio-economic factors still play an
important part in restricting access to them, nevertheless, it is
probably true to say that, as far as access is concerned, the system of
post-secondary education in America displays a fuller realisation of
egalitarian ideals than that of any other country.

Australia: 1945-1974

World War II brought about a number of important changes in Australian
higher education. Urgent national planning and manpower needs related to
the war effort led to the federal government's involvement in higher
education. In 1942 a prototype Universities Commission was established to
co-ordinate the efforts of the universities and the government and to
advise the Director-General of Manpower. Late in 1945 the Commonwealth
Office of Education was established to play a research and advisory role:
amongst other tasks, it was expected 'to advise the Minister of Post-War
Reconstruction on matters relating to education' and to advise on grants
to 'the States and other authorities for educational purposes' (Waddington
et al, 1950, p.23). During the war the faculties of medicine, dentistry,
veterinary science, science, engineering and agriculture became 'reserved'
faculties, study in which was regarded as a form of national service for
which fees were paid by the government, together with a means-tested
living allowance. At the end of the war this financial assistance scheme
was extended to students in non-reserved faculties, and continued until the
beginning of the competitive Commonwealth Scholarship Scheme in 1951. More
important, in terms of number of students involved, was the Commonwealth
Reconstruction Training Scheme, begun in 1944 with aim of rehabilitating
ex-service men and women by giving them the opportunity to acquire civil
occupations, with free training at a university or technical college, plus
living allowance and supplementary allowances. In 1947 more than five times
as many students received financial assistance under C.R.T.S. than under
the financial assistance scheme, and the influx of ex-service personnel
significantly swelled student numbers in the immediate post-war period.
In 1939 the total enrolments at the six Australian universities were 14,024,
while in 1945, 1946 and 1947 their numbers rose to 18,326, 25,008 and 29,075,
of which 6%, 32% and 39% respectively received assistance under C.R.T.S.

5 All information relating to the 1940s is taken from Waddington et al, (1950).
6 Before World War I each of the six states had a university in its capital
city (6,200 students in 1915).
7 The Commonwealth government set another precedent at this time which may have been historically significant, by supplying directly the capital funds needed to cope with the rapid growth in student numbers.
This represented an increase in the number of students from 2.02 per thousand of the population to 3.82 (Waddington et al, pp.156-7). In other words, the proportion of university students in the Australian population doubled in less than ten years, and since C.R.T.S. assistance was offered on a needs basis it seems safe to conclude that the social mix of students would have changed substantially from that of the pre-war period. It should be remembered, however, that although the two student assistance schemes removed some of the financial barriers to university participation by lower socio-economic status (s.e.s.) groups, entry requirements remained the same, and the educational disadvantage experienced by lower s.e.s. students while at school would have meant that far fewer lower s.e.s. students could qualify for entry to university (and take advantage of C.R.T.S.) than the higher s.e.s. students who, due to a variety of family, social and school factors, tend far more frequently to matriculate. Nevertheless, there is some indirect evidence (e.g. Hohne, 1951, shows the proportion of private school students to be decreasing at Melbourne University from 1939) that more students had lower s.e.s. after the war than before.

The rapid expansion of tertiary education in the immediate post-war years set the pattern for what was to follow up to 1975. The 1951 States Grants (Universities) Act led to direct grants from the federal government to the States to meet the bulk of the costs of university expansion, now beginning to involve new universities as well as more students. This expansion accelerated as a result of the report of the Murray Committee (Report of the Committee on Australian Universities, 1957) and was guided by the Australian Universities Commission, established in 1959 in response to the Murray Committee's recommendations. The next major development was the establishment of the college of advanced education system after the Martin Committee (Tertiary Education in Australia, 1964-65) recommended the development of colleges offering vocationally-oriented courses at a level below that of degree work. Its growth boosted by extensive federal government funding (in accordance with advice from the newly established Commission on Advanced Education), the C.A.E. sector mushroomed dramatically, with student enrolments rising from 28,615 in 1968 to 44,351 in 1971 and 107,192 in 1974, during which time university enrolments rose from 101,537 to 123,776 and then 142,859 (Anderson et al, 1975, p.28).  

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8 The spectacular increase in C.A.E. student numbers between 1971 and 1974 is partly attributable to the fact that in 1973 the federal government assumed financial responsibility for State teachers colleges, thereby bringing those colleges and their considerable enrolments into the C.A.E. system.
From 1974 events moved rapidly. In that year the Labor Government assumed full financial responsibility for tertiary education, abolished all tuition fees, and replaced the highly competitive Commonwealth Scholarship Scheme with the needs-based Tertiary Education Assistance Scheme. The desire to open up tertiary education to the economically depressed sections of society and minority groups traditionally badly under-represented in universities and colleges was a major consideration in these policy decisions. But economic conditions were deteriorating rapidly in 1974-75, so that the Whitlam Government's commitment to education as a force for social equality had to be reconciled with economic realities. In 1975 the Labor Government refused to accept the recommendations for funding made by the Universities Commission and the Commission on Advanced Education, imposing restraints ('guidelines') on the advisory bodies, with the result that growth was cut dramatically. The present Fraser Government has carried this procedure further: in 1976 there was only marginal real growth in finance for tertiary education, and in 1977 growth dwindled to zero, with no signs that things will improve in the foreseeable future.

During this period of expansion of post-secondary education (which except for the early 1950s covers the whole post-war period) there was an even greater expansion in secondary education throughout Australia. The greater part of this expansion took place in State high schools, with the proportion of students in independent and Catholic schools declining slightly. From the mid-1950s to the present time the number of students staying at school beyond the age of compulsory education increased slightly. In the last ten years alone the retention rate - the ratio of the number enrolled in the final school year to the number that entered secondary school in a given year - rose from 22% in 1967 to 34% in 1976. Hence since the war the number of students eligible for entry to higher education has increased dramatically. The following tables (Table 1.3 and Table 1.4) show secondary school enrolments since 1962 and retention rates for years since 1967 according to Commonwealth Department of Education statistics.

**Australian Higher Education in 1976**

In 1976, 79,443 students enrolled to begin tertiary courses for a first degree or diploma in an Australian university or C.A.E. and it is these persons about whom this study reports. This number does not include students who enrolled externally for their studies. The corresponding figure in 1971 was just-over 50,000, and five years earlier there was no comparable figure because the C.A.E. system was only just about to begin.
### Table 1.3 SECONDARY SCHOOL ENROLMENTS, 1962-1976

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrolments in Government Schools</th>
<th>Enrolments in Non-government Schools</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>466,633</td>
<td>174,512</td>
<td>641,145</td>
</tr>
<tr>
<td>1963</td>
<td>490,760</td>
<td>181,538</td>
<td>672,298</td>
</tr>
<tr>
<td>1964</td>
<td>537,376</td>
<td>194,709</td>
<td>732,085</td>
</tr>
<tr>
<td>1965</td>
<td>567,548</td>
<td>203,498</td>
<td>771,046</td>
</tr>
<tr>
<td>1966</td>
<td>593,383</td>
<td>207,395</td>
<td>800,778</td>
</tr>
<tr>
<td>1967</td>
<td>629,536</td>
<td>218,282</td>
<td>847,818</td>
</tr>
<tr>
<td>1968</td>
<td>664,131</td>
<td>225,724</td>
<td>889,855</td>
</tr>
<tr>
<td>1969</td>
<td>693,986</td>
<td>230,918</td>
<td>924,904</td>
</tr>
<tr>
<td>1970</td>
<td>719,381</td>
<td>236,829</td>
<td>956,210</td>
</tr>
<tr>
<td>1971</td>
<td>745,122</td>
<td>241,674</td>
<td>986,796</td>
</tr>
<tr>
<td>1972</td>
<td>773,286</td>
<td>247,131</td>
<td>1,020,417</td>
</tr>
<tr>
<td>1973</td>
<td>788,220</td>
<td>254,164</td>
<td>1,042,384</td>
</tr>
<tr>
<td>1974</td>
<td>801,801</td>
<td>261,084</td>
<td>1,062,885</td>
</tr>
<tr>
<td>1975</td>
<td>834,301</td>
<td>265,621</td>
<td>1,099,922</td>
</tr>
<tr>
<td>1976</td>
<td>848,238</td>
<td>269,911</td>
<td>1,118,122</td>
</tr>
</tbody>
</table>

### Table 1.4 SECONDARY SCHOOL RETENTION RATES, 1967-1976

<table>
<thead>
<tr>
<th>Year</th>
<th>Government %</th>
<th>Catholic %</th>
<th>Non-Catholic Independent %</th>
<th>All Schools %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1967</td>
<td>18.4</td>
<td>N.A.</td>
<td>N.A.</td>
<td>22.7</td>
</tr>
<tr>
<td>1968</td>
<td>20.4</td>
<td>27.5</td>
<td>76.3</td>
<td>25.0</td>
</tr>
<tr>
<td>1969</td>
<td>23.0</td>
<td>29.7</td>
<td>78.5</td>
<td>27.5</td>
</tr>
<tr>
<td>1970</td>
<td>24.8</td>
<td>31.6</td>
<td>80.6</td>
<td>29.3</td>
</tr>
<tr>
<td>1971</td>
<td>25.9</td>
<td>33.9</td>
<td>81.7</td>
<td>30.6</td>
</tr>
<tr>
<td>1972</td>
<td>27.6</td>
<td>35.2</td>
<td>86.5</td>
<td>32.4</td>
</tr>
<tr>
<td>1973</td>
<td>27.9</td>
<td>37.7</td>
<td>88.0</td>
<td>33.1</td>
</tr>
<tr>
<td>1974</td>
<td>27.3</td>
<td>39.1</td>
<td>90.3</td>
<td>32.9</td>
</tr>
<tr>
<td>1975</td>
<td>28.6</td>
<td>40.9</td>
<td>88.2</td>
<td>34.1</td>
</tr>
<tr>
<td>1976</td>
<td>29.6</td>
<td>41.5</td>
<td>88.9</td>
<td>34.9</td>
</tr>
</tbody>
</table>
Table 1.5  THE NUMBERS OF STUDENTS, BY SEX, ENROLLED IN UNIVERSITIES AND C.A.E.s IN 1976 AND THEIR PROPORTIONS OF THE TOTAL POPULATION FOR EACH AGE LEVEL

| Age | Population N | University Enrolments | | | C.A.E. Enrolments | | | FEMALES | University Enrolments | | | C.A.E. Enrolments |
|-----|--------------|-----------------------|---|---|-------------------|---|---|-----------------------|---|---|-------------------|
|     | N            | Total                | % | N | Total                | % | N | Total                | % | N | Total                |
| 16  | 126651       | 302 0.2              | 290 0.2 | 191 0.1 | 184 0.1 | 120660 | 325 0.3 | 318 0.3 | 364 0.3 | 359 0.3 |
| 17  | 124371       | 6579 5.3             | 6176 4.9 | 4358 3.5 | 4155 3.3 | 115389 | 5115 4.3 | 4701 3.9 | 6655 5.5 | 6232 5.2 |
| 18  | 120232       | 11461 9.5            | 5642 4.7 | 8030 6.7 | 4481 3.7 | 116543 | 7778 6.7 | 3314 2.8 | 11407 9.8 | 4896 4.2 |
| 19  | 116789       | 11299 9.7            | 1361 1.2 | 8348 7.1 | 1817 1.5 | 113017 | 7761 6.7 | 664 0.6 | 11048 9.8 | 1042 1.0 |
| 20  | 114730       | 10265 8.9            | 455 0.3 | 7213 6.3 | 825 0.7 | 110935 | 6534 5.9 | 242 0.2 | 7211 6.5 | 451 0.4 |
| 21  | 112624       | 8514 7.6             | 290 0.2 | 5745 5.1 | 625 0.6 | 111458 | 4617 4.1 | 166 0.1 | 3603 1.9 | 281 0.3 |
| 22  | 108831       | 6385 5.7             | 198 0.2 | 4745 4.4 | 516 0.5 | 109944 | 3098 2.8 | 140 0.1 | 2128 3.2 | 238 0.2 |
| 23  | 110924       | 5204 4.7             | 189 0.2 | 4008 3.6 | 477 0.4 | 11247 | 2324 2.1 | 147 0.1 | 1628 1.9 | 175 0.2 |
| 24  | 110076       | 4084 3.7             | 109 0.2 | 3550 3.2 | 418 0.4 | 109166 | 1905 1.7 | 133 0.1 | 1535 1.4 | 165 0.2 |
| 25  | 111326       | 3815 3.4             | 179 0.2 | 3256 2.9 | 415 0.4 | 110879 | 1755 1.6 | 177 0.2 | 1448 1.3 | 208 0.2 |
| 26  | 111319       | 3297 3.0             | 148 0.1 | 2890 2.6 | 355 0.3 | 110461 | 1540 1.4 | 149 0.1 | 1256 1.1 | 176 0.2 |
| 27  | 109789       | 3120 2.8             | 163 0.1 | 2696 2.4 | 399 0.4 | 109490 | 1542 1.4 | 139 0.1 | 1157 1.0 | 148 0.1 |
| 28  | 112909       | 2883 2.5             | 148 0.1 | 2513 2.2 | 344 0.3 | 111918 | 1442 1.3 | 135 0.1 | 1108 1.0 | 167 0.1 |
| 29  | 123216       | 2652 2.2             | 121 0.1 | 2217 1.8 | 313 0.3 | 118390 | 1242 1.0 | 119 0.1 | 987 0.8 | 160 0.1 |
| 30-39 | 898139       | 11970 1.3            | 603 0.0 | 9155 1.0 | 1296 0.0 | 857636 | 7089 0.8 | 792 0.1 | 6429 0.7 | 999 0.1 |
| 40+ | 4249         | 221                  | 3038 416 | 3994 463 | 3310 484 |


2 In all tables the report percentages will only be presented to one decimal place. This will lead in some cases to totals which do not appear to tally to 100. However 100 will be used as the total wherever all the population or sample data have been included.
If these beginning students, a single year's enrolment in Australian higher education, are compared with a single age cohort (either the 17 or 18 year olds from which the majority of them stemmed) they amount to just 33% - a most surprising figure when it is compared with the rates of between only 10 and 20% which Radford (1962) reported for the numbers of students who stayed at school for all the years of secondary education in Australia at the end of the 1950s.9

Of course the commencing students are of various ages, and a more realistic picture of the involvement of the Australian population in higher education is obtained from Table 1.5 which shows the numbers and percentages of males and females for various age groups who are engaged in or commenced higher education in 1976.10

The remarkable growth of this level of education since 1960 is clear with almost 9% of both the 17 and 18 year olds beginning courses at C.A.E.s or universities in 1976, together with very significant numbers of older students of all ages (amounting to 25% of all the new enrollees) also commencing their studies.

In the initial age groups, females tend to begin their studies sooner, but of most of the older ages male enrolments are almost double those of female until the oldest groups (40 plus) where females predominate in both universities and C.A.E.s.

The new students were distributed between universities and C.A.E.s as shown in Table 1.6 with 46.5% in the universities, an almost identical percentage in the metropolitan colleges and with 7.9% in the non-metropolitan colleges.

The distribution in 1976 does reflect the expansion that has occurred in the C.A.E. sector over the last five years and the comparatively static state of the university sector during that period. In 1971 the balance was the other way with the majority (62%) of these tertiary students in universities.

9 Karmel reported in an address to ANZAAS at the University of N.S.W. in 1972 that tertiary students in universities and the fore-runners of C.A.E.s in 1962 amounted to 8-9% of the 17-22 year old population - a commonly used index of participation. The Sixth Report of the Australian Universities Commission (1975) gives the same index for 1976 as 18.3%. Change in the index demonstrates variation in participation or availability, but its value deflates the actual situation since it divides a number of students by a population figure for a period (5 years) which is rather longer than the years these students would average in higher education.

10 Borrie (1972) has discussed the more sophisticated analysis of participation in terms of these age cohorts.
Table 1.6  NUMBER OF NEW TERTIARY STUDENTS FOR A FIRST DEGREE OR DIPLOMA IN AUSTRALIA, 1976, BY SEX

<table>
<thead>
<tr>
<th>Type of Institution</th>
<th>Male</th>
<th>Female</th>
<th>Total N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universities</td>
<td>21719</td>
<td>15152</td>
<td>36871</td>
<td>46.5</td>
</tr>
<tr>
<td>Metropolitan C.A.E.s</td>
<td>18853</td>
<td>17484</td>
<td>36337</td>
<td>45.6</td>
</tr>
<tr>
<td>Non-Metropolitan or Country C.A.E.s</td>
<td>3047</td>
<td>3188</td>
<td>6235</td>
<td>7.9</td>
</tr>
<tr>
<td>(Total C.A.E.s)</td>
<td>(21900)</td>
<td>(20672)</td>
<td>(42572)</td>
<td>(53.5)</td>
</tr>
<tr>
<td>Total All Institutions</td>
<td>43619</td>
<td>35824</td>
<td>79443</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 1.7  TYPES OF ENROLMENTS, OF NEW STUDENTS, BY SEX, IN UNIVERSITIES AND C.A.E.s in 1976

<table>
<thead>
<tr>
<th>Type of Enrolment</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Full time</td>
<td>18025</td>
<td>12058</td>
<td>11552</td>
</tr>
<tr>
<td></td>
<td>83.0</td>
<td>79.6</td>
<td>61.3</td>
</tr>
<tr>
<td>Part time</td>
<td>3694</td>
<td>3094</td>
<td>7301</td>
</tr>
<tr>
<td></td>
<td>17.0</td>
<td>20.4</td>
<td>38.7</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total number</td>
<td>21719</td>
<td>15152</td>
<td>18853</td>
</tr>
</tbody>
</table>

Type of Enrolment

Table 1.7 shows that both sectors offered full and part-time possibilities for study although overall the C.A.E.s - particularly in metropolitan areas - are now much more involved in the latter style of study than are the universities. Eighteen per cent (18%) of the university enrollees were part time compared with 27% in the C.A.E.s (29% metropolitan, 14% non-metropolitan).

Males still exceed females in the universities although their majority of 59% has dwindled from 72% in 1961, 68% in 1966 and 62% in 1971. In both types of C.A.E. the sexes are evenly balanced.

It is not clear which of the factors in the model discussed in the Introduction are most responsible for the similarities and differences that now mark the participation in these two sectors of Australian tertiary education. Aspiration between the sexes appears to have been rapidly equalising with a marked increase in the numbers of girls staying on to complete secondary education in all States. Beswick (1975) has reported a more direct study of the way aspects of aspiration and achievement have interacted to result in the rapid increase in women entering Australian tertiary education. Rowland (1976) has analysed the achievements of the sexes at the Higher School Certificate examinations - the basis in Victoria
for tertiary selection. He found that there are now very comparable overall enrolments and, on average, a higher pass rate for girls, but that boys still achieve passes, at the highest level, significantly more often than girls.

Between the universities and the metropolitan colleges there is a reverse pattern of participation by the sexes in part-time study. In universities 20% of females are part-time and 17% of males. In the metropolitan colleges the corresponding values were 18.5% and 39% respectively, and a similar bias holds in the non-metropolitan colleges with 18% and 12.5%.

These gross features of the distribution of the 1976 enrollees are determined by the availability of the particular courses that the two types of institution offer and by the extent to which the two sexes aspire and achieve places in them. Tables 1.8, 1.9 and 1.10 show the faculty, sex and type of enrolment distributions for each type of institution.

The Potential Family Background of New Enrolments in 1976

If we assume these students are the children of parents who are now aged between 40-59\(^{11}\) we can derive some information from the data of the 1971 population Census about the characteristics of the whole Australian population who could, in theory, have been involved in tertiary education.\(^{12}\) Not all the socio-economic characteristics that will be discussed in Chapter 3 for our samples of students in universities and C.A.E.s are available from the Census data. Nevertheless some very relevant information is available concerning the occupations, level of schooling, post school educational achievement, and country of birthplace of the potential parent population of the students of 1976.

Occupations of Parents

Using the 11 major categories of the Census, the occupational distribution for males and females is shown in Table 1.11.

These data only report the occupation of persons employed at the time of the 1971 Census. The distribution for males may be a quite valid estimate of the occupational distribution of the fathers of the potential

\(^{11}\) The presence of increasing numbers of mature age students among new enrollees clearly undermines this assumption, but their numbers are not yet such that they invalidate the above as a conservative base for comparing the actual participation that is discussed in Chapter 4.

\(^{12}\) This assumption also ignores changes in population by immigration or emigration over the last 5 years which may have altered the characteristics of the families of students enrolling in 1976.
### Table 1.8: The Distribution of New Tertiary Students (First Degree or Diploma) in 1976 Between Faculties, by Sex, by Type of Enrolment:

<table>
<thead>
<tr>
<th>Faculty of Enrolment</th>
<th>Full Time</th>
<th></th>
<th>Part Time</th>
<th></th>
<th>Total N</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>361</td>
<td>119</td>
<td>15</td>
<td>13</td>
<td>508</td>
<td></td>
</tr>
<tr>
<td>Applied Science</td>
<td>234</td>
<td>53</td>
<td>24</td>
<td>2</td>
<td>313</td>
<td></td>
</tr>
<tr>
<td>Science/Biology</td>
<td>3727</td>
<td>2010</td>
<td>379</td>
<td>246</td>
<td>6362</td>
<td></td>
</tr>
<tr>
<td>Pharmacy</td>
<td>58</td>
<td>99</td>
<td>1</td>
<td>-</td>
<td>158</td>
<td></td>
</tr>
<tr>
<td>Building/Surveying</td>
<td>235</td>
<td>1</td>
<td>23</td>
<td>-</td>
<td>259</td>
<td></td>
</tr>
<tr>
<td>Total Science</td>
<td>4615</td>
<td>2272</td>
<td>442</td>
<td>261</td>
<td>7600</td>
<td></td>
</tr>
<tr>
<td>Commerce/Economics</td>
<td>2809</td>
<td>847</td>
<td>1160</td>
<td>207</td>
<td>5023</td>
<td></td>
</tr>
<tr>
<td>Computer Studies</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Commerce/Business</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Commerce</td>
<td>2809</td>
<td>847</td>
<td>1160</td>
<td>207</td>
<td>5023</td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>3771</td>
<td>5551</td>
<td>1368</td>
<td>1992</td>
<td>12682</td>
<td></td>
</tr>
<tr>
<td>Social Work</td>
<td>77</td>
<td>275</td>
<td>4</td>
<td>17</td>
<td>373</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>66</td>
<td>108</td>
<td>6</td>
<td>15</td>
<td>195</td>
<td></td>
</tr>
<tr>
<td>Total Arts</td>
<td>3914</td>
<td>5934</td>
<td>1378</td>
<td>2024</td>
<td>13250</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>327</td>
<td>526</td>
<td>148</td>
<td>250</td>
<td>1251</td>
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<td>339</td>
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<td>28</td>
<td>5</td>
<td>469</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>2360</td>
<td>66</td>
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<td>5</td>
<td>2628</td>
<td></td>
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<td>Total Engineering</td>
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<td>225</td>
<td>10</td>
<td>3097</td>
<td></td>
</tr>
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<td>554</td>
<td>134</td>
<td>68</td>
<td>1893</td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td>1006</td>
<td>511</td>
<td>12</td>
<td>5</td>
<td>1534</td>
<td></td>
</tr>
<tr>
<td>Dentistry</td>
<td>233</td>
<td>48</td>
<td>2</td>
<td>3</td>
<td>286</td>
<td></td>
</tr>
<tr>
<td>Veterinary Science</td>
<td>183</td>
<td>98</td>
<td>6</td>
<td>2</td>
<td>289</td>
<td></td>
</tr>
<tr>
<td>Paramedical Studies</td>
<td>46</td>
<td>200</td>
<td>1</td>
<td>3</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>Total Medicine</td>
<td>1468</td>
<td>857</td>
<td>21</td>
<td>13</td>
<td>2359</td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>1056</td>
<td>895</td>
<td>186</td>
<td>261</td>
<td>2398</td>
<td></td>
</tr>
<tr>
<td>Total Number</td>
<td>18025</td>
<td>12058</td>
<td>3694</td>
<td>3094</td>
<td>36871</td>
<td></td>
</tr>
</tbody>
</table>

1 The enrolment information for various courses and faculties has been grouped in eight underlined large faculties which are the way course and faculty information is presented throughout this report.
Table 1.9  THE DISTRIBUTION OF NEW TERTIARY STUDENTS (FIRST DEGREE OR DIPLOMA) IN 1976 BETWEEN FACULTIES, BY SEX, BY TYPE OF ENROLMENT:

**METROPOLITAN C.A.E.s**

<table>
<thead>
<tr>
<th>Faculty of Enrolment</th>
<th>Full Time Male</th>
<th>Full Time Female</th>
<th>Part Time Male</th>
<th>Part Time Female</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>93</td>
<td>23</td>
<td>3</td>
<td>-</td>
<td>119</td>
</tr>
<tr>
<td>Applied Science</td>
<td>861</td>
<td>290</td>
<td>529</td>
<td>97</td>
<td>1777</td>
</tr>
<tr>
<td>Science/Biology</td>
<td>664</td>
<td>335</td>
<td>215</td>
<td>86</td>
<td>1300</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>100</td>
<td>100</td>
<td>8</td>
<td>3</td>
<td>211</td>
</tr>
<tr>
<td>Building/Surveying</td>
<td>96</td>
<td>-</td>
<td>42</td>
<td>-</td>
<td>138</td>
</tr>
<tr>
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<td>748</td>
<td>797</td>
<td>186</td>
<td>3407</td>
</tr>
<tr>
<td>Commerce/Economics</td>
<td>25</td>
<td>13</td>
<td>-</td>
<td>29</td>
<td>67</td>
</tr>
<tr>
<td>Computer Studies</td>
<td>148</td>
<td>52</td>
<td>136</td>
<td>25</td>
<td>361</td>
</tr>
<tr>
<td>Commerce/Business</td>
<td>2136</td>
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<td>3548</td>
<td>569</td>
<td>7532</td>
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<tr>
<td>Total Commerce</td>
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<td>1344</td>
<td>3684</td>
<td>623</td>
<td>7960</td>
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<td>498</td>
<td>687</td>
<td>3542</td>
</tr>
<tr>
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<td>49</td>
<td>81</td>
<td>389</td>
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<td>Music</td>
<td>117</td>
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<td>28</td>
<td>57</td>
<td>405</td>
</tr>
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<td>575</td>
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<td>11302</td>
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<td>931</td>
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</tr>
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<td>Dentistry</td>
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</tr>
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<td>Veterinary Science</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>Total Medicine</td>
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<td>152</td>
<td>259</td>
<td>2294</td>
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<tr>
<td>Others</td>
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<td>Total Number</td>
<td>11552</td>
<td>14276</td>
<td>7301</td>
<td>3208</td>
<td>36337</td>
</tr>
</tbody>
</table>
Table 1.10  THE DISTRIBUTION OF NEW TERTIARY STUDENTS (FIRST DEGREE OR DIPLOMA) IN 1976 BETWEEN FACULTIES, BY SEX, BY TYPE OF ENROLMENT:

<table>
<thead>
<tr>
<th>Faculty of Enrolment</th>
<th>Full Time Male</th>
<th>Full Time Female</th>
<th>Part Time Male</th>
<th>Part Time Female</th>
<th>Total N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>426</td>
<td>101</td>
<td>1</td>
<td>-</td>
<td>528</td>
</tr>
<tr>
<td>Applied Science</td>
<td>171</td>
<td>60</td>
<td>42</td>
<td>18</td>
<td>291</td>
</tr>
<tr>
<td>Science/Biology</td>
<td>52</td>
<td>27</td>
<td>9</td>
<td>4</td>
<td>92</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Building/Surveying</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Science</td>
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<td>52</td>
<td>22</td>
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<tr>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Computer Studies</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Commerce/Business</td>
<td>434</td>
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<tr>
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<td>124</td>
<td>226</td>
<td>47</td>
<td>831</td>
</tr>
<tr>
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<td>282</td>
<td>73</td>
<td>150</td>
<td>755</td>
</tr>
<tr>
<td>Social Work</td>
<td>3</td>
<td>5</td>
<td>-</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Music</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total Arts</td>
<td>253</td>
<td>287</td>
<td>73</td>
<td>153</td>
<td>766</td>
</tr>
<tr>
<td>Education</td>
<td>782</td>
<td>2017</td>
<td>30</td>
<td>92</td>
<td>2921</td>
</tr>
<tr>
<td>Architecture</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Engineering</td>
<td>276</td>
<td>-</td>
<td>25</td>
<td>-</td>
<td>301</td>
</tr>
<tr>
<td>Total Engineering</td>
<td>1058</td>
<td>2017</td>
<td>55</td>
<td>92</td>
<td>3222</td>
</tr>
<tr>
<td>Law</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Medicine</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Dentistry</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Veterinary Science</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Paramedical Studies</td>
<td>10</td>
<td>29</td>
<td>6</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>Total Medicine</td>
<td>10</td>
<td>29</td>
<td>6</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>Others</td>
<td>174</td>
<td>146</td>
<td>57</td>
<td>83</td>
<td>460</td>
</tr>
<tr>
<td>Total Number</td>
<td>2578</td>
<td>2791</td>
<td>469</td>
<td>397</td>
<td>6235</td>
</tr>
</tbody>
</table>
Table 1.11 PERCENTAGE DISTRIBUTION OF OCCUPATIONS OF EMPLOYED PERSONS OF AGE, 35-54 YEARS IN 1971 IN AUSTRALIA - CENSUS GROUPINGS

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>Males %</th>
<th>Females %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional, Technical etc.</td>
<td>8.3</td>
<td>11.0</td>
</tr>
<tr>
<td>Administrative, Executive etc.</td>
<td>12.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Clerical</td>
<td>6.2</td>
<td>23.7</td>
</tr>
<tr>
<td>Sales</td>
<td>5.8</td>
<td>13.4</td>
</tr>
<tr>
<td>Farmers, Fishermen etc.</td>
<td>9.4</td>
<td>5.3</td>
</tr>
<tr>
<td>Miners, Quarrymen etc.</td>
<td>1.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Transport and Communication</td>
<td>8.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Tradesmen, Labourers etc.</td>
<td>39.7</td>
<td>16.9</td>
</tr>
<tr>
<td>Service, Sport etc.</td>
<td>4.1</td>
<td>18.6</td>
</tr>
<tr>
<td>Armed Services</td>
<td>0.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Inadequately described</td>
<td>4.4</td>
<td>4.8</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

1 Constructed from Table 4, Bulletin 4.9, 1971 Census of Population and Housing, Australian Bureau of Statistics.

students of 1976. However, the very much smaller number of females means that the distribution for females must be a much less certain estimate for the occupational backgrounds of the mothers of potential students in 1976. Many mothers who were no longer in the workforce in 1976 would have contributed to the various categories of this Census distribution at some earlier stage of their careers.

The occupational categories of the Census in Table 1.11 are manpower or industrial classifications. In order to relate these occupations in the population of potential parents to the research studies reviewed in Chapter 2 and to our own data that are reported in the following chapters, a re-grouping of the minor groups in the Census was undertaken. Table 1.12 presents the Census of occupations in the categories used in this study in so far as the re-grouping allowed.

Level of Schooling

There are Census data for the level of schooling achieved by the married population group aged 35-54 in 1971. The categories, however, are not very discriminating at the highest level because of the variety of years of secondary education between States. The data are concerned with schooling and not level of education more generally. All persons who stayed at school until the senior year(s) of secondary school are grouped
### Table 1.12 DISTRIBUTION OF EMPLOYED PERSONS OF AGE 35-54 YEARS IN 1971 BY PLACE OF RESIDENCE IN AUSTRALIA - STUDY GROUPINGS

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>MALES</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Capital City</td>
<td>Other Areas</td>
</tr>
<tr>
<td>Upper Prof.</td>
<td>5.8 %</td>
<td>3.8 %</td>
</tr>
<tr>
<td>Lower Prof.</td>
<td>4.7 %</td>
<td>2.1 %</td>
</tr>
<tr>
<td>Large Employer or Manager</td>
<td>18.0 %</td>
<td>10.9 %</td>
</tr>
<tr>
<td>Small Employer or Manager</td>
<td>9.5 %</td>
<td>4.3 %</td>
</tr>
<tr>
<td>Intermediate Non-Manual</td>
<td>10.6 %</td>
<td>4.1 %</td>
</tr>
<tr>
<td>Clerical and Related</td>
<td>50.5 %</td>
<td>54.7 %</td>
</tr>
<tr>
<td>Foreman and Skilled</td>
<td>1.2 %</td>
<td>19.8 %</td>
</tr>
<tr>
<td>Home Duties</td>
<td>Not recorded in Census</td>
<td></td>
</tr>
<tr>
<td>Total per cent</td>
<td>100 %</td>
<td>100 %</td>
</tr>
<tr>
<td>Total Number</td>
<td>664429</td>
<td>424675</td>
</tr>
</tbody>
</table>


### Table 1.13 PERCENTAGE DISTRIBUTION OF HIGHEST LEVEL OF SCHOOLING OF MARRIED PERSONS 35-54 YEARS IN 1971, BY SEX, BY PLACE OF RESIDENCE

<table>
<thead>
<tr>
<th>Highest Level of Schooling</th>
<th>Capital Cities</th>
<th>Other Areas</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male %</td>
<td>Female %</td>
<td>Male %</td>
</tr>
<tr>
<td>5-6 years Secondary</td>
<td>21.7 %</td>
<td>14.8 %</td>
<td>12.1 %</td>
</tr>
<tr>
<td>4 years Secondary</td>
<td>9.8 %</td>
<td>9.7 %</td>
<td>7.3 %</td>
</tr>
<tr>
<td>Some Secondary</td>
<td>42.8 %</td>
<td>47.7 %</td>
<td>45.9 %</td>
</tr>
<tr>
<td>Some or all Primary</td>
<td>21.8 %</td>
<td>23.0 %</td>
<td>29.0 %</td>
</tr>
<tr>
<td>None</td>
<td>0.5 %</td>
<td>0.7 %</td>
<td>0.8 %</td>
</tr>
<tr>
<td>Not Stated</td>
<td>3.4 %</td>
<td>3.8 %</td>
<td>4.4 %</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100 %</td>
<td>100 %</td>
<td>100 %</td>
</tr>
</tbody>
</table>

1 Constructed from Table 148, P1507-1515, 1971 Census of Population and Housing, Australian Bureau of Statistics.
together whether or not they went on to work or continued with study. Table 1.13 shows the level of schooling reached by males and females in this population group. Unlike the occupational information in Tables 1.11 and 1.12 these data do not suffer from the career changes that have occurred for so many women in this age group.

About one quarter of both the males and females had experienced only primary education. The great majority of the remainder left school at or soon after the age for compulsory school - 1, 2 or 3 years of secondary school - and a rather higher percentage of males (18.3 cf. 12.9) stayed at school until the final years.

In the mid-1970s considerable attention was directed to the educational disadvantages that are experienced by persons living in rural areas outside the large metropolitan centres that are such a dominant feature of Australia's geography. If this disadvantage, due to place of residence, is still real there is little doubt that it was even more marked when the parents of our potential student population were at school. The Census data enable us to get a rather crude estimate of the differential experience of schooling for residents of capital cities and other places. The estimate is a crude one since it deals with the place of residence in 1971 of the parental age group - data of residence which would be reasonably close to their actual residence in 1976 but which may be far removed from the residence they had at the time when these persons were at school. Rural-metropolitan movement is considerable and over 20 or 30 years, including the post war period, will have wrought considerable effects.

Furthermore, the vast in-flow of migrant families will have meant that many of these persons who were raised in rural areas will now be resident in capital cities and vice versa.

With these considerable limitations the residential data in Table 1.13 show the level of schooling of potential parents who reside in capital cities to be less than their capital city counterparts. More persons resident outside the capital cities had experienced only primary education (29% cf. 22%) and a significantly lower proportion of these residents, both male and female, had had a full secondary education (12% and 9% cf. 22% and 15%).

Educational Achievement Beyond School

The continued education beyond school of this population group is recorded in the Census in terms of the qualifications they achieved. Table 1.14 indicates these qualifications for the males and females of the age we are considering as potential parents of the students of 1976.
Almost three times as many men as women achieved a qualification from education beyond schooling. The largest difference was at the trade level where the opportunities for females were (and still are) very much less. However, males outstripped females almost 4:1 in terms of the qualifications obtained from university study, although no such sex barriers existed to limit formal availability.

Birthplace of Parents

Table 1.15 shows the birthplace of the fathers and mothers of all persons in Australia who were aged between 10 to 19 in 1971. The great bulk of students who enrolled in 1976 will have been among this Census group. Once again it will be the mature age students and those persons arriving in Australia after 1971 who will alter the distribution of Table 1.15 and prevent it being a valid estimate of the parental birthplaces from which the commencing students of 1976 could have been drawn if all other factors of our introductory model - aspiration, accessibility and achievement - were equal.

Almost 70% of this potential population for students in higher education in 1976 have both parents born in Australia. Of the remaining 30%, the largest groups are those with both parents born in the U.K. or Eire (7.0%) and those (6-7%) whose parents were born in countries other than those explicitly designated in the Census data. Just over 3% of this potential student population had both parents born in Italy and this more than doubles the values for both parents from Greece (1.4%), Germany (0.6%) and Yugoslavia (0.9%).

### Table 1.14 DISTRIBUTION OF POST SCHOOL QUALIFICATIONS OBTAINED BY POPULATION 35-54 YEARS IN 1971, BY SEX

<table>
<thead>
<tr>
<th>Qualification Obtained</th>
<th>Male %</th>
<th>Female %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Degree</td>
<td>0.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Bachelor Degree or P.G. Diploma</td>
<td>2.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Other Tertiary</td>
<td>4.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Technician Level</td>
<td>4.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Trade Level</td>
<td>21.9</td>
<td>1.8</td>
</tr>
<tr>
<td>Other</td>
<td>1.3</td>
<td>2.9</td>
</tr>
<tr>
<td>None</td>
<td>65.0</td>
<td>87.7</td>
</tr>
</tbody>
</table>

Total Number: 1520738 (Male) 1451072 (Female)

1 Constructed from Table 124, 1971 Census of Population and Housing, Australian Bureau of Statistics.
Table 1.15  PERCENTAGE DISTRIBUTION OF PERSONS 10-19 YEARS, IN 1971, BY SEX: FATHER'S BIRTHPLACE BY MOTHER'S BIRTHPLACE

<table>
<thead>
<tr>
<th>Father's Birthplace</th>
<th>Australia Male</th>
<th>Australia Female</th>
<th>U.K. and Eire Male</th>
<th>U.K. and Eire Female</th>
<th>Italy Male</th>
<th>Italy Female</th>
<th>Greece Male</th>
<th>Greece Female</th>
<th>Germany Male</th>
<th>Germany Female</th>
<th>Yugoslavia Male</th>
<th>Yugoslavia Female</th>
<th>Other Male</th>
<th>Other Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>69.6</td>
<td>69.2</td>
<td>1.8</td>
<td>1.9</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>U.K., Eire</td>
<td>3.1</td>
<td>3.2</td>
<td>7.0</td>
<td>7.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Italy</td>
<td>0.4</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
<td>3.2</td>
<td>3.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Greece</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>1.4</td>
<td>1.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Germany</td>
<td>0.2</td>
<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.6</td>
<td>0.6</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>0.1</td>
<td>0.1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.9</td>
<td>0.9</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Other</td>
<td>1.8</td>
<td>1.9</td>
<td>0.4</td>
<td>0.4</td>
<td>0.1</td>
<td>0.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.1</td>
<td>0.1</td>
<td>6.4</td>
<td>6.9</td>
</tr>
</tbody>
</table>

1 Constructed from Table 3, Bulletin 3.9 (Demographic Characteristics), 1971 Census of Population and Housing, Australian Bureau of Statistics.
Table 1.16  PERIOD OF RESIDENCE IN AUSTRALIA FOR OVERSEAS BORN PERSONS 12-14 YEARS IN 1971, BY SEX

<table>
<thead>
<tr>
<th>Period of Residence</th>
<th>Male %</th>
<th>Female %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 2 years</td>
<td>20.1</td>
<td>20.1</td>
</tr>
<tr>
<td>2-4 years</td>
<td>17.1</td>
<td>17.1</td>
</tr>
<tr>
<td>4-6 years</td>
<td>16.7</td>
<td>16.7</td>
</tr>
<tr>
<td>6-10 years</td>
<td>26.9</td>
<td>26.4</td>
</tr>
<tr>
<td>10+ years</td>
<td>19.2</td>
<td>19.7</td>
</tr>
<tr>
<td>Total Overseas Born %</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Total Number

N 41657 38490

Overseas Born

11.3 11.1

Born in Australia

88.7 88.9

Total per cent

100 100

Total Number

367930 348352

One quarter (24.8%) of these students have a mother born outside Australia - a measure suggested by demographers as more indicative of persistent cultural influence than a father so born (27.7%). At least half of these immigrant families would be non-English speaking originally.

Potential Student Characteristics

Just as we have constructed a potential parent population, we can construct from Census data some characteristics of the more immediate antecedents of a potential student population. The main data relate to period of residence in Australia - a variable of some interest since it may influence the participation of immigrants in higher education - and to the type of secondary school the potential students have attended.

Residence in Australia

Because of the migration programme over the last 30 years families from which students in 1976 are drawn will have had quite varying periods of residence in Australia. More strictly, the population of families from whom students could potentially come, will have lived here for varying periods. It may be interesting to see whether the period of residence does seem to affect the chance of persons becoming tertiary students. The 1971 Census provides some data on this characteristic, and Table 1.16 presents the distribution of the period of residence for those 12, 13 and 14 year olds born outside Australia who will be 17, 18 and 19 years old in 1976 and hence part of our potential student population. By 1976 most of these overseas born members of the Australian population will have been here a
Table 1.17 DISTRIBUTION OF FINAL YEAR SECONDARY STUDENTS IN 1975 BETWEEN THE TYPES OF SCHOOL BY STATE

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N.S.W.</th>
<th>Vic.</th>
<th>Qld.</th>
<th>S.A.</th>
<th>W.A.</th>
<th>Tas.</th>
<th>N.T.</th>
<th>A.C.T.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>70.0</td>
<td>57.5</td>
<td>61.6</td>
<td>72.0</td>
<td>67.0</td>
<td>79.0</td>
<td>100</td>
<td>68.0</td>
<td>65.3</td>
</tr>
<tr>
<td>Catholic</td>
<td>19.8</td>
<td>21.4</td>
<td>22.4</td>
<td>21.0</td>
<td>18.5</td>
<td>10.8</td>
<td>-</td>
<td>20.9</td>
<td>20.4</td>
</tr>
<tr>
<td>Non-Catholic</td>
<td>10.2</td>
<td>21.1</td>
<td>16.0</td>
<td>7.0</td>
<td>14.5</td>
<td>10.2</td>
<td>-</td>
<td>11.1</td>
<td>14.3</td>
</tr>
<tr>
<td>Total %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>28014</td>
<td>22930</td>
<td>11586</td>
<td>8670</td>
<td>6873</td>
<td>2086</td>
<td>164</td>
<td>1710</td>
<td>82033</td>
</tr>
</tbody>
</table>

1 Constructed from Table 14, Schools, 1975, Reference No. 13.5, Australian Bureau of Statistics.

Further five years, but it may be useful to regard them as two groups. The first, 37%, will have had essentially only their secondary education in Australia while the remaining 63% will have had virtually all their education within the Australian school system.

Type of Secondary School

The contribution of the three types of school - government, Catholic independent and non-Catholic independent - to the main group of potential students can be seen from the Census data on enrolments in the senior year of secondary school. Table 1.17 shows the distribution of these students in 1975.

Overall, 65.3% are in government schools, 20.4% in Catholic independent schools and 14.3 in other independent schools. The detail of Table 1.17, however, indicates that there are some notable differences between the States. Victoria (42.5%) and Queensland (38.4%) are educating a larger fraction of these final year secondary students in independent schools than are the other States and Territories. This is due to a slightly higher than average number of students in Catholic schools and to a considerably greater contribution from the non-Catholic independent schools.

The sex breakdown of these senior students is not directly available from the Census by grade level, but a good indication for the potential student population can be obtained by considering students who are 17 or over at school in 1975. Table 1.18 gives this information.

In the next chapter, prior to presenting the findings of our own study, we examine the evidence of earlier Australian investigations, going back to the 1930s, of students' socio-economic status, sex, type of school attended, representation of rural and urban students, and the proportions of part-time and full-time enrolment.
Table 1.18 DISTRIBUTION OF SECONDARY STUDENTS, 17 YEARS AND OVER, BETWEEN THE TYPES OF SCHOOL BY SEX (ROW PERCENTAGES) ¹

<table>
<thead>
<tr>
<th>Type of School</th>
<th>Male %</th>
<th>Female %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>69.0</td>
<td>68.4</td>
<td>68.9</td>
</tr>
<tr>
<td>Catholic Independent</td>
<td>18.0</td>
<td>18.1</td>
<td>18.1</td>
</tr>
<tr>
<td>Non-Catholic Independent</td>
<td>12.8</td>
<td>13.5</td>
<td>13.0</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>51243</td>
<td>42881</td>
<td>94124</td>
</tr>
</tbody>
</table>

¹ Constructed from Table 16, Schools 1975, Reference No. 13.5, Australian Bureau of Statistics.

References

Association of University Teachers, (1977) 'Universities can look forward to a decade of growth,' The Times Higher Education Supplement, 22 April.
H.E. Barff, (1902) A Short Historical Account of the University of Sydney, Sydney, Angus & Robertson.
D.G. Beswick, (1975) 'Why more women are entering higher education,' Education News, 15, no. 4, 70-77.
F. Brokington and Z. Stein, (1963) 'Admission, achievement, and social class,' Universities Quarterly, 18, 52-73.
L. Broom, P. Duncan-Jones, F. Jones and P. McDonnell, (1977) Investigating Social Mobility, Monograph no. 1, Canberra, Department of Sociology, R.S.S.S., Australian National University.
M.J. Crook, (1968) 'Access of girls and women to universities in the United Kingdom,' Vestes, 11, 47-57.


H. Jenkins and D.C. Jones, (1950) 'Social class of Cambridge University alumni of the 18th and 19th centuries,' British Journal of Sociology, 1, 93-116.


D.S. Macmillan, (1963) 'The University of Sydney - the pattern and the public reaction, 1850-1870,' Australian University, 1, 27-59.


Report of the Robbins Committee, (1963a) Appendix II (B), Students and their Education, London, HMSO.


Chapter 2
AUSTRALIAN STUDIES OF THE ORIGINS OF STUDENTS IN HIGHER EDUCATION

Introduction

The social and regional origins of students in higher education in Australia have never been studied systematically. Little data is available for the period before World War II. There are a few studies of particular universities dating from the post-war years, and from about 1969 onwards a few studies which collected information from a number of institutions, but none which survey the whole field.

The questions asked in almost all studies concern differences within institutions; that is between faculties, between sexes and between part-time and full-time students. There have been no attempts at careful across-the-board comparisons of the university or college of advanced education populations with the population at large. However, the concentration of students in the professional and managerial classes has been so obvious that many authors have commented on the significance of this social selectivity. Generally there have been two sorts of arguments. First, it is inferred that there is an inequality of educational opportunity in that students of working class background, students from the country and women have lower participation rates and are, therefore, disadvantaged. The second inference assumes that talent is more or less equally distributed across social, regional and sex boundaries and that the imbalance indicates that a great deal of potential talent is not being developed. That the latter conclusion, even if valid, does not lead to simple remedies is indicated by some analyses of academic performance and social class. Some earlier studies indicated a small but statistically significant association between social origin and performance: the students from more privileged backgrounds did better. More recent studies have not found any consistent relations between class and performance. Assuming that the academic potential of lower class students who do not gain admission is no better than that of those who do, it cannot be inferred that a large boost in the number of students presently under-represented, at the expense of some of the groups who are now over-represented, would lead to an overall improvement in performance. The most obvious reason for this is that the conditions which cause bright working class students to 'under-perform' and drop-out of secondary school before matriculation, or not to proceed to higher education, would continue to operate in university and college.
A more recent interest in the social class origins of students stems from the question of who pays for higher education. Under the present arrangements when most of the cost is borne by the State, and little or none by the students in the form of fees, it is argued that principles of equity are violated if it is the well-off class of students who participate in and benefit from higher education. Abolition of fees, it is argued, means a transference of resources from the average tax-payer to the well-off. The counter-argument, and one which strongly influenced the Labor Government when it abolished tuition fees, was that fees were a deterrent to the participation of students from working class origins in universities and colleges.

Our purpose in this chapter is to review the studies which have been made so far in Australia of the social background, regional, ethnic and sex characteristics of students in universities and colleges of advanced education. We will be interested in the following questions:

1. What evidence is there for under and over-representation of various groups?
2. What differences are there within institutions between faculties, and full-time and part-time students?
3. What differences are there between institutions and between types of institution?
4. What changes have taken place over time?

The review is made difficult because researchers have a strong disposition to devise their own questionnaires and classifications rather than use existing ones and thereby enable comparison and generalisations to be made. A particularly difficult example of this is the classification of occupations. There are almost as many classifications as there are investigators, making comparisons difficult. Generally one can be confident about large differences, and many of the differences are large, but when fine distinctions are required it is often not possible to know whether the difference is a real one or due to the question or classification which has been used.

In fairness to the investigators it must be pointed out that the Australian census uses a manpower or industrial classification of occupations whereas researchers studying the occupational background of students’ parents (usually the father) almost always want a hierarchical ordering of occupations related to social status or social class. Such a classification is necessary for correlational analysis; and some justification for the approach is found in the consistent associations...
(r = approx + 0.5) which are found between a status ordering of occupations and size of income or years of education. A valuable contribution to the classification of occupations in Australia is one by Broom, Jones and Zubrzycki in which 16 occupational groups from the Australia census are ordered hierarchically according to occupational prestige.

**Early Studies of University Students**

The earliest studies of Australian university students were concerned primarily with student 'wastage' and what in modern terms might be called the poor productivity of universities. The high failure rate, especially amongst first year students, was seen to be undesirable from the point of view of national manpower needs, the individual student, and the ubiquitous taxpayer. It seems correct to describe the goal implicit in the early studies as institutional efficiency, since they almost inevitably led to recommendations of selection criteria designed to maximise the intake of students who would perform best academically. The overriding aim was to produce graduates, and this rather narrow approach dominated research at least into the 1960s.¹ This basic orientation means that any snippets of information concerning the social background of students in these early surveys are presented only insofar as they are relevant to academic performance. An important exception to this generalisation is La Nauze's (1940) study² in which he wrote:

> There is no need for a statistical inquiry to prove that there is considerable inequality in the opportunity to acquire education beyond the minimum school-leaving age; nor to establish that this inequality is correlated with the level of income. But there is need to replace impressions with exact information; and more important to analyse the effects of inequality. It may then be possible to determine the stages of educational life at which social policy could most usefully be applied to counteract it, if this is considered desirable (p.31).

Operating on the 'generalisation' that 'parents of boys at private schools comprise the higher income groups of the community' (p.33) La Nauze compared 'educational opportunities for boys from groups of South Australian schools' . . . throughout the various stages of educational

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¹ See, for example, the studies discussed by Sanders (1957, 1958).
² For further discussion of problems relating to equal educational opportunity see La Nauze (1943).
life, from primary school to university graduation' (p.31). He found what many researchers since then have also found: that 'boys from State schools, despite their great numerical superiority in the early years of life, play a progressively smaller part at each stage of progress towards higher education and higher incomes' (pp.54-55). La Nauze produces some interesting figures relating to education in South Australia in the 1920s and 1930s in support of his case. Up to age 14 (then the age to which school attendance was compulsory) 90% of the total school population was enrolled at State schools; for pupils aged 16 and over the proportion was only 58%; and while some 14% of private school pupils were 16 years or older, only 3% of Catholic school pupils were so, and less than 2% of State school pupils (pp.35-36). On the basis of school retention rates alone, therefore, the probability of a State school pupil continuing to university was much less than that of private school pupils. Many more private school boys than State school boys passed examinations in the last year of high school (Leaving Honours) and many more received government bursaries for university study: over the period 1924-1933, 71% of bursaries went to private school pupils, 22% to State school pupils, and 7% to Catholics; for the period 1924-1937 the percentages were 70, 25 and 5 respectively (p.41). The following table from La Nauze's study (Table 2.1) gives figures for male graduates of Adelaide University according to faculty of study and school attended for the period 1927-1937. That the majority of students in the Arts and Science pass courses come from State schools was, according to La Nauze, because most of them were student teachers paid by the Department of Education. For the rest, over-representation of students from private schools, which began in the later years of secondary school, is further intensified: 'men from State schools, who comprise nearly 90% of the school population at age 13-14 . . . are only 40% of all graduates in the period' (p.48).

Henderson (1942, 1946) presents similar data relating to Victorian education in 1939. While State school pupils comprised three-quarters of the total school population of Victoria in that year, only slightly more than one-third of the pupils qualifying for the Leaving Certificate (Grade 12 examination) were from State schools, and just under a quarter of the 1939 graduates of Melbourne University had attended State schools. As in the case of Adelaide University, illustrated by La Nauze, there was considerable variation between faculties, as Table 2.2 shows. (Unfortunately Henderson did not separate Catholic and non-Catholic private schools.)

Studies of student wastage and success in various faculties were carried out at the universities of Melbourne and Western Australia. These were
### Table 2.1 UNIVERSITY OF ADELAIDE - MALE GRADUATES 1927-1937, WHO ATTENDED SOUTH AUSTRALIAN SCHOOLS

<table>
<thead>
<tr>
<th>Field</th>
<th>Number of graduates</th>
<th>State schools</th>
<th>Private schools</th>
<th>Rom.Cath. schools</th>
<th>Total</th>
<th>'Private study' etc. not included N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arts (pass)</td>
<td>125</td>
<td>71.2</td>
<td>24.8</td>
<td>4.0</td>
<td>100</td>
<td>17</td>
</tr>
<tr>
<td>Arts (honours)</td>
<td>29</td>
<td>13.8</td>
<td>82.8</td>
<td>3.4</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>Science (pass)</td>
<td>88</td>
<td>64.8</td>
<td>30.7</td>
<td>4.5</td>
<td>100</td>
<td>2</td>
</tr>
<tr>
<td>Science (honours)</td>
<td>26</td>
<td>30.8</td>
<td>69.2</td>
<td>-</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Engineering</td>
<td>151</td>
<td>45.0</td>
<td>53.0</td>
<td>2.0</td>
<td>100</td>
<td>6</td>
</tr>
<tr>
<td>Law (and Final Certificate)</td>
<td>137</td>
<td>21.9</td>
<td>65.7</td>
<td>12.4</td>
<td>100</td>
<td>10</td>
</tr>
<tr>
<td>Medicine</td>
<td>135</td>
<td>14.1</td>
<td>68.9</td>
<td>17.0</td>
<td>100</td>
<td>4</td>
</tr>
<tr>
<td>Dentistry</td>
<td>24</td>
<td>29.2</td>
<td>54.1</td>
<td>16.7</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Totals</td>
<td>715</td>
<td>39.4</td>
<td>52.6</td>
<td>8.0</td>
<td>100</td>
<td>41</td>
</tr>
</tbody>
</table>

1 Source: La Nauze (1940)

### Table 2.2 SCHOOL BACKGROUND OF GRADUATES OF MELBOURNE UNIVERSITY IN 1939, ACCORDING TO FACULTY

<table>
<thead>
<tr>
<th>Field</th>
<th>Number of graduates</th>
<th>State</th>
<th>Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicine</td>
<td>55</td>
<td>9</td>
<td>91</td>
</tr>
<tr>
<td>Science (pass)</td>
<td>66</td>
<td>29</td>
<td>71</td>
</tr>
<tr>
<td>Science (honours)</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Law</td>
<td>30</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Arts (honours)</td>
<td>33</td>
<td>24</td>
<td>76</td>
</tr>
<tr>
<td>Arts (pass)</td>
<td>52</td>
<td>33</td>
<td>67</td>
</tr>
<tr>
<td>Commerce</td>
<td>23</td>
<td>13</td>
<td>87</td>
</tr>
<tr>
<td>Engineering</td>
<td>15</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Other Faculties</td>
<td>18</td>
<td>21</td>
<td>79</td>
</tr>
<tr>
<td>Totals</td>
<td>292</td>
<td>24.3</td>
<td>75.7</td>
</tr>
</tbody>
</table>

1 Source: Henderson (1946).
based on student intakes in the 1930s, but give little information concerning social background. However, Sanders (1948) compiled, in 1944 and 1945, data gathered on behalf of the newly established Universities Commission which do reveal something of the social background of students in the late 1930s and early 1940s, despite his central concern with performance (Sanders, 1948). During World War II manpower control changed conditions for entry to university, and together with the Commonwealth Government's scheme of financial assistance to less well-off students this may have resulted in changes in the social background of students: from 1939 to 1944 there was a decrease in the number of students from private non-Catholic schools entering science faculties and an increase in the number of students from State and Catholic schools, as Table 2.3 shows.

Sanders commented: 'it would seem that at normal times, the tendency of students from various types of secondary school to enter scientific faculties ... is determined partly by the economic position of the parents and partly by the type of schooling, whether Government or private, available at the secondary stage' (p.129). An indication of the relative socio-economic status of the families of the students from the various types of school is given by the fact that, while only 26% of students entering university science faculties in 1943 received Government financial assistance, 63% of students from State schools and 53% of students from Catholic schools did so (p.131). It was also found that country students were badly under-represented at university in comparison with their metropolitan counterparts: in 1939 and 1944, though about half of the Australian population lived outside the capital cities, country areas supplied only 28% of first year science students (pp.129-130).

Table 2.3 SCHOLASTIC SOURCES OF FIRST-YEAR POPULATION IN SCIENTIFIC FACULTIES IN AUSTRALIAN UNIVERSITIES (YEARS 1939, 1943, 1944) 1

<table>
<thead>
<tr>
<th></th>
<th>1939</th>
<th></th>
<th>1943</th>
<th></th>
<th>1944</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Men</td>
<td>Women</td>
<td>All</td>
<td>Men</td>
<td>Women</td>
</tr>
<tr>
<td>State</td>
<td>36</td>
<td>37</td>
<td>36</td>
<td>46</td>
<td>43</td>
</tr>
<tr>
<td>Private Non-RC</td>
<td>41</td>
<td>49</td>
<td>43</td>
<td>28</td>
<td>44</td>
</tr>
<tr>
<td>Roman Catholic</td>
<td>14</td>
<td>8</td>
<td>13</td>
<td>22</td>
<td>9</td>
</tr>
<tr>
<td>Private Study</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

1 Source: Sanders (1948).
Table 2.4 PERCENTAGE DISTRIBUTION OF THE OCCUPATIONS OF THE FATHERS OF HISTORY HONOURS STUDENTS, UNIVERSITY OF MELBOURNE, 1937-1966

<table>
<thead>
<tr>
<th></th>
<th>1937-45</th>
<th>1946-51</th>
<th>1952-59</th>
<th>1960-66</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professions</td>
<td>43</td>
<td>36</td>
<td>35</td>
<td>32</td>
</tr>
<tr>
<td>Company directors/</td>
<td>13</td>
<td>15</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>managers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small business</td>
<td>11</td>
<td>10</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Clerical workers</td>
<td>4</td>
<td>14</td>
<td>21</td>
<td>18</td>
</tr>
<tr>
<td>Farmers and graziers</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Artisans, labourers</td>
<td>19</td>
<td>22</td>
<td>17</td>
<td>18</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

1 Source: Serle (1971).

The only other study we have been able to discover which contains information concerning student socio-economic status from the pre-war period is Serle's (1971) survey of history honours graduates at Melbourne University from 1937 to 1966. In his article Serle does not present the data on a year to year basis, but Table 2.4 presents his results dealing with father's occupation in a way which makes comparisons between the pre-war and post-war periods possible. It should be noted that Serle's survey covers only some 300 students.

Between 1937 and 1966 there was a decrease in the proportion of students graduating with history honours who had professional backgrounds and a corresponding increase in the number of students where fathers were non-professional white-collar workers. Children of skilled and unskilled workers were consistently under-represented. The proportion of fathers with a university degree or other qualification remained unchanged: one-third had such qualifications in 1937-45 and 1960-66.

Another early investigation which reports some information relevant to family socio-economic status is that of Hohne (1951, 1955) which concerns students who entered Melbourne University in 1943 and 1944. Hohne cautions, however, that wartime conditions certainly affected the data e.g. the small male intake in Arts. Like La Nauze, Sanders and Serle, Hohne found that students from non-Catholic independent schools made up a very high proportion of the full-time students: approximately 40% of the Arts intake in 1943 and 50% in 1944. In the case of part-time students the proportions were considerably lower, with students from State and Catholic schools gaining better representation. (Prediction of Academic Success, Vol.1, pp.3-4)
Hohne also found that country students were greatly outnumbered by those from the city: more than 3 to 1 in 1943, and more than 4 to 1 in 1944 (ibid., pp.15-16). In *Success and Failure in Scientific Faculties of the University of Melbourne* (Ch.18) he deals briefly with socio-economic factors affecting success at university. Although the categories he uses are the crude ones of 'assisted', 'non-assisted' and 'scholarship-winning' students, his conclusion is worth recording, since assistance was only available to students from low income families:

> There is little room for doubt that full-time students assisted under the Commonwealth Financial Assistance Scheme who entered scientific faculties of the University of Melbourne during the years here under review showed significantly less success and significantly more serious failure than did either students who were not financially assisted or else had begun their courses after winning scholarships (p.106).

Hohne also found that university performance varied according to type of school attended. In his 1951 study of Arts students he reports that students from non-Catholic private schools were most successful and those from State schools were least successful (Ch.4). Moreover, in the 1955 report he states that 'the situation revealed in Arts prevailed even more markedly in the scientific faculties' (p.109).

**Studies in the 1950s**

During the 1950s a number of student surveys were undertaken, the scope of which went beyond factors affecting performance. Rowe (1960) reports a survey carried out at the University of Adelaide in which 243 new students enrolling in 1952 answered questionnaires each year until graduation in 1956, and another in 1958 concerning jobs and salaries. The questionnaires included items concerning father's occupation, but Rowe found 'no relationship between father's occupation and academic performance' (p.101). This differs from Hohne's finding, but since the socio-economic categories used by both are very crude it is difficult to draw a meaningful comparison. Rowe did not investigate whether or not children from lower socio-economic groups were under-represented in the student population, but he did attempt to measure what he called the 'E factor' of students: 'the general cultural standard of the student' (p.102) with 'culture' interpreted in a fairly traditional sense as literary, humane understanding and social awareness. Not surprisingly, Rowe found that a high E factor tended to correlate with higher ranking occupations on the part of the father (p.105), and also that academic performance increased 'steadily' with E factor (p.108).
The two most important student surveys of the 1950s were undertaken at the University of Melbourne and the University of Queensland. The Melbourne study surveyed just under 1,000 first year students in 1955 and 1956, and is documented in Hammond's 1957 report and in an article he published in 1962. Noteworthy findings were that males outnumbered female students two to one, and that entry to university was governed by a 'very marked economic selection' (Draft Report, p.45): there was 'an extraordinary amount of selection of university students by parents' occupation', and 'in all occupational groups' into which students' parents fall 'there is a high proportion of university related people' (Draft Report, p.38).

Similarly, data concerning family income led to 'the not unexpected conclusion that family resources play a major part in determining entry to university' (Draft Report, p.39).

In his article Hammond reports that 'In proportion to population, not many country students come to university. There is a three times greater likelihood of a student from an urban area coming to the university than a student from a provincial area, and a six times greater likelihood of a student from an urban area than one from a rural area' (p.107). Attendance at university was strongly associated with previous family experience of university - so much so that Hammond concluded that 'for some families attendance at the university is becoming a family characteristic' (p.108), and felt justified in emphasising the role of family expectations and aspiration in relation to entry to university.

Schonell, Roe and Meddleton (1962) present the results of a study of a total of some 1,500 students at the University of Queensland, using some data relating to 1950-2 entrants but dealing more extensively with the 1955 entrants and their progress during the next seven years. Once again a clear relation was found between entry to university and high socio-economic background. 'The fact that 24% of students' fathers had a university education is significant if we remember that this figure is several times higher than that for all Queensland males and even more significant if we remember that the fathers of the 1955 students were educated more than 20 years ago when the proportion of the population attending a university was considerably smaller than it is today' (p.31). It was found that 'the 8% of all Queensland working males who are in professional, semi-professional or administrative occupations are the fathers of 42% of students, whereas the 35.3% who are semi-skilled or unskilled workers (operatives and labourers) are fathers of only 3.5% of students' (p.32).
Sociologically, therefore, university students came from a very select group, and although in terms of scholastic aptitude and attainments they were also select, the authors emphasise that 'other evidence shows that many gifted students who completed their secondary school courses and took the matriculation examination did not go on to university' (p.316). They cite a study by the Queensland Department of Education (1957) which found that 'the children of professional fathers had most chance of reaching university; the gifted children (and particularly the daughters) of unskilled and semi-skilled workers had little chance of doing so' (p.34).

Anderson (1960) found in a study of just over 100 pass and honours students at the University of Melbourne in 1959 that this 'wastage' of gifted students continues even at university: potential honours students whose fathers had low-ranking occupations were much less likely to actually enrol for study at honours level than those from professional families.

A survey of first year students was also undertaken at Melbourne University in 1959 by Theobald, using a representative sample of entrants to Arts, Engineering, Medicine and Science. The main concern of this study was student performance and, as well as establishing that a large proportion of students had a high socio-economic background in terms of father's occupation, income and educational level, it found evidence to support the view that poor performance at university correlated with father's low level of education, lack of earlier family experience of university, and lack of positive encouragement by parents for their child to attend university (p.20).

Studies of University Students in the 1960s

Interest in the social background of students in relation to academic performance carried on into the 1960s. Hughes (1960) studied the 1960

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3 From the study of 1959-60 school leavers throughout Australia, Radford (1962) concluded: 'There is . . . a vast reservoir of talent still to be tapped, in children from unskilled and semi-skilled homes, in the children of farmers, and in children attending non-metropolitan schools. Not only are some able children from such homes and schools leaving too early, but there are well-qualified children from them not pursuing full-time study beyond school, thereby making less than they might of their ability and education' (p.97). In 1975 the Committee for the Review of the Tertiary Education Assistance Scheme stressed that 'Some disadvantaged groups in the community, for a variety of reasons, do not reach an educational level where they can benefit from assistance under the Scheme' (p.3).
intake at the University of Tasmania and tested a number of hypotheses linking performance with social factors. In contrast to the Melbourne studies already discussed, Hughes found no significant correlation between examination success and high family income (pp.69-71), but confirmed the finding that previous family association with university was prevalent among students (pp.70-72); he also found evidence to support Rowe's view that 'cultural' background of a 'bookish' nature is also relevant to university entry and performance (pp.74-76).

A study of students at the University of New England during 1961-64 was carried out by Katz, Katz and Olphert (1965). Its results relating to socio-economic background (pp.20-25) serve as a reminder that it is dangerous to generalise, not only from State to State, but also from one institution to others: the majority of New England students came from the country rather than a metropolitan centre; almost twice as many students had fathers who were farmers or graziers as those with professional fathers; more than half came from extended families with no previous experience of university, and less than a quarter from nuclear families with previous university experience. New England's rural setting, and the fact that some two-fifths of its students held teacher training scholarships, must be relevant to these results. Over the years 1961-64 no trends were discernible in the proportions of students coming from various socio-economic groups. Table 2.5 shows the representation of students according to father's occupation for that period.

<table>
<thead>
<tr>
<th>Father's occupation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional</td>
<td>15</td>
</tr>
<tr>
<td>Teacher</td>
<td>8</td>
</tr>
<tr>
<td>Clerical</td>
<td>18</td>
</tr>
<tr>
<td>Sales</td>
<td>6</td>
</tr>
<tr>
<td>Skilled</td>
<td>11</td>
</tr>
<tr>
<td>Unskilled</td>
<td>8</td>
</tr>
<tr>
<td>Farmer or grazier</td>
<td>30</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1</td>
</tr>
<tr>
<td>No answer</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total per cent</strong></td>
<td><strong>100</strong></td>
</tr>
<tr>
<td><strong>Total Number</strong></td>
<td><strong>923</strong></td>
</tr>
</tbody>
</table>

Table 2.6 CHANGES IN OCCUPATION OF STUDENT'S FATHER'S OCCUPATION
AT THE UNIVERSITY OF MELBOURNE 1955-56 to 1965

<table>
<thead>
<tr>
<th></th>
<th>1955-56(^1)</th>
<th>1965(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional (univ. degree)</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Professional (non-univ. degree)</td>
<td>13</td>
<td>9</td>
</tr>
<tr>
<td>Managerial and administrative</td>
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<td>36</td>
</tr>
<tr>
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<td>17</td>
</tr>
<tr>
<td>Rural</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Manual workers</td>
<td>15</td>
<td>16</td>
</tr>
<tr>
<td>Deceased</td>
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<td>2</td>
</tr>
<tr>
<td>No information</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
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<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>482</td>
<td>1506</td>
</tr>
</tbody>
</table>

1 New first year full-time students, excluding commerce, surveyed during Term 2. (Response about 75%.)
2 Information provided by new full-time students at enrolment.

Considerable information concerning the social background of university students of the mid-1960s was gathered in the course of the longitudinal study of professionalisation by Anderson and Western (1970). New entrants to faculties of engineering and law in 1965, and to faculties of medicine and teacher education in 1967, at all Australian universities answered questionnaires concerning their social origins soon after enrolling, and a social profile of the 3,146 students in the sample (representative of some 80% of all Australian undergraduates), was presented. The by-now familiar picture was repeated: in terms of both education and occupational status, compared with the Australian male population generally, students' fathers ranked very high, with 50% of the fathers compared with 17% of the male population being classed as 'professionals' or 'managers', and 19% compared with 2% having a university education (pp.16-17); in terms of father's income also, it was found that students (especially those studying law or medicine) tended to come from the moneyed elite. There appeared to be some variation between faculties in the extent to which these three elements of socio-economic status - father's income, father's occupation, and father's education - were inter-correlated: for 'medicine, law and engineering the highest correlations are between father's income and father's occupation; for teaching it is between father's education and occupation' (p.14).

In order to see what changes in social composition may have occurred
over a decade the responses to the Melbourne 1957 study were re-coded and compared with the results for 1967 first year students (Table 2.6). It was found that the proportion of students from upper professional backgrounds had almost halved, and that there was a corresponding increase in students from middle-level white-collar backgrounds. The proportion of students from manual working-class backgrounds remained constant. The greatest decline in the proportion of professionals occurred in engineering and medicine.

A possible explanation of the change is the sharp rise in demand for higher education which occurred during the late 1950s and 1960s without a comparable expansion in university places. Quotas were introduced at Melbourne in 1962 and by 1967 they operated in all faculties with large numbers of qualified students not securing a place. It is reasonable to assume that the effect of competition, with entry based on aggregate marks from the matriculation examination, excluded some of the less able children from professional classes. Their place was taken not by the under-represented manual working group, but by high achieving students from the middle classes, an occupational group which a decade earlier would not have aspired as strongly to university education. Subsequently the social composition of entrants to the University of Melbourne showed no further variations in students' occupational background.

Recent Studies

It was only towards the end of the 1960s that studies of university students began to be undertaken in which the main interest was the social composition of the student population generally, rather than social background as a factor affecting performance or professionalisation. This shift in focus appears to reflect a growing concern for social justice amongst researchers, a sharpening awareness that perhaps the notion of education as a force for social equality was belied by social realities, in which those most in need of the help education could give tended least to benefit from it, and that greater knowledge of the differential involvement of various social groups in education was needed. The late 1960s and early 1970s were a time of sharpened idealism in Australian education, and this led to studies of university students of this time which were different in orientation from those of earlier decades.

A social profile of students entering the University of Melbourne in 1969 and 1970 was presented by Dow, Jones and Osman (1972). The data used are the results of a survey of new entrants first carried out by
D.S. Anderson in 1962 and repeated annually since then (except for 1971 and 1973), first by the University's Education Research Office and more recently by the Centre for the Study of Higher Education. Since the survey has been repeated over a period of 14 years any significant trends in the socio-economic composition of the student body should be readily apparent. The tables (A2.1-A2.8) included in Appendix 2 present some of the findings of the survey for the period 1962-76.

The information yielded by these tables can be summed up simply: although some marginal trends are discernible, it is the fundamental lack of change which makes the overwhelming impression. The figures can only be discouraging for any idealist who wants to believe that education alone is sufficiently powerful to break down traditional social inequalities. On the basis of these results one could easily be led to the conclusion that higher education is just one more social epiphenomenon which reflects established social patterns rather than a force which changes them.

Over the 14 years to 1976 the proportion of women entering Melbourne University has increased by some 6% or 7% but they are still greatly outnumbered by the men, especially in faculties such as engineering, law and medicine (cf. Dow et al, p.79). As far as type of school attended is concerned, students from non-Catholic independent schools have been consistently over-represented, and although participation by Catholics appears to have increased slightly, this perhaps can be accounted for by a reclassification of 'major public schools' introduced in the 1968 statistics. It seems that there has been a marginal decrease in the number of enrolments from within metropolitan Melbourne, with a corresponding increase in the number of students from elsewhere in Victoria. In the absence of massive shifts of population from country to city, Hammond's finding (Hammond, p.105) that rural school students are much less likely to proceed to university than their metropolitan counterparts still holds.

Turning to the data on father's occupation (Table A4.3), it is clear that, except for a marginal increase in the proportion of working class students enrolling, apparently displacing some of those with a clerical or sales background, no significant changes have taken place in the proportions of University of Melbourne students coming from various occupational strata: half of the students have high-ranking professional or administrative family backgrounds, despite the fact that those groups together comprise less than one-fifth of the Victorian workforce, while semi-skilled and unskilled workers (almost half the workforce) contribute
less than one-fifth of the students. As Anderson and Western found, this bias is even more extreme in the more 'exclusive' faculties, particularly medicine.

Figures relating to parents' education (Table A2.4) appear to reflect the general trend toward greater participation in post-compulsory education by all social groups: in 1976 substantially less parents than in 1963 had no formal qualifications of any kind. On the other hand, the over-representation of students with university educated parents has not decreased, which suggests that university education to a large extent remains a 'family tradition'.

Data comparable to that of the University of Melbourne surveys have been gathered at Monash University since 1970 by the Higher Education Advisory and Research Unit, details of which have appeared in a number of publications. The 1970 and 1971 student intakes are analysed by Ryan (1972), 1970 to 1972 by Smurthwaite (1974), and the years 1970 to 1975 by Slamowicz, Smurthwaite and West (1976). The data for 1970 to 1976 are also presented in Tables A2.5 to A2.8 in Appendix 4.

The results of the Monash surveys correspond quite closely to the University of Melbourne ones. At Monash, as at Melbourne, the proportion of female students has gradually increased over the years, though the large majority of students are still male, especially in the medical and law faculties. The proportion of students from rural areas attending Monash has been greater than at Melbourne University, but the proportion of provincial students less (Smurthwaite, p.177). As far as type of school attended is concerned, independent schools have consistently been over-represented, though not to the same extent as at Melbourne University; proportionately more Monash students than Melbourne students have attended State schools. In 1975 the proportion of Catholic students at Monash jumped by 5%, bringing it to a level equal to that of Catholic students at Melbourne. This increased participation by Catholic school students at Monash carried on into 1976, coinciding with a decrease in the number of students coming from outside Victoria.

The occupational background of Monash students has been even more stable than that of their Melbourne University counterparts: the proportion of students with semi-skilled or unskilled fathers has remained steady around a low 18%, while the proportion with professional fathers has consistently hovered in the high 20s. Whether the lower figures for the last two years are actually the beginning of a decrease in the proportion of professional students or whether they are merely
year to year fluctuations like those of earlier years remains to be seen. In any case, the only occupational category to increase its representation in the student body appears to be the high-ranking administrative workers rather than the lower occupational groups.

One study outside Victoria of students entering the University of New South Wales in 1969 (Katz, Barrett and Firth (1969) ) showed a somewhat greater representation (22%) in the craftsmen and labourer groups of fathers' occupations and the professional/administrative groups provided 41% compared with the more than 50% at Melbourne/Monash. The persistence of these differences in these two States unfortunately could not be checked until our own study as no further data were collected at the University of New South Wales.

The educational background of the parents of Monash students is also very similar to that of Melbourne University students, and perhaps even more unchanging. Unlike the Melbourne data, the Monash figures do not show a decrease in the proportion of parents without formal qualifications, and both the proportions of those with university qualifications and those with other post-secondary qualifications have been remarkably stable. Once again the proportion of parents who have attended university is much higher for students than among the population generally.

To conclude this section on studies of the socio-economic background of Australian students some mention should be made of studies which restrict their attention to specific issues or sections of the student population. Many of the studies already mentioned have shown that the proportion of women entering university is slowly increasing. This gradual move towards more equal participation by the sexes is further demonstrated by the figures from the Australian Bureau of Statistics presented by Keeves and Read (1976). Table 2.7 reproduces details of this trend throughout the States.

Table 2.7 RATIO OF MALE TO FEMALE STUDENTS ENROLLED AT AUSTRALIAN UNIVERSITIES, 1961-1973

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
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<td>New South Wales</td>
<td>3.8</td>
<td>3.4</td>
<td>3.0</td>
<td>2.9</td>
<td>2.7</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Victoria</td>
<td>2.8</td>
<td>2.6</td>
<td>2.4</td>
<td>2.3</td>
<td>2.2</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Queensland</td>
<td>3.1</td>
<td>2.9</td>
<td>2.7</td>
<td>2.3</td>
<td>2.1</td>
<td>1.9</td>
<td>1.7</td>
</tr>
<tr>
<td>South Australia</td>
<td>3.0</td>
<td>2.9</td>
<td>2.9</td>
<td>2.8</td>
<td>2.6</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Western Australia</td>
<td>3.4</td>
<td>3.3</td>
<td>3.1</td>
<td>2.7</td>
<td>2.4</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Tasmania</td>
<td>2.4</td>
<td>2.4</td>
<td>2.2</td>
<td>2.0</td>
<td>2.0</td>
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<tr>
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<td>2.8</td>
<td>2.6</td>
<td>2.4</td>
<td>2.2</td>
<td>2.0</td>
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</tbody>
</table>

1 Source: Keeves and Read (1976).
The issues involved in increasing participation by women in post-secondary education are discussed at length in the report of the Study Group to the Schools Commission (1975) and the follow up study in Victoria (Victorian Committee on Equal Opportunity in Schools (1977)).

Both reports are concerned about the differentials between the sexes in various faculties and the factors in and out of school that lead to this situation. One illustration of this concern is the fact that some of the early studies of students in C.A.E.s, such as those of Dunn et al. (1969), and Horne and Wise (1970), were either only of males or concerned with courses that were overwhelmingly male. These emphases at that stage in the development of the C.A.E.s were indicative of the very strong bias against the participation of women in the types of courses (technical and business) that characterised the first years of the C.A.E.s. The current balance (cf. Chapter 4) between the sexes in the C.A.E.s indicates how rapidly this sector of tertiary education, as a whole, has changed to serve the whole population.

Differences in the socio-economic background of part-time and full-time students have also been revealed in many of the studies discussed. A special study of part-time students at the Australian National University was carried out by the Education Research Unit in 1968-69. Its findings, published in Part-Time Students at the Australian National University (1970) agree with those of other studies. The occupational background of part-time students tended to be lower than that of full-time students: 57% of full-time students among the 280 respondents had a professional or administrative background, compared with only 32% of part-timers; and while 22% of full-time students came from clerical or manual homes, 35% of part-timers did so. Differences in parents' education between the two student groups were of approximately the same magnitude.

Interest in the educational participation of migrants has tended to focus on children at school level, with very little work being done on migrant education at the tertiary level. The relation between national background and choice of type of tertiary education has been investigated by Taft, Strong and Fensham (1971) in a study of Victorian male school leavers. They found among male senior secondary students that certain groups of migrant families had aspirations to enter tertiary education, especially universities, that were at least as high as those of Australian origin. Furthermore these high aspirations among migrants stemmed from a wider cross-section of fathers' occupations. In other words level of aspiration and status ranking of fathers' occupations were not so
correlated in these ethnic groups as for Australian families. For those migrants whose education had been in government secondary schools their aspirations were not fulfilled as often as were Australians of similar aspiration. However, when all types of schools were considered, the achievement of these high aspiring young people did enable a similar proportion of them to move into tertiary education as compared with the English speaking students from Australian families. Many must have failed to gain their first choice since they were more represented in C.A.E.s than in the Victorian universities, and the earlier study (Dunn et al, 1969) had indicated their preference for universities. Fensham and Taft (1973) have followed the progress of these students in their tertiary studies and found that they display a tenacious quality that has led them to be considerably 'over-represented' among post-graduate students. However, in a study of the socio-economic background of entering students at Macquarie University in 1971, Janet Mitchell (1976) found that, although students with migrant backgrounds were slightly under-represented, in terms of father's occupation there was no difference between native Australian students and the migrant students. Students whose fathers were in the upper and middle occupational categories were over-represented in both groups, and lower categories were under-represented. This result supports the view that 'it was socio-occupational group membership, through its socio-economic factors and associated attitudes to educational achievement which was a major factor associated with entrance to university rather than the migrant status of the parents' (pp.223-24).

One particular ethnic group is known to have a high participation in tertiary education. Taft (1973) reported that 69% of a fairly representative sample of Jewish youth expected to enter a tertiary institution and that more than 40% expected to obtain a university degree compared with 7% of their parents who had that educational achievement. The high success in tertiary selection of the Polish ethnic group is also likely to be related to the significant number of Jews in it.

Bochner and Wicks (1972) edited a number of papers that discuss overseas students in Australia. In a number of institutions and in some faculties and courses in particular, these students are a very significant minority. Almost 10,000 students were enrolled in tertiary education in 1969 and most of these were from South East Asia. From studies by Hynes, Rich and Katz (1971) and Rao (1976) it is clear that there are a number of cultural differences in the attitudes (and aspirations) concerning
higher education between South East Asian and Australian students. About 15% only were here under some form of government sponsorship so that the great majority are private students. Although the fees for tertiary education prior to 1974 were only a small fraction of the cost for such a student's studies, the abolition of fees did make Australian tertiary education even more attractive to overseas students because of the quite rapid escalation of fees at about the same time in Britain.

A number of reports about mature entrants, particularly those who have been enrolled under the recent special entry arrangements are beginning to appear. At Newcastle, La Trobe, Monash and N.S.W. there are suggestions that the performances of these students are very encouraging compared with the normal entrants from school. Most of these special entrants have been in the non-technical faculties and only a few experiments with bridging programmes into other more technical courses appear to exist. Murdoch and Griffith, among the universities, and several C.A.E.s have courses in environmental studies which, in the next year or so, may provide further interesting evidence of the possibilities for mature entrants in tertiary education.

Studies of College Students

The Colleges of Advanced Education as a system was established incorporating existing senior technical colleges, teachers colleges, and agricultural colleges - in the late 1960s, under the guidance of the Wark Committee. Since C.A.E.s were originally intended to meet needs not being met by the universities, the socio-economic composition of C.A.E. students, especially in comparison with that of their university counterparts, is a matter of considerable interest.

One of the first studies of C.A.E. students was that by Horne and Wise (1970) of first-year students of business studies and engineering (the largest C.A.E. groups; Horne and Wise worked with a sample of slightly less than 3,900 students) in Australian C.A.E.s in 1969. The fact that students in only some faculties were surveyed makes it difficult to generalise the results; it is difficult to judge the extent to which the highly vocational nature of business studies and engineering courses appears to exist. Murdoch and Griffith, among the universities, and several C.A.E.s have courses in environmental studies which, in the next year or so, may provide further interesting evidence of the possibilities for mature entrants in tertiary education.

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4 The findings of the student survey are also summarised in Horne (1971). An early study of C.A.E. students was that carried out by A.C.E.R. of the 1957 first years at Royal Melbourne Technical College (now Royal Melbourne Institute of Technology). A poor response rate to the questionnaire made the results questionable, but it was found that students from upper class homes were over-represented, while manual students were under-represented. See: Australian Council for Educational Research (1958).
would make their students atypical in institutions which themselves are
supposed to be vocationally orientated (e.g. proportion of females
studying is certainly affected, being outnumbered by males approximately
10 to 1). Horne and Wise found that approximately one-third of students
classified their father's occupation as being in the professional or
administrative fields (p.12). While this is less than the studies of
university students have shown (e.g. Radford, 40%; Anderson and Western,
50%), it is still far more than the proportion of professional and
administrative workers in the Australian population as a whole. Although
approximately one-tenth of fathers of C.A.E. students had tertiary
education, compared with 1.55 per cent of Australian males of their age
group (p.13), this was much less than among university students:
'students entering business studies and engineering in the colleges in
1969 generally did not come from homes with an established tradition
of tertiary education' (p.14).

The social background of engineering students was discussed by Horne
(1970) in an article published by A.C.E.R. together with the Anderson
and Western study of university students in the professions in order to
make comparisons between the two student groups possible: 'generally,
the college engineering students tended to be drawn from lower social
strata than did the university engineering students' (p.34) in terms of
father's occupation, and father's and mother's education.

Another study carried out in 1969 was Maddox's survey of Students
Entering Applied Science in Colleges of Advanced Education (1970), which
complements the A.C.E.R. study. Maddox's results, based on a sample of
803 college students and 255 university science students, are similar to
those of Horne and Wise: college science students tended to have a lower
socio-economic background than their counterparts at the Universities of
Adelaide, Melbourne and New South Wales, but the professional,
administrative and managerial groups are still over-represented, and
manual workers under-represented. Full-time university students had the
highest socio-economic standing, then part-time university students,
followed by full-time college students, with part-time college students
having the lowest standing (pp.114-15).

... the parity ratios calculated from our data for students of
manual origins suggest that, if anything, their representation in
tertiary education has declined since 1959-60. It is clear that the
expansion of higher education does not benefit all social classes
equally, unless all social classes have equal access to higher
education. The proportions of students of manual origin in the
University Science samples are certainly less than the University figures given by the A.C.E.R. for 1959-60 (p.116).

Maddox concluded that 'A father's occupation . . . is related to length and quality of schooling among his children, . . . to aspirations for university entrance, and to the percentage of women students entering tertiary education' (p.135). Women (only 13% of the college sample, and 23% in science at Melbourne University) tended to be both better educated and have a higher social background than men. Migrant children, especially those from southern Europe, tended to be under-represented, but Maddox suggests that this could be explained to a large extent in terms of the generally lower socio-economic status of migrant groups (pp.123, 212). 5

A comparison of large metropolitan C.A.E.s with universities (Royal Melbourne Institute of Technology and Melbourne University, N.S.W. Institute of Technology and University of N.S.W.) also showed that differences in socio-economic background between students at the two types of institutions were far less significant than the difference between the socio-economic status of either student body and that of the population generally (pp.137, 140-42).

A survey of C.A.E. students was also carried out as part of the study of regional colleges of advanced education by the Education Research Unit, Australian National University, 1973-74, written up by Anderson et al (1975) in Regional Colleges: A Study of Non-Metropolitan Colleges of Advanced Education in Australia. Though the main focus of the study was regional colleges, a sample of urban college students was included for comparison purposes. Matriculation students in rural areas - potential C.A.E. students - were also studied. The total sample included approximately 2,000 college students and 5,000 matriculation students. From the study of matriculation students and follow-up study it was found (rather surprisingly) that family socio-economic status was not a strong predictor of transition from Grade 12 to tertiary education, though it appeared to play a more significant role in determining whether a prospective student entered university or C.A.E. (Regional Colleges, Vol.1, p.206), with students of higher socio-economic status being more likely to go to university than to C.A.E. However, attitudes of family (and friends) towards higher education were found to be of considerable importance; after examination results the students' reports of their parents' wishes for them to continue their formal education was a better predictor of

5 Compare the study of the socio-economic background of migrant university students by Mitchell (1976) mentioned earlier.
enrolment in a tertiary institution than any other factor measured in the study (I, p.211).

Some 37% of the matriculation student sample had professional, managerial or well-off farming backgrounds. While students from each socio-economic category went to university, college of advanced education, and teachers college, there was clearly a 'greater tendency for the highest status group to "send" their children to university' (I, p.273), and a tendency for students from lower status groups to enter a C.A.E. or teachers college. A student's social background was also found to correlate with type of course undertaken (I, p.275).

... within universities, students of law, the health professions and architecture have a higher than average S.E.S; students taking up courses in the humanities, social sciences and engineering at universities have a higher S.E.S. than their counterparts at colleges. Those entering teacher education, science, business studies and architecture are more nearly similar in the two systems (I, p.276).

As in other studies of C.A.E. students, it was found that there was relatively little previous family experience of tertiary education: less than 2% of the mothers and 6% of the fathers were university graduates (for Australian males of comparable age the figure was 2%), although 9% of mothers and 15% of fathers had some experience of tertiary education (I, pp.280-81). Little evidence was found of family discrimination against girls at entry to tertiary education (I, p.363). Though there was no difference in socio-economic status between male and female matriculation students, the average socio-economic status of female college students was slightly higher than that of the males (I, p.365).

Studies of Student Costs and the Tertiary Education Assistance Scheme

Information concerning the social background of university students was gathered in a survey of student costs and incomes carried out by the Student Representative Council of the University of Melbourne in 1973, reported by Beighton and O'Connell (1974). A random sample of all students at the university was used, leading to findings concerning parental occupation and education similar to those of Dow et al - which is scarcely surprising, since a number of the students would have been in the samples of both studies. Beighton and O'Connell write that 'The "typical" member of this sample had a professionally employed father with at least some tertiary education and a mother who is a housewife, educated to the upper levels of
secondary school' (p.11). A similar study - but this time on a national scale - was carried out in 1974 by the Australian Department of Education and the Australian Union of Students. The sample represented 3% of the population of university and C.A.E. students in Australia: 4,456 students, of whom approximately three-quarters were studying full-time. Men outnumbered women 3 to 2. Once again, professional groups were over-represented and manual workers under-represented, especially in the case of university students (Australian Department of Education (1975) p.8). Fathers of university students tended to earn more than fathers of C.A.E. students, and this was also true of fathers of full-time students compared with fathers of part-time students generally.

A comparison of the socio-economic backgrounds of university and C.A.E. students which draws on this data was presented by Beighton and Gallagher (1976). Education students at both university and C.A.E. were placed in separate categories and it was found that the distribution of the occupations of fathers of full-time students had two outstanding features: a marked bias towards professional/administrative categories compared to the population distribution and a gradient across the four groups of students which is remarkably consistent across employment categories (p.165). Table 2.8 shows that gradient.

Table 2.8 FATHERS' OCCUPATIONS OF FULL-TIME TERTIARY STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>Uni</th>
<th>CAE</th>
<th>Uni.Ed</th>
<th>CAE Ed</th>
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<td>Professional/technical</td>
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<td>26.1</td>
<td>24.6</td>
<td>24.3</td>
<td>7.5</td>
</tr>
<tr>
<td>Administrative</td>
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<td>18.2</td>
<td>15.4</td>
<td>12.8</td>
<td>12.1</td>
</tr>
<tr>
<td>Clerical</td>
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<td>6.9</td>
<td>5.0</td>
<td>6.8</td>
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<tr>
<td>Sales</td>
<td>5.4</td>
<td>5.4</td>
<td>5.1</td>
<td>5.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Farming/mining</td>
<td>7.2</td>
<td>9.3</td>
<td>8.5</td>
<td>13.7</td>
<td>10.9</td>
</tr>
<tr>
<td>Communication/transport</td>
<td>3.8</td>
<td>5.2</td>
<td>7.5</td>
<td>7.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Tradesmen/labourers</td>
<td>13.7</td>
<td>18.0</td>
<td>21.3</td>
<td>21.0</td>
<td>39.9</td>
</tr>
<tr>
<td>Service, sport and recreation</td>
<td>3.0</td>
<td>1.9</td>
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<td>3.1</td>
<td>4.3</td>
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<td>Armed forces</td>
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<td>0.0</td>
<td>0.2</td>
<td>0.6</td>
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<tr>
<td>Not in workforce and/or no information</td>
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<td>10.0</td>
<td>7.7</td>
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<td>4.4</td>
</tr>
<tr>
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<td>100</td>
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</tr>
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<td>881</td>
<td>674427</td>
</tr>
</tbody>
</table>

1 Source: Beighton and Gallagher (1976).
Among part-timers there were no significant differences between the groups in terms of parental occupations, but, 'as with full-timers, approximately 50% of part-timers had professionally or administratively employed fathers' (p.172).

School Leavers and Entry to Tertiary Education

A number of studies have been made of school leavers and factors associated with entry into tertiary education, which have provided a great deal of information about the social background of tertiary students and the differences between them and school leavers who go straight into the workforce.

In an early study Ralph Berdie (1956) investigated the educational plans and aspirations of more than 1,000 high school children tested as having above average intelligence. Berdie found that children of professional fathers were almost twice as likely as those whose fathers were skilled tradesmen to plan to go to university; that the probability that a child would plan to go to university increased with the level of education of the parents; and that children whose parents were born in Australia or other English-speaking countries were less likely to plan to attend university than children whose parents were born elsewhere (p.60). It should be emphasised that Berdie's sample was of children in the year before their matriculation and that more than half of his respondents indicated they were planning to attend university after leaving school. Clearly, such a high proportion can only mean that the plans of many were not based on a realistic assessment of the likelihood of their continuing to university.

The Commonwealth Office of Education (1961) and the Australian Council for Educational Research together carried out a survey of school pupils who in 1957 matriculated to Australian universities, reported in Matriculation - and After. Much of the data was presented rather awkwardly, but findings of interest included the fact (supported by other studies) that the probability of a student matriculating was highest at private or independent schools; a high proportion of female matriculants did not enrol at university (57% in N.S.W., 44% in Victoria); and a high proportion of non-Catholic private school pupils go on to university.

A much more extensive and thorough study - almost contemporaneous with the one just mentioned - was a survey undertaken by the Australian Council for Educational Research of some three-quarters of the 145,000 children who left Australian schools from April 1959 to March 1960. The survey, reported by Radford (1962), yielded detailed information concerning the
destination of school leavers - type of work, entrance to university, teachers college, and other educational institutions - in relation to father's occupation. It was found that of the 33% of all school leavers whose fathers were 'unskilled or semi-skilled' workers, only 1.5% of the boys and only 0.7% of the girls entered university. In the case of those whose fathers were 'university professional' on the other hand (only 2% of the total sample), 35.9% of the boys and 23.7% of the girls entered university (see Radford, table 13B, p.55).

This study of school leavers was used by A.C.E.R. as a basis for a submission to the inquiry by the Martin Committee (Tertiary Education in Australia, 1964-1965). Table 2.9, reproduced from that submission, shows the percentage distribution according to father's occupation of entrants to universities, teachers colleges and technical colleges.

The 1959-60 study was repeated by A.C.E.R. on a national scale in 1971-72 and reported by Radford and Wilkes (1975). A comparison of the results of the two surveys reveals small but significant changes. First, a greater proportion of school leavers went to university in 1971-72 than in 1959-60: for males the proportion rose from 6.3% to 8.7%, for females from 3.3% to 6.6%. Second, representation of children from semi-skilled and unskilled homes increased to some extent. The proportion of males with unskilled or semi-skilled backgrounds rose by 1.7% to 3.2%, and the proportion of females with the same background rose by 1.7% to 2.4%. In the same 12 year period the proportion of male university students with professional backgrounds rose by 3.5% to 28.6%, and that of females by 3.1% to 20.6%. Nevertheless, these changes involved some lowering in the ratio of upper class university students to lower class ones (Radford and Wilkes, pp.73-74). Representation of different socio-economic status groups at senior technical colleges or colleges of advanced education was much more in line with their proportions in the population generally. Over-representation was greatest among the employer/managerial group, which composed 27% of the school leaver sample but 33% of male and 29% of female college entrants. Under-representation was greatest in the unskilled/semi-smilled group: only 16% of male and 23% of female college entrants had such a background, although 28% of the males and 29% of the females in the school leaver sample came from such homes.

Both the 1957 matriculation study and the A.C.E.R. school leaver studies revealed quite marked variations from State to State, for example, in the proportions of males and females continuing to tertiary education and in the proportions of university students drawn from the different school systems. There have been a number of other studies which focus on the
<table>
<thead>
<tr>
<th>Father's Occupation</th>
<th>Percentage of all fathers of known occupations in this category</th>
<th>Percentage of all males with such fathers entering tertiary institutions</th>
<th>Percentage of all females with such fathers entering tertiary institutions</th>
<th>Percentage distribution of all males with such fathers according to institution</th>
<th>Percentage distribution of all females with such fathers according to institution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male leavers</td>
<td>Female leavers</td>
<td>Male leavers</td>
<td>Female leavers</td>
<td>Technical college</td>
</tr>
<tr>
<td>Unskilled or semi-skilled</td>
<td>33</td>
<td>33</td>
<td>4.4</td>
<td>13</td>
<td>6.4</td>
</tr>
<tr>
<td>Skilled manual</td>
<td>21</td>
<td>21</td>
<td>9.3</td>
<td>17</td>
<td>10.8</td>
</tr>
<tr>
<td>Skilled supervisory</td>
<td>3</td>
<td>3</td>
<td>16.6</td>
<td>5</td>
<td>16.2</td>
</tr>
<tr>
<td>Sales supervisory</td>
<td>3</td>
<td>3</td>
<td>12.6</td>
<td>3</td>
<td>13.6</td>
</tr>
<tr>
<td>Sales</td>
<td>9</td>
<td>9</td>
<td>18.8</td>
<td>15</td>
<td>17.9</td>
</tr>
<tr>
<td>Farmer</td>
<td>14</td>
<td>13</td>
<td>5.6</td>
<td>7</td>
<td>13.0</td>
</tr>
<tr>
<td>Clerical</td>
<td>5</td>
<td>5</td>
<td>17.8</td>
<td>8</td>
<td>13.6</td>
</tr>
<tr>
<td>University professional</td>
<td>2</td>
<td>2</td>
<td>44.8</td>
<td>8</td>
<td>38.6</td>
</tr>
<tr>
<td>Other professional</td>
<td>5</td>
<td>5</td>
<td>30.9</td>
<td>14</td>
<td>33.8</td>
</tr>
<tr>
<td>Higher administration</td>
<td>1</td>
<td>1</td>
<td>38.3</td>
<td>3</td>
<td>29.5</td>
</tr>
<tr>
<td>Other supervisory</td>
<td>4</td>
<td>4</td>
<td>18.0</td>
<td>6</td>
<td>21.6</td>
</tr>
</tbody>
</table>

1 Source: Tertiary Education in Australia, (1964-1965) Vol.1, p.44.
populations of individual States. Dunn et al., (1969) studied the decisions relating to tertiary education made by more than 6,000 Victorian senior high school boys in 1967 and their course of action in 1968. The results clearly illustrate the increasing social selectivity which occurs at the higher educational levels: 'boys who reach the stage of secondary education where they can contemplate tertiary education tend to come from homes with above average education and occupational standing' (p.13), and those entering tertiary education tended more strongly still to have an upper class background. Fifteen per cent of senior secondary boys' fathers had a university degree, compared with 1.6% of Victorian males, while 9.8% had some other tertiary qualification, compared with 2.5 per cent. In the case of mothers, 4.6% had degrees and 6.3% had other tertiary qualifications, compared with 0.5% and 1.8% respectively (p.11). Fathers tended more often than the male population generally to have professional and higher level white-collar jobs (p.11). Of the students entering university, approximately one-quarter had fathers who had a degree, as did one-tenth of college entrants (p.63), and fathers of both groups were concentrated much more than the school pupils' fathers in the professional/administrative and 'own business' classes (p.62).

A follow-up study was carried out in 1973 of those of the 1967 sample who had entered any of nine major Victorian tertiary institutions (approximately half had done so). The report of this study (Fensham and Taft, 1973) contains the finding that:

... while the Middle Class respondents who were located in the tertiary institutions represented 52.9% of those possible from the 1967 sample, the Working Class sample represented only 37.7%; the Low Middle groups fell in between at 42.6%. There is clearly a gradient involved, although it is not as steep as is sometimes believed. From these figures it appears that the respondents of Working Class background who had stayed at school to 5th or 6th form had a reasonably good chance of eventually attending a tertiary institution if they so desired (p.14).

It was also found that middle class students tended most to go to university, while working class and lower middle class students were more inclined to go to C.A.E. or teachers college (pp.16, 18). Rather surprisingly, students from a non-English speaking background were at least as likely as native English speakers to enter tertiary education (49.6% compared to 48%), with C.A.E.s having a larger proportion of students from non-English speaking homes than universities (p.19).6

6 Attitudes of various migrant groups towards tertiary education have been examined by Taft, Strong and Fensham (1971).
School retention rates and transition to tertiary education in Western Australia have been studied by Dufty (1972) using data for 1970-71 supplied by Western Australian Education Department and the W.A. Tertiary Education Commission. Dufty found that retention rates in Catholic high schools were higher than in government schools, and that those of independent schools were much higher still. Proportions of students from the various types of schools proceeding to university followed the same pattern, though proportions entering the Western Australian Institute of Technology and teachers colleges were much less disparate. At all tertiary institutions the over-representation of higher socio-economic groups was apparent, in accordance with a hierarchy of institutions found to occur in other studies also: university students had the most 'exclusive' social background, then the Western Australian Institute of Technology students, and then teachers college students. 'The white collar-independent high school-university links persist even within the part-time student populations, suggesting that family value structures are perhaps more significant than economic factors' (p.251). According to Dufty, girls are more likely than boys to proceed to tertiary education, but this is due to the large proportion of girls entering teachers colleges.

Another important study of the early seventies was that of educational opportunity - especially in relation to tertiary education - in South Australia reported by Blandy and Goldsworthy (1975). They report that 'social class - as measured by family income and father's occupation - affects continuation through the school system' (p.102), but also that 'there was little difference in many of the family background characteristics of students who continued to tertiary education and who did not continue' (p.118). The 'fathers and mothers of the continuers tended to be somewhat more educated than the fathers and mothers of the non-continuers' (p.118); the parents of tertiary students tended to be 'slightly wealthier' (p.119); and while 'more than one third of the fathers of continuers held professional or administrative occupations ... only a quarter of the fathers of non-continuers did so' (p.119). The same proportions of boys and girls continued to tertiary education (p.116). Like Dufty, Blandy and Goldsworthy showed that there were significant differences in the socio-economic composition of entrants to the various tertiary institutions, as Table 2.10 shows.

In 1957 a study was made of a sample of 421 Melbourne primary school boys which identified a number of social psychological factors influencing educational achievement (Hammond and Cox, 1967). A follow-up study of 130 boys was carried out in 1967 in which comparisons were made between those
Table 2.10 OCCUPATIONAL DISTRIBUTION OF FATHERS OF STUDENTS ENTERING TERTIARY INSTITUTIONS FROM MATRICULATION, SOUTH AUSTRALIA, 1972

<table>
<thead>
<tr>
<th></th>
<th>Adelaide University %</th>
<th>Flinders University %</th>
<th>Institute of Technology %</th>
<th>Teachers College %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional, technical and related workers</td>
<td>28</td>
<td>25</td>
<td>21</td>
<td>12</td>
</tr>
<tr>
<td>Administrative, executive and managerial workers</td>
<td>12</td>
<td>13</td>
<td>15</td>
<td>18</td>
</tr>
<tr>
<td>Clerical workers</td>
<td>7</td>
<td>7</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Sales workers</td>
<td>9</td>
<td>6</td>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>Farmers, fishermen and related workers</td>
<td>7</td>
<td>9</td>
<td>7</td>
<td>13</td>
</tr>
<tr>
<td>Transport and communication workers</td>
<td>1</td>
<td>3</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Craftsmen, production workers and labourers</td>
<td>19</td>
<td>21</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Service, sport and recreation workers and armed forces</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Others including</td>
<td>3</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Not in workforce</td>
<td>14</td>
<td>16</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>No answer or uncertain</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

1 Source: Blandy and Goldsworthy (1975).

Boys of the original sample who had entered university, or equivalent courses at the Royal Melbourne Institute of Technology, and a group from the original sample whom tests had shown to be their intellectual equals but who had not undertaken high tertiary level study (Gilchrist and Hammond, 1971). Here too, high occupational status of father, high level of education of father, and attendance at independent school were found to be significantly correlated with entrance to tertiary education (p.321). But perhaps most important was the 'level of aspiration of the family for their son':

Some families took university entrance and a professional career for granted; other families regarded the boy as performing well above expectations if he reached Intermediate or Leaving level. This 'level of aspiration of the family for the son' is significantly higher in families of the high level tertiary entrants (p.01) and correlates positively with the three socio-economic status indicators above (p.322).

Conclusions

Although there is considerable variation in detail in the results of the studies reviewed in this chapter, there is unanimity in the main conclusions.
There is almost a surfeit of evidence that the great majority of students at Australian universities tend to come from the upper socio-economic levels of society. In terms of father's occupation and parents' education university students tend to rank considerably higher than their age group in the population as a whole. High ranking professional and administrative families, which make up only a small percentage of the population, contribute approximately half of all university students, whereas manual and skilled workers, who make up almost half the workforce, contribute a disproportionately small number of students.

A number of studies have produced evidence that the attitudes towards tertiary education and values families of higher socio-economic status tend to have and to communicate to their children are at least as important in determining entry to university as are financial resources. Hence previous family experience of university, such as father or mother educated to degree level, or siblings who have studied at university, is much more common among students than in the population as a whole. Students tend to come from families which not only value university education - for personal development, prestige, as an avenue of social mobility, or for the financial rewards it brings - but also regard a university education as lying within its domain of possibilities, whether as the pinnacle of aspiration or as a natural right assumed without question.

Such attitudinal considerations are also relevant to the disproportionate representation of other sorts of groups at university. Both early and later studies have shown that students who have attended non-Catholic independent schools are greatly over-represented in comparison with students from both State and Catholic schools. Early researchers used attendance at non-Catholic independent schools as a measure of socio-economic status, arguing (quite rightly) that children at such schools tended to come from well-off families who could afford to pay the school fees. However, that such families can afford to send their children to private schools does not in itself explain why they should want to do so when State schools are free. The obvious explanation is that they are prepared to spend the extra money because they believe that at a private school their children will gain something a State school does not offer. It has always been recognised that parents of children at Catholic schools also have to pay fees, but that this does not necessarily mean that they are better off than most parents of State school pupils; rather, it is accepted that they are prompted by certain values and beliefs about what is best for their children. Thus, while financial resources may set the limits to what is possible and what is
not, attitudes and values determine what a family does with the money available to it. The studies of school leavers show that parents could be well justified in believing that independent schools are better able than State schools to provide the academically orientated education they want for their children and better able to prepare their children for entry to university: that more independent school students than State school students enter university seems to have at least as much to do with the attitudes, expectations and aspirations the students acquire at school as with their parents' financial resources.

It has always been the case that less women than men attend university. Clearly, the reasons for this are attitudinal rather than economic, and revolve around the notion of the proper role of women in society. The traditional view was stated in 1939 by one State director of education concerned with the transition from school to work and widespread unemployment among the young:

It is in the majority of cases neither inappropriate nor unsatisfactory that thousands of young girls should leave school and become helpers in their own homes; but it is disastrous that thousands of boys of the same age should leave school and stay at home, or fail to take up some definite occupational or other interest (Fenner, 1939, pp.14-15).

Attitudes are changing, and university study is now attracting a greater proportion of women than ever before. Should present trends continue the participation rate of women will equal that of men in a few years and may even exceed it.

The low university participation rate of those with provincial and rural backgrounds must also be partly accounted for in terms of values and attitudes. While it is true that country students attending metropolitan universities have extra costs that many metropolitan students living at home do not have, a large proportion of metropolitan students also live away from home. What is probably at least as important in explaining the small number of country students at university is that for many country people university lies outside the sphere of relevance: like other institutions and states of affairs located in the capital cities, universities at best are regarded as having a tenuous connection with the needs of local life. Thus the University of New England, because it is located in the country and therefore 'part' of country life, has a much higher proportion of students with a farming or rural background than metropolitan universities, even though most of the students have to live away from home, just as they would have to in the city, and though its courses are not especially orientated to rural concerns.
Surprisingly little research has been done on migrant participation in university education. What research has been done indicates that students with a migrant background are under-represented, which fits with the fact that migrants—especially those whose native language is not English—tend to rank lower socio-economically than native Australians. Those migrant students who do enrol at university, however, have socio-economic backgrounds very similar to those of the student body as a whole.

The studies show that there are considerable differences between faculties in the socio-economic composition of student groups. Faculties such as medicine, law and architecture tend to have a markedly high proportion of students who have attended independent schools, whose families have had previous experience of university and whose fathers have prestigious jobs. The proportion of female students in these faculties also tends to be low, as it does in 'unfeminine' fields such as engineering and applied science. There are also quite pronounced socio-economic differences between part-time and full-time students: as would be expected, part-time students tend to have a lower socio-economic background than full-time students.

Comparison of early studies of university students with later ones, and examination of studies which cover a considerable time-span, reveals that the composition of the student body has remained remarkably stable over the years despite the innovations and changes worked in the university system by politicians and administrators. The only trend which may be confidently asserted to exist is that of increasing participation by women in university study. For the rest, the variety of systems used in the studies reviewed for classifying variables makes it difficult to judge what is a significant change and what is not. The annual student surveys at Melbourne University indicate a slight increase (about 3%) in the proportion of working class students entering the university over a twelve year span, but that is the only suggestion in all the studies reviewed in this chapter that the socio-economic composition of the student body is coming any closer to that of the Australian population.

The studies of college of advanced education students show that the socio-economic background of these students, while slightly lower on average than that of university students, nevertheless appears exclusive in comparison with the general population. In terms of status of father's occupation and previous family experience of tertiary education college students are similar rather than dissimilar to their university counterparts when compared to the rest of the population. In the college system also men outnumber women, and but for the fact that more women than men enter teachers
colleges the disparity would certainly be greater than that in universities. Because many colleges are located in non-metropolitan centres the proportion of country students in colleges is greater than in universities. The differences in socio-economic background between part-time and full-time students observed in colleges are also present in the colleges, so that there is a clear gradient in the level of socio-economic status across the tertiary student body as a whole: full-time university students rank highest, followed by part-time university students, then full-time college students, and part-time college students ranking lowest, though still higher than their non-student peers.

References


D.S. Anderson, (1960) 'Students of honours potential in pass courses in the University of Melbourne,' The Educand, 4, No.1, 84-95.


F.C.L. Beighton and A.P. Gallagher, (1976) 'Socio-economic Differences between University and C.A.E. Students,' The Australian University, 14, 162-76.


C. Fenner, (1939) Some Aspects of the Transition from School to Workshop, Melbourne, Melbourne University Press.


P.W. Hughes, (1960) Academic Achievement at the University, Hobart, Department of Education, University of Tasmania.


J.A. La Nauze, (1940) 'Some aspects of educational opportunity in South Australia,' Australian Educational Studies, (Second series), Education Research Series No.59, Melbourne, Melbourne University Press.


Part-Time Students at the Australian National University, (1970) Canberra, Education Research Unit, Australian National University.


A.P. Rowe, (1960) If the Gown Fits, Melbourne, Melbourne University Press.


C. Sanders, (1948) Student Selection and Academic Progress, Sydney, Commonwealth Office of Education.


A. Smurthwaite, (1974) 'Entrants to Monash University and the University of Melbourne,' The Australian University, 12, 165-96.


M.J. Theobald, (1961) A Study of First Year Students at the University of Melbourne, Melbourne, National Union of Australian University Students.

Victorian Committee on Equal Opportunity in Schools (1977) Report to Premier of Victoria, Premier's Department, Victoria.
Chapter 3
THE FAMILY BACKGROUND
OF NEW STUDENTS IN HIGHER EDUCATION

This chapter begins the basic data on the social composition of the students who enrolled in Australian universities and C.A.E.s to commence studies for undergraduate degrees or diplomas in 1976. The construction of the samples of students for the universities, and the metropolitan and the country C.A.E.s is described in detail in Appendix 1. It is from these samples that the data to be presented are drawn. Usually the comparable data for each type of institution will be presented in parallel; and each variable will be considered in terms of the sex of the students, and their faculty of enrolment.

The plan for this and the next chapter is shown in Figure 3.1.

Figure 3.1 SEQUENCE OF SOCIAL BACKGROUND CHARACTERISTICS OF STUDENTS ENROLLING IN HIGHER EDUCATION

| Chapter 3 | FATHER          | Education ( ) | Composite s.e.s. ( ) |
| Chapter 3 | MOTHER          | Occupation ( ) | Income ( )           |
| Chapter 4 | STUDENT         | Country of birth | Age |
|           |                 | Place of residence in Australia | Type of school |
|           |                 | Time from school | Deferment |
|           |                 | Work experience | Previous tertiary experience |

(By Type of Institution, by Sex, by Faculty, by Type of Enrolment)

As far as possible, the presentation is an unfolding sequence that traces these three groups of students from their family origins. We begin with the educational characteristics of the students' parents so that the framework is set as one educational generation to the next. The parents' occupations are considered next, as they are likely to be, along with the educational background, important variables in determining the aspiration of our student generation. Parental income follows, since for many students, it must bear on the complex factor of the accessibility of higher education.

Because of the importance of immigration in contemporary Australia, the parents' country of origin is considered next since the different cultural
FIGURE 3.2 DISTRIBUTION FOR STUDENTS, BY SEX, OF THEIR FATHER’S HIGHEST LEVEL OF EDUCATION FOR EACH TYPE OF INSTITUTION

**UNIVERSITIES**

N: M 3002, F 2078  
n.s.: M 3.6%, F 5.1%

**METROPOLITAN COLLEGES**

N: M 1947, F 1519  
n.s.: M 4.5%, F 3.2%

**COUNTRY COLLEGES**

N: M 682, F 924  
n.s.: M 3.2%, F 4.0%
backgrounds that result may profoundly alter the influence the factors in the model have in determining the ultimate enrolment of the student children in higher education.

In Chapter 4, we turn to the student generation itself and begin with their own country of origin since significant numbers of the potential student population have, in fact, been born abroad and so have some direct experience of the cultural differences between their country of origin and Australia.

We next consider the experience these new students in higher education have had in the secondary schools of Australia, which present at least three distinctly different systems for schooling. Because nearly 25% of the enrolling students are more than 20 years old, the age characteristics will also be presented since it is clear that increasing numbers of mature or older students are now studying in Australian higher education. Where appropriate, attention will be drawn to the corresponding characteristics of the whole Australian population itself.

This sequence continues with an examination of the experience of this student generation between secondary school and the enrolment they undertook in 1976.

Parent's Education

The highest level of education achieved by the fathers and mothers of the student samples are given in Figures 3.2 and 3.3. As would be expected, the fathers achieved, in their time as students, higher levels of education than the mothers. The university students of 1976, both male and female, have parents who have both achieved rather higher levels of education than have the parents of both types of college student. For example, 33% of the university fathers and 24% of the mothers had some post secondary education compared with 23% and 12% for the better college group. There is little difference between the two groups of college parents. When the sex of the students is considered there is again little difference within the types of institution and the larger differences, by far, lie between the universities and the C.A.E.s.

Perhaps the most striking aspect of these data on the parents of the present student population is how few of them had reached the level and type of education on which their children are now embarking. Less than 20% of the fathers of the university sample and only 12% of their mothers had previously studied at a university. Likewise, less than a quarter of the college students' fathers and only just over 10% of their mothers had
FIGURE 3.3 DISTRIBUTION FOR STUDENTS, BY SEX, OF THEIR MOTHER'S HIGHEST LEVEL OF EDUCATION FOR EACH TYPE OF INSTITUTION

**UNIVERSITIES**

N: M 3002, F 2078  
n.s.: M 3.4%, F 4.2%

**METROPOLITAN COLLEGES**

N: M 1947, F 1519  
n.s.: M 3.5%, F 3.5%

**COUNTRY COLLEGES**

N: M 682, F 924  
n.s.: M 4.0%, F 3.9%
undertaken any post-school education themselves. Well over 80% of the students enrolling in higher education today in Australia are 'first generation' students in this sense. More than 50% of both college groups of parents completed no more than compulsory schooling and this is also true for 40% of the parents of the university students. Students in today's higher education are drawn from a wide cross section of family educational backgrounds.

Comparison with Tables 1.3 and 1.4 enables some estimate to be made of just how representative, in terms of parents' education, the student samples are. In the parents' generation - 25 to 40 years ago - more than 70% of the population completed only compulsory education and 7.5% (males) and 3.7% (females) obtained tertiary qualifications. Accordingly, despite the widespread educational backgrounds of the parents of today's students, families with parental tertiary backgrounds are three or four times more likely than other families to have children undertaking courses in higher education.

Fathers' Education by Faculty

Tables 3.1, 3.2 and 3.3 give the highest level of education of the fathers of the three student samples now differentiated into their faculties of enrolment.

Table 3.1 DISTRIBUTION OF FATHER'S HIGHEST LEVEL OF EDUCATION FOR STUDENTS IN FACULTY GROUPING: UNIVERSITIES SAMPLE

<table>
<thead>
<tr>
<th>Father's Highest Level of Education</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Science</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Primary</td>
<td>10.4</td>
</tr>
<tr>
<td>Some Sec.</td>
<td>28.0</td>
</tr>
<tr>
<td>4 Years Sec.</td>
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</tr>
<tr>
<td>5-6 Years Sec.</td>
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</tr>
<tr>
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</tr>
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</tr>
<tr>
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</tr>
<tr>
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<td>5.0</td>
</tr>
<tr>
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</tr>
<tr>
<td>Total per cent</td>
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</tr>
<tr>
<td>Total Number</td>
<td>1047</td>
</tr>
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</table>
Table 3.2 DISTRIBUTION OF FATHER'S HIGHEST LEVEL OF EDUCATION FOR STUDENTS IN FACULTY GROUPING: METROPOLITAN COLLEGES SAMPLE

<table>
<thead>
<tr>
<th>Father's Highest Level of Education</th>
<th>Faculty</th>
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<th></th>
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<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Science</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>15.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>545</td>
</tr>
<tr>
<td>Some Sec.</td>
<td>36.7</td>
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<td></td>
<td>1208</td>
</tr>
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</tr>
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<td></td>
<td></td>
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<td></td>
<td>285</td>
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<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
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<td></td>
<td>253</td>
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<td></td>
<td>100</td>
</tr>
<tr>
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<td>832</td>
<td>379</td>
<td>1104</td>
<td>411</td>
<td>45</td>
<td>314</td>
<td>3466</td>
</tr>
</tbody>
</table>

In the university sample (Table 3.1) medicine and law stand out as two faculties where there is a greater likelihood for fathers to have university education themselves. At the other end of this scale of faculties, only 11.7% of the fathers of education students had themselves been at university. Science and engineering are very comparable particularly if the non-university tertiary education of the latter's fathers is considered. Commerce, after education, has the lowest fraction of tertiary parents, but in the college samples the students in commercial studies are most likely to have tertiary backgrounds. This probably reflects the more practical orientation of the commerce/business and commerce/economics studies that are available now in the C.A.E.s and that previously were undertaken in the parents' time as post-school courses through various agencies, but were definitely not degree or diploma courses in the university or even senior technical college sense. The country colleges, a number of which have specially developed these commercially oriented courses, are attracting as many students with tertiary parents as are the...
there are somewhat less manual workers (foremen and skilled plus semi-skilled) among the university fathers (18.4 cf. 10-11%). There are somewhat less manual workers (foremen and skilled plus semi-skilled) among the university fathers (18.7%) than among the college ones (23.4 and 21.7%); but these differences do little to alleviate the unrepresentative
FIGURE 3.4 DISTRIBUTION FOR STUDENTS, BY SEX, OF THEIR FATHER'S OCCUPATION FOR EACH TYPE OF INSTITUTION

UNIVERSITIES
N: M 3002, F 2078
n.s.: M 7.5%, F 9.3%

METROPOLITAN COLLEGES
N: M 1947, F 1519
n.s.: M 7.8%, F 8.8%

COUNTRY COLLEGES
N: M 682, F 924
n.s.: M 10.6%, F 9.5%
FIGURE 3.5 DISTRIBUTION FOR STUDENTS, BY SEX, OF THEIR MOTHER'S OCCUPATION FOR EACH TYPE OF INSTITUTION.
character of these groups of fathers when compared with the national population. Table 1.12 indicates that about 50% of Australian fathers of this age group are manual workers and that not more than 5% are in the occupations classified as upper professional. Children in the former families have less than a 50% chance of pursuing higher education while those from the latter families have a 300 or 200% chance of enrolling for university and C.A.E. studies respectively. This family background characteristic no doubt influences aspiration fairly directly and the other factors of Figure 0.3 in more complex ways. Figure 3.4 gives the complementary figures for the occupational background of the three groups of mothers.

The large fraction for each sample of the mothers not in employment reduces any comparisons that can be made although it is notable that this fraction was so uniform (44.2, 44.9 and 45.9%). More (14.9 cf. 9.5 and 10.7%) of the mothers of the university students are in professional occupations and a slightly smaller number are in manual employment. Otherwise no other differences seem worthy of comment.

Father's Occupation and Faculty

Tables 3.4, 3.5 and 3.6 give the detailed distribution by faculty of the fathers' occupations. As would be expected from the definition of Upper Professional as occupations requiring a university degree, there is strong representation of Upper Professionals among the fathers of students of law and medicine. As counter-balance these two faculties have the lowest representation of manual fathers - law (5.9%) being particularly low. The arts faculties in both universities and metropolitan colleges are the most representative faculty for manual fathers, but still, at 21.3 and 23.8% respectively, less than half the whole population figure.
Table 3.4 DISTRIBUTION OF FATHER'S OCCUPATION FOR STUDENTS IN FACULTY GROUPING: UNIVERSITIES SAMPLE

<table>
<thead>
<tr>
<th>Father's Occupation</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Law</th>
<th>Medicine</th>
<th>Other</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Professional</td>
<td>19.2</td>
<td>13.2</td>
<td>17.0</td>
<td>16.0</td>
<td>21.8</td>
<td>25.6</td>
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<td>938</td>
</tr>
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<td>Lower Professional</td>
<td>12.0</td>
<td>9.6</td>
<td>10.0</td>
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<td>8.9</td>
<td>9.5</td>
<td>9.2</td>
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<td>10.6</td>
<td>11.8</td>
<td>10.4</td>
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<td>11.7</td>
<td>17.2</td>
<td>12.1</td>
<td>10.1</td>
<td>563</td>
</tr>
<tr>
<td>Small Employer or Manager</td>
<td>14.5</td>
<td>19.1</td>
<td>14.5</td>
<td>20.9</td>
<td>17.4</td>
<td>15.8</td>
<td>15.5</td>
<td>17.9</td>
<td>809</td>
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<td>8.6</td>
<td>7.7</td>
<td>9.4</td>
<td>9.8</td>
<td>8.5</td>
<td>8.8</td>
<td>7.2</td>
<td>7.9</td>
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<td>4.7</td>
<td>4.1</td>
<td>4.3</td>
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<td>3.3</td>
<td>2.3</td>
<td>4.4</td>
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<td>4.6</td>
<td>4.7</td>
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<td>0.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.4</td>
<td>0.3</td>
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<td>Not Stated</td>
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<td>9.0</td>
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<td>9.2</td>
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<td>100</td>
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<td>348</td>
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</table>
### Table 3.5 DISTRIBUTION OF FATHER'S OCCUPATION FOR STUDENTS IN FACULTY GROUPING: METROPOLITAN COLLEGES SAMPLE

<table>
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<th>Father's Occupation</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Other</th>
<th>Not Stated</th>
<th>Total Number</th>
</tr>
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<td>11.9</td>
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<td>10.1</td>
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<td>315</td>
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<td>3466</td>
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<tr>
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<td></td>
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</tr>
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<td>37%</td>
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</table>

**UNIVERSITIES**

N: M 3002, F 2078  
n.s.: M 12%, F 19.8%

**METROPOLITAN COLLEGES**

N: M 1947, F 1519  
n.s.: M 12.6%, F 21.9%

**COUNTRY COLLEGES**

N: M 682, F 924  
n.s.: M 12.5%, F 20.5%
Parental Income

The respondents in this study were enrolling students - not their parents. It is clear from the 'not stated' categories for various items that students were most clear about their parents' previous education and least clear about their parents' incomes. Twenty per cent were unable to comment concerning their father's income and it is likely that the accuracy of the specific responses for income is not as high as for other items. The information presented accordingly needs to be treated with appropriate reserve.

Figure 3.6 gives the distribution of the incomes of the students' fathers for each of the institutional groups. Female students tend to report fewer incomes at the extremes than do males, but otherwise it is the higher percentage of the highest category (greater than $16,000) in the university fathers that is the main difference.

Tables 3.7, 3.8 and 3.9 give the detailed breakdown by faculty for each sample group of fathers' incomes. In the university group, the students in law and medicine stand out with almost twice as many parents (28.2%) in the highest income category. Education has the lowest representation of these fathers (9.8%) and arts is next with 12.1%. Arts and education in both college samples again show lower incomes than the other faculties and the fathers of students in the commerce courses in the colleges are the most affluent (except for paramedical courses in the metropolitan colleges) in line with the high representation among these students of fathers with some sort of tertiary education.
Table 3.7 DISTRIBUTION OF FATHER'S LEVEL OF INCOME FOR STUDENTS IN FACULTY GROUPINGS: UNIVERSITIES SAMPLE

<table>
<thead>
<tr>
<th>Income $</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Law</th>
<th>Medicine</th>
<th>Other</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Income</td>
<td>3.2</td>
<td>4.7</td>
<td>7.8</td>
<td>8.6</td>
<td>3.2</td>
<td>4.8</td>
<td>4.9</td>
<td>4.4</td>
<td>278</td>
</tr>
<tr>
<td>Less than 2000</td>
<td>3.3</td>
<td>2.8</td>
<td>2.3</td>
<td>1.8</td>
<td>2.1</td>
<td>3.3</td>
<td>4.3</td>
<td>1.6</td>
<td>136</td>
</tr>
<tr>
<td>2000 - 4000</td>
<td>3.7</td>
<td>4.2</td>
<td>4.1</td>
<td>4.9</td>
<td>4.8</td>
<td>1.1</td>
<td>1.7</td>
<td>4.7</td>
<td>195</td>
</tr>
<tr>
<td>4000 - 6000</td>
<td>7.5</td>
<td>6.7</td>
<td>7.7</td>
<td>9.2</td>
<td>10.1</td>
<td>4.8</td>
<td>5.7</td>
<td>11.9</td>
<td>394</td>
</tr>
<tr>
<td>6000 - 8000</td>
<td>15.0</td>
<td>15.6</td>
<td>12.3</td>
<td>16.6</td>
<td>12.4</td>
<td>10.6</td>
<td>6.9</td>
<td>15.7</td>
<td>671</td>
</tr>
<tr>
<td>8000 - 10000</td>
<td>11.2</td>
<td>13.8</td>
<td>13.1</td>
<td>10.4</td>
<td>12.2</td>
<td>8.4</td>
<td>10.3</td>
<td>12.3</td>
<td>617</td>
</tr>
<tr>
<td>10000 - 12000</td>
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<td>9.2</td>
<td>9.0</td>
<td>13.5</td>
<td>13.5</td>
<td>7.3</td>
<td>11.2</td>
<td>13.8</td>
<td>531</td>
</tr>
<tr>
<td>12000 - 14000</td>
<td>8.0</td>
<td>7.3</td>
<td>6.4</td>
<td>5.5</td>
<td>6.4</td>
<td>8.1</td>
<td>9.2</td>
<td>8.5</td>
<td>367</td>
</tr>
<tr>
<td>14000 - 16000</td>
<td>6.9</td>
<td>8.6</td>
<td>5.3</td>
<td>6.1</td>
<td>7.8</td>
<td>7.0</td>
<td>9.5</td>
<td>3.8</td>
<td>335</td>
</tr>
<tr>
<td>over 16000</td>
<td>15.8</td>
<td>14.8</td>
<td>12.1</td>
<td>9.8</td>
<td>18.3</td>
<td>28.2</td>
<td>28.2</td>
<td>8.5</td>
<td>783</td>
</tr>
<tr>
<td>Not Stated</td>
<td>13.8</td>
<td>12.4</td>
<td>20.0</td>
<td>13.5</td>
<td>9.2</td>
<td>16.5</td>
<td>8.0</td>
<td>14.8</td>
<td>773</td>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>1047</td>
<td>687</td>
<td>1808</td>
<td>163</td>
<td>436</td>
<td>273</td>
<td>348</td>
<td>318</td>
<td>5080</td>
</tr>
</tbody>
</table>
Table 3.8 DISTRIBUTION OF FATHER'S LEVEL OF INCOME FOR STUDENTS IN FACULTY GROUPINGS: METROPOLITAN COLLEGES' SAMPLE

<table>
<thead>
<tr>
<th>Income $</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Medicine</th>
<th>Other</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>No Income</td>
<td>7.3</td>
<td>7.7</td>
<td>6.6</td>
<td>4.9</td>
<td>4.4</td>
<td>8.9</td>
<td>5.7</td>
<td>211</td>
</tr>
<tr>
<td>Less than 2000</td>
<td>3.9</td>
<td>3.2</td>
<td>2.1</td>
<td>2.4</td>
<td>2.7</td>
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</tr>
<tr>
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<td>5.2</td>
<td>3.7</td>
<td>4.5</td>
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<td>4.6</td>
<td>2.2</td>
<td>5.4</td>
<td>147</td>
</tr>
<tr>
<td>4000 - 6000</td>
<td>13.9</td>
<td>8.3</td>
<td>8.4</td>
<td>9.5</td>
<td>10.7</td>
<td>15.6</td>
<td>8.6</td>
<td>337</td>
</tr>
<tr>
<td>6000 - 8000</td>
<td>16.5</td>
<td>15.0</td>
<td>14.0</td>
<td>14.9</td>
<td>18.7</td>
<td>17.8</td>
<td>14.3</td>
<td>536</td>
</tr>
<tr>
<td>8000 - 10000</td>
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<td>12.1</td>
<td>13.7</td>
<td>14.0</td>
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<td>15.6</td>
<td>16.9</td>
<td>466</td>
</tr>
<tr>
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<td>10.6</td>
<td>12.5</td>
<td>10.9</td>
<td>4.4</td>
<td>10.2</td>
<td>386</td>
</tr>
<tr>
<td>12000 - 14000</td>
<td>4.7</td>
<td>7.9</td>
<td>6.9</td>
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<td>8.0</td>
<td>6.7</td>
<td>4.8</td>
<td>223</td>
</tr>
<tr>
<td>14000 - 16000</td>
<td>4.2</td>
<td>5.2</td>
<td>4.5</td>
<td>5.2</td>
<td>5.1</td>
<td>2.2</td>
<td>4.1</td>
<td>168</td>
</tr>
<tr>
<td>over 16000</td>
<td>9.4</td>
<td>13.1</td>
<td>8.2</td>
<td>6.4</td>
<td>9.2</td>
<td>15.6</td>
<td>8.3</td>
<td>318</td>
</tr>
<tr>
<td>Not Stated</td>
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<td>13.1</td>
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<td>20.7</td>
<td>12.2</td>
<td>11.1</td>
<td>19.1</td>
<td>579</td>
</tr>
<tr>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tr>
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<td>379</td>
<td>1104</td>
<td>411</td>
<td>45</td>
<td>314</td>
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</table>
Table 3.10 DISTRIBUTION OF FATHER'S LEVEL OF INCOME FOR STUDENTS IN FACULTY GROUPINGS: COUNTRY COLLEGES SAMPLE

<table>
<thead>
<tr>
<th>Income $</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Other</th>
<th>Not Stated</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Income</td>
<td>3.1</td>
<td>6.5</td>
<td>11.1</td>
<td>2.1</td>
<td>3.3</td>
<td>6.0</td>
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<td>49</td>
</tr>
<tr>
<td>Less than 2000</td>
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<td>2.6</td>
<td>3.7</td>
<td>3.7</td>
<td>3.3</td>
<td>2.6</td>
<td>3.7</td>
<td>61</td>
</tr>
<tr>
<td>2000 - 4000</td>
<td>6.5</td>
<td>3.9</td>
<td>7.4</td>
<td>7.8</td>
<td>6.7</td>
<td>5.2</td>
<td>2.6</td>
<td>106</td>
</tr>
<tr>
<td>4000 - 6000</td>
<td>10.0</td>
<td>13.0</td>
<td>7.4</td>
<td>9.0</td>
<td>20.0</td>
<td>13.8</td>
<td>6.9</td>
<td>155</td>
</tr>
<tr>
<td>6000 - 8000</td>
<td>14.6</td>
<td>7.8</td>
<td>7.4</td>
<td>14.7</td>
<td>6.7</td>
<td>14.7</td>
<td>17.5</td>
<td>232</td>
</tr>
<tr>
<td>8000 - 10000</td>
<td>13.1</td>
<td>6.5</td>
<td>11.1</td>
<td>15.8</td>
<td>16.7</td>
<td>12.9</td>
<td>14.8</td>
<td>234</td>
</tr>
<tr>
<td>10000 - 12000</td>
<td>8.8</td>
<td>13.0</td>
<td>3.7</td>
<td>10.8</td>
<td>16.7</td>
<td>12.9</td>
<td>12.2</td>
<td>175</td>
</tr>
<tr>
<td>12000 - 14000</td>
<td>7.7</td>
<td>6.5</td>
<td>3.7</td>
<td>6.0</td>
<td>3.3</td>
<td>8.6</td>
<td>5.8</td>
<td>103</td>
</tr>
<tr>
<td>14000 - 16000</td>
<td>2.3</td>
<td>9.1</td>
<td>0.0</td>
<td>5.1</td>
<td>3.3</td>
<td>9.5</td>
<td>5.3</td>
<td>81</td>
</tr>
<tr>
<td>over 16000</td>
<td>9.6</td>
<td>14.3</td>
<td>0.0</td>
<td>8.4</td>
<td>10.0</td>
<td>5.2</td>
<td>9.0</td>
<td>138</td>
</tr>
<tr>
<td>Not Stated</td>
<td>19.2</td>
<td>16.9</td>
<td>44.4</td>
<td>16.6</td>
<td>10.0</td>
<td>8.6</td>
<td>19.0</td>
<td>275</td>
</tr>
<tr>
<td>Total per cent</td>
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<td>100</td>
<td>100</td>
<td>100</td>
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<td>100</td>
<td></td>
</tr>
<tr>
<td>Total Number</td>
<td>260</td>
<td>77</td>
<td>27</td>
<td>910</td>
<td>30</td>
<td>116</td>
<td>189</td>
<td>1609</td>
</tr>
</tbody>
</table>

Mother's Income

Figure 3.7 gives the distribution of the incomes reported by the students for their mothers. It will be seen that there is again a large number (21%) of Not Stated replies and more than 30% for each sample of mothers with no independent income. Less than 7% of the mothers in any of the samples earn more than $10,000 and there are no marked differences between the samples as was the case in Figure 3.6 for the fathers' incomes.

Interaction of Parental Variables

It is clear from the figures presenting these data for parental education, occupation and income that there are a number of consistent patterns. Students with more highly educated parents more often report professional occupations and higher incomes for their parents. This is not surprising and the intercorrelation between two or all three of these variables has often been reported in other studies. The extent of these intercorrelations in Australian higher education can be seen in the three 2-way interactions between these variables that describe the students' fathers. These results are given in Appendix 2 (Tables 2A.9-2A.17).
UNIVERSITIES
N: 5080
n.s.: 20.1%

METROPOLITAN COLLEGES
N: 3466
n.s.: 21.9%

COUNTRY COLLEGES
N: 1609
n.s.: 23.1%
In each case of the two-way interactions there are very positive correlations between the extreme categories of the variables - completed Tertiary Education/Primary Education; Professional/Semi-skilled; Over $16,000/Less than $2,000 - but there are much more complex interactions between these variables for intermediate categories.

In Appendix 1 there is a description of the construction of a composite family socio-economic status variable which has the advantage of correlating more strongly with criterion variables than do any of the three separate measures of father's background. It has five categories: 1 (lowest) to 5 (highest). This new constellation of educational background will now be used to discuss the effect of home background on various aspects of the 1976 student samples.

The distribution of this family background variable in terms of the sex of the student shows a fairly consistent pattern for each type of institution. There are fewer female students from families of s.e.s. category 1, and in the universities and country colleges fewer females whose families are in the highest category, 5. Females are slightly more frequent from families of s.e.s. categories 3, 4 and 5 in the metropolitan C.A.E.s. In general, there is a slight tendency for females from the extremes of this family variable to be less represented in higher education than their male counterparts.

Families in category 5 are much more likely to have student children in higher education and as we shall see, to have them in particular faculties and types of institution. We shall begin by presenting the distribution, by faculty, of the students' families according to this variable.

Composite S.E.S. and Faculty Enrolment

Figure 3.8 presents the data for the relation between composite s.e.s. of the students' families and their faculty of enrolment for each type of institution.

In the universities 25% of the enrolling students come from families whose value on this variable is 5. There are, however, 36.3% and 37.6% of the students in law and medicine from these families. Arts, commerce and education are the compensating faculties with over-representations from the families whose s.e.s. category is 1. There are no such obvious discrepancies among the students in the metropolitan C.A.E.s where the composite s.e.s. variable's values appear more evenly distributed through the faculties. Students from families of category 5 are over-represented in commerce and engineering in the country colleges.
and under-represented in education and arts. There are compensating excesses in these faculties from families of category 1 and a large excess of these students in engineering - an occurrence that was not evident in the other institutions.

**Parental Birthplace**

Figures 3.9 and 3.10 give information about the birthplace of the fathers and mothers of the students in the three samples. The differences between the country colleges sample and the other two types of institution stand out as the striking feature. More than 83% of the country college students have Australian born mothers and fathers compared with less than 70% in the other two types of institution. The country colleges' attraction for students from any of the other parental countries of origin is consistently less. Students with Asian backgrounds and those with the non-English speaking parental backgrounds are less than half as well represented in these colleges as they are in the universities and C.A.E.s in metropolitan areas.

An alternative view of these data is obtained when they are related to the information in Table 1.5 about the country of origin of the population's potential parent group. Even allowing for the continued but slackening immigration in the years since 1971 there seems to be no doubt that the families with Australian born parents are under-represented in both the universities and the metropolitan colleges. Only a small number of the Asian students are admitted under schemes which are effectively outside the competitive selection procedures. These data thus suggest that students with overseas born parents are not aspiring for places in country colleges in proportion to their numbers in the population, but that their aspiration and achievement for universities and metropolitan C.A.E.s is higher than this proportion.

**Parental Birthplace and Faculty**

Some further insight into these differential effects of parental origins are to be found in Tables 3.10, 3.11 and 3.12 which give the faculty distribution for these family backgrounds.

In the universities, education, law and medicine have the highest proportion of Australian born. There are probably different factors operating. Medicine and law require high achievement and the former has conditions which tend to make it inaccessible to students who have qualified from schools overseas. Persons born outside Australia probably aspire less for places in education, particularly those with non-English speaking connections. Asian students are particularly attracted to commerce.
UNIVERSITIES
N: M 3002, F 2078
n.s.: M 0.7%, F 0.5%

METROPOLITAN COLLEGES
N: M 1947, F 1519
n.s.: M 0.8%, F 0.7%

COUNTRY COLLEGES
N: M 682, F 924
n.s.: M 0.4%, F 0.2%
Table 3.10 RELATION BETWEEN FATHER'S COUNTRY OF BIRTH AND STUDENT'S FACULTY OF ENROLMENT: UNIVERSITIES SAMPLE

<table>
<thead>
<tr>
<th>Father's Birthplace</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Law</th>
<th>Medicine</th>
<th>Other</th>
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<tr>
<td>Australia</td>
<td>65.8</td>
<td>59.5</td>
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<td>74.7</td>
<td>70.4</td>
<td>61.6</td>
</tr>
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<td>U.K., Eire &amp; N.Z.</td>
<td>13.2</td>
<td>12.6</td>
<td>16.5</td>
<td>9.8</td>
<td>9.0</td>
<td>9.5</td>
<td>12.1</td>
<td>16.6</td>
</tr>
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<td>11.9</td>
<td>12.7</td>
<td>13.2</td>
<td>11.0</td>
<td>12.8</td>
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<td>0.6</td>
<td>11.2</td>
<td>2.6</td>
<td>5.5</td>
<td>2.2</td>
</tr>
<tr>
<td>Other</td>
<td>3.1</td>
<td>3.9</td>
<td>2.6</td>
<td>1.8</td>
<td>3.2</td>
<td>1.8</td>
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<td>5.0</td>
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<td>0.7</td>
<td>0.0</td>
<td>0.9</td>
<td>0.4</td>
<td>0.3</td>
<td>0.0</td>
</tr>
<tr>
<td>Total per cent</td>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>1047</td>
<td>687</td>
<td>1808</td>
<td>163</td>
<td>436</td>
<td>273</td>
<td>348</td>
<td>318</td>
</tr>
</tbody>
</table>

Table 3.11 RELATION BETWEEN FATHER'S COUNTRY OF BIRTH AND STUDENT'S FACULTY OF ENROLMENT: METROPOLITAN COLLEGES SAMPLE

<table>
<thead>
<tr>
<th>Father's Birthplace</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Medicine</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>63.3</td>
<td>63.5</td>
<td>67.3</td>
<td>71.6</td>
<td>58.2</td>
<td>82.2</td>
<td>70.1</td>
</tr>
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<td>U.K., Eire &amp; N.Z.</td>
<td>13.9</td>
<td>10.9</td>
<td>15.8</td>
<td>14.6</td>
<td>10.7</td>
<td>8.9</td>
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<td>11.6</td>
<td>10.4</td>
<td>18.2</td>
<td>4.4</td>
<td>10.8</td>
</tr>
<tr>
<td>Asia</td>
<td>4.7</td>
<td>7.7</td>
<td>1.6</td>
<td>1.1</td>
<td>6.6</td>
<td>4.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>2.9</td>
<td>4.8</td>
<td>2.4</td>
<td>1.5</td>
<td>5.3</td>
<td>0.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.3</td>
<td>0.8</td>
<td>1.3</td>
<td>0.8</td>
<td>1.0</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>381</td>
<td>832</td>
<td>379</td>
<td>1104</td>
<td>411</td>
<td>45</td>
<td>314</td>
</tr>
</tbody>
</table>
Table 3.12 RELATION BETWEEN FATHER'S COUNTRY OF BIRTH AND STUDENT'S
FACULTY OF ENROLMENT: COUNTRY COLLEGES SAMPLE

<table>
<thead>
<tr>
<th>Father's Birthplace</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Other</th>
<th>Not Stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>85.0</td>
<td>80.5</td>
<td>70.4</td>
<td>84.2</td>
<td>83.3</td>
<td>82.8</td>
<td>79.9</td>
</tr>
<tr>
<td>U.K., Eire &amp; N.Z.</td>
<td>8.9</td>
<td>7.8</td>
<td>22.2</td>
<td>7.0</td>
<td>13.4</td>
<td>7.8</td>
<td>12.2</td>
</tr>
<tr>
<td>Europe</td>
<td>2.7</td>
<td>7.8</td>
<td>3.7</td>
<td>6.4</td>
<td>0.0</td>
<td>4.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Asia</td>
<td>1.2</td>
<td>2.6</td>
<td>0.0</td>
<td>0.9</td>
<td>3.3</td>
<td>1.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Other</td>
<td>1.9</td>
<td>1.3</td>
<td>3.7</td>
<td>1.3</td>
<td>0.0</td>
<td>2.6</td>
<td>2.6</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.4</td>
<td>0.0</td>
<td>0.0</td>
<td>0.3</td>
<td>0.0</td>
<td>0.9</td>
<td>0.0</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>260</td>
<td>77</td>
<td>27</td>
<td>910</td>
<td>30</td>
<td>116</td>
<td>189</td>
</tr>
</tbody>
</table>

In the metropolitan C.A.E.s, education and the paramedical courses have over-representations from the Australian born. European families are well represented in engineering and science, perhaps as a result of their persistent aspiration for them now that these courses are declining in popularity among Australian families. Asians are less attracted to, or less likely to achieve places in arts and education - two faculties that do have above average representation from immigrant families of English speaking origins.

As has been noted, the country C.A.E.s are dominated by students from Australian born families and only the arts faculty in these colleges shows a deviation. Students from the English speaking origins of U.K., Eire and N.Z. make up 22.2% of the courses in this faculty.

Father's Occupation and Birthplace

Table 3.13 presents some interesting information regarding a condensed distribution of father's occupation according to his country of origin for the three samples of students.

If the Australian born fathers are considered as the base distribution, it is clear that immigrant fathers who are manual workers are much more likely to have student children than their Australian
Table 3.13 DISTRIBUTION OF FATHER'S OCCUPATION BY FATHER'S COUNTRY OF BIRTH FOR STUDENTS FOR EACH TYPE OF INSTITUTION

<table>
<thead>
<tr>
<th>Father's Occupation</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Professional</td>
<td>30.9</td>
<td>30.9</td>
<td>21.6</td>
</tr>
<tr>
<td>Other</td>
<td>45.7</td>
<td>36.2</td>
<td>52.1</td>
</tr>
<tr>
<td>Manual</td>
<td>15.7</td>
<td>23.9</td>
<td>18.8</td>
</tr>
<tr>
<td>Not Stated</td>
<td>7.7</td>
<td>9.0</td>
<td>7.5</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3351</td>
<td>699</td>
<td>629</td>
</tr>
</tbody>
</table>

In the universities, manual English speaking immigrants account for 23.9% of their group and the non-English origin ones for 35.1% compared with 15.7% in the Australian group. An even more dramatic demonstration of this trend occurs in the metropolitan C.A.E.s - 28.1 and 47.7% cf. 18.8%. Asian families are more highly represented by the occupational group that includes shop-keepers, clerks and large and small employers than families of other origins.
In the previous chapter some picture has been provided of the family backgrounds from whence came the students enrolling in universities and C.A.E.s in 1976. We now turn to the students themselves, beginning with their country of birth. The ages of the enrolling students are then considered and the type of their enrolment. The interaction of both of these with other variables including the family background ones clearly enlarges the picture provided in the previous chapter. The students' secondary schooling prior to embarking on studies in higher education is presented next and related to the preceding variables.

**Student's Birthplace**

Figure 4.1 gives the data for the birthplace of the students. These data can be compared with the corresponding one for the students' parents which has already appeared in Table 1.15. As would be expected the percentage of Australian born parents is higher than the value for the students. On the other hand, the more permanent immigrant groups - from U.K., Eire and N.Z., and from Europe - are correspondingly lower. Apart from the country C.A.E.s with their very low numbers of students from non-Australian families, the overall percentage of overseas born students from these two main groups of sources is about 12% for both males and females. This figure compares well with the estimate of 11% for these sorts of students in the school population from which students in higher education may be drawn. This comparison is taken a little further on page 116.

**Age of Students**

It is now time to consider the fact, so evident earlier in Chapter 1 (Table 1.5) that the students newly enrolling in degree and diploma courses in 1976 are by no means all in the age group of immediate school leavers, namely, 17-19 years. Figure 4.2 gives the age distribution of our three institutional samples of students.

In each type of institution, these data suggest that a majority of students enrol either straight from school or soon after. More detailed information on this transition is given later in this chapter. However, only in the country colleges are these students not joined by a large
minority of older students who have clearly not come straight from school. The location of these colleges, away from the large concentrations of population, presumably make them less accessible to these older students who may have financial commitments that require them to undertake studies where part-time enrolment is possible or in locations where they can be supported financially by partners whose work is likely to be located in metropolitan centres.

This relation between availability of courses and the age of the enrolling students is developed a little when type of enrolment is considered. The country C.A.E.s can be discounted because in 1976 they
Figure 4.2 DISTRIBUTION BY AGE OF STUDENTS, BY SEX, IN THE DIFFERENT TYPES OF INSTITUTIONS

**UNIVERSITIES**

N: M3002 F 2078
n.s.: 0.8% 1.2%

**METROPOLITAN COLLEGES**

N: M 1947 F 1517
n.s.: 0.8% 2.0%

**COUNTRY COLLEGES**

N: M 682 F 924
n.s.: 1.0% 0.8%
had so few older part-time students, and 99.5% of their younger students were full-time. Only 8.4% of their enrolments were over 21 and of these 81.3% were full-time. This meant that only 1.6% of our sample of the students in these types of C.A.E.s were both older and part-time. The corresponding proportions in the universities and metropolitan C.A.E.s were 13.5% and 13.9%. Particularly in the latter institutions, there was a significant group (14.7%) of the younger students who were also part-time. Figure 4.3 presents this data.

It will be seen that in each type of institution the younger students make up more than 80% of the full-time enrolment. Indeed finer details
of the age variable show, for example in the universities, that the percentage of enrolments which are full-time goes from 97.6% for 17 year olds through 95.2%, 90.3% to 78.4% for the 20-21 year olds. In the metropolitan C.A.E.s the same trend holds with 90.8% for 17 year olds and 68.8% for the 20-21 group.

One quarter of the part-timers in the universities were less than 22 but almost half (43.9%) of the part-timers in the metropolitan C.A.E.s were in this younger age bracket. There were more older students enrolled part-time in both the universities and metropolitan C.A.E.s than full-time. The proportions were similar in these two types of institution, although the availability of courses for part-time study differ considerably. For example, there are few possibilities for studying engineering part-time in universities whereas this is common in the C.A.E.s. The reverse holds for education which tends to be available for part-time students in universities but not in C.A.E.s.

In order to see more clearly how higher education is serving this recurrent or continuing role in Australian education, the age categories of Figure 4.2 have been collapsed into two groups and Figure 4.4 presents this information.

More than a quarter of the university students are older than 21 and
Figure 4.5 DISTRIBUTION OF YOUNGER AND OLDER STUDENTS BETWEEN FACULTIES IN UNIVERSITIES AND METROPOLITAN COLLEGES

UNIVERSITIES

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Law</th>
<th>Medicine</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>N:</td>
<td>1047</td>
<td>687</td>
<td>1808</td>
<td>163</td>
<td>436</td>
<td>273</td>
<td>348</td>
<td>318</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent</th>
<th>17-21</th>
<th>22+plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>87.9</td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td>79.6</td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td>67.4</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>58.6</td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td>32.6</td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td>53.2</td>
<td></td>
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<tr>
<td>Medicine</td>
<td>46.5</td>
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</tr>
<tr>
<td>Other</td>
<td>82.3</td>
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</tr>
</tbody>
</table>

METROPOLITAN COLLEGES

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Law</th>
<th>Medicine</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>N:</td>
<td>381</td>
<td>832</td>
<td>379</td>
<td>1104</td>
<td>411</td>
<td>45</td>
<td>45</td>
<td>314</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percent</th>
<th>17-21</th>
<th>22+plus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Law</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17.2% of the metropolitan college students. Females in universities are more likely to be older than males but the reverse is true in the C.A.E.s. This is undoubtedly related to the availability of particular courses for which achievement and aspiration coincide suitably in these older students. The entry by mature age students into higher education is by no means uniform across the courses and faculties. Figure 4.5 shows the faculty distribution of these younger and older students in the universities and the metropolitan C.A.E.s.

In the universities older students are a higher than average proportion in two faculties - arts and education. Law and commerce have fair representations of these students but they appear much less than average in science and rarely in engineering and medicine. The traditional achievements for selection into these science-based faculties, the lack of part-time courses and the highly competitive availability of places for medicine combine to make these types of university study less attractive for older students. In the metropolitan C.A.E.s, however, there is a more even spread of older students. Although the paramedical courses have the lowest proportion of older students these are 13.3% compared with only 5.5% in the university courses, grouped as medicine. It is interesting to note that both science and engineering in the C.A.E.s...
attract an about average proportion of older students and this reinforces the view that availability rather than aspiration is the main factor operating to exclude them from university studies since the level of achievement in 1976 was not high for these faculties in many universities. Again in some contrast to the university sample, courses in commerce were the most attractive to older students in the C.A.E.s. This may again reflect the appropriateness of the courses and hence their attractiveness for these older students.

Age and Family Social Background

The age of enrolment has also a marked effect in the universities on the likelihood that certain family backgrounds will be represented. Figures 4.6, 4.7 and 4.8 present the distributions of younger and older students in the institutions in terms of collapsed categories of father's education, occupation and income respectively. The other categories in the fine detail for these variables do not show any major variations as a function of the age of enrolment.

The older students more often have parents with only compulsory schooling. In the universities there is a substantially smaller proportion (25.9 cf. 35.3%) of the older students with tertiary educated fathers. Likewise, there is a corresponding drop in the proportion of older
students with professional fathers, and a rise - most marked in the universities - of manual workers' children among the older students. It is clear that numbers of students from groups that are under-achieving higher education straight from school are in fact finally entering universities after a number of years away from education. As far as income is concerned the older university students only report fathers' incomes over $16,000 half as frequently (8.9 cf. 17.2%) and in each type of institution a much higher proportion of the older students reported no income for their fathers. Whether this means that many of these older students now have retired (or deceased) fathers is not clear.
Figure 4.9 DISTRIBUTION FOR EACH TYPE OF INSTITUTION OF COMPOSITE S.E.S. VARIABLE AMONG YOUNGER AND OLDER STUDENTS

UNIVERSITIES
N: (17-21) 3872, (22+) 1161

METROPOLITAN COLLEGES
N: (17-21) 2579, (22+) 841

COUNTRY COLLEGES
N: (17-21) 1461, (22+) 134
The composite s.e.s. variable summarises these results and Figure 4.9 shows this information.

Except in the country C.A.E.s with their very few older students there is a marked tendency for the family s.e.s. to be lower among the older students. This is most striking in the university sample with 27.6% of younger students coming from families of s.e.s.5 compared with 16.5% of older students. At the other end, 24.7% of older university students have families from category 1 and as many as 30% of the older students in the metropolitan C.A.E.s.

It is also possible to consider the relationship between this measure of the socio-economic status of the student and the likelihood that he or she will enrol full-time. Figure 4.10 shows, for each value of the socio-economic status variable, and each type of institution, the likelihood that the student will enrol full-time.

For the university students in the sample there is a strong relationship between the s.e.s. of the student and the likelihood that he will be enrolled full time. Students in the lowest s.e.s. group have a probability of .78 of being full-time while students in the highest s.e.s. group have a probability of .87 of being full time. A similar relationship, though not as clear or as strong, can be observed for the students at the metropolitan colleges. In the country colleges where the vast majority of the students are enrolled full-time it is not possible to discern a relationship between s.e.s. and the likelihood of full-time enrolment.

An examination of the relationship between the occupational group of the fathers of the students and the likelihood that they will enrol full-time indicates that the effects observed in Figure 4.10 cannot be attributed to the occupational status of the fathers of the students. Figure 4.11 shows the relationship between the income groups of the fathers of the students and the likelihood that a student will be enrolled full-time to see whether the effect can be accounted for by the financial resources of the family.

This figure (4.11) does not show any very convincing relationships between income of father and the likelihood of full-time enrolment which indicates that the relationship between s.e.s. and likelihood of full-time enrolment also cannot be accounted for by the income of the fathers. An indication of an effect of the fathers' income can, however, be obtained from the figure. University students whose fathers' incomes are above $4000 and below $12,000 are slightly less likely to be enrolled full-time than students whose fathers earn some income but less than $4000 or earn more than $12,000. This can be accounted for if it is noted that the means test
reduces the amount of the T.E.A.S. allowance payable for students whose fathers are earning more than a few thousand dollars and that fathers earning more than $12,000* are more likely to be in a position where they can assist their children financially without undue hardship. This conclusion must be treated with caution because the size of the effect is quite small and it cannot be detected in the data for the metropolitan college students.

* These are 1976 values.
When the relationship between the educational attainment of the fathers of the students and the likelihood of full-time enrolment is examined an interesting pattern emerges. For the universities, where there is a quite clear relationship between s.e.s. of father and the likelihood that a student will enrol full-time, the students whose fathers have less than four years secondary schooling are less likely to be enrolled full-time (77.2%) than other students (84.3%). At the metropolitan colleges, where only the students in s.e.s. group 1 have a lower likelihood of being full-time, the pattern is similar. When the students whose fathers have primary education only (15.7% of metropolitan college students) are considered there is a
corresponding lower likelihood of full-time enrolment: 69.4% full-time compared with 75.5% full-time for students whose fathers have more than primary education.

*Father's Birthplace*

The relationship between the birthplace of the fathers of the students and the type of enrolment is summarised in Figure 4.12 which shows, for each place of birth, the likelihood that the student will be enrolled full-time.

Asian students in the universities are much more likely to be full-time, a finding which is consistent with the terms under which higher education is accessible (scholarships, student visas, etc.) to this group.
However, in the metropolitan colleges no such tendency is observed and so the finding in the universities may also be influenced by the unavailability of part-time programmes in the courses these students wish to study (e.g. engineering) rather than limited accessibility to this group in general.

The group with the highest likelihood of being part-time is the students from the U.K., Eire and New Zealand which is consistent with the findings reported in this chapter about the way this group of older 'immigrants' is entering Australian higher education. These effects are not, however, found for the students at the metropolitan colleges.

Figure 4.13 gives the distribution of older and younger students in
the three types of institution by their father's country of origin. There
is a striking decrease among the older students in the proportion of
students with Australian-born fathers in all types of institution. This
decrease is almost wholly accounted for by the greater numbers of older
students who are drawn from families who can be called for this purpose
'English speaking' immigrants. The directness of these extra-Australian
cultural influences are not easy to interpret from these data since the
older the students the greater possibilities there are for the father's
birthplace to be a less direct influence. Indeed many of these older
students may be the only migrant so that only the direct effect has
comparative meaning.
Accordingly, a clearer picture can be seen from Figures 4.14 and 4.15 which present the distribution of students in the three types of institution in terms of their own country of origin, firstly by sex and then by age.

The differential aspiration of older students who are 'immigrant' to Australia is even more striking in Figure 4.13 but now it clearly also applies to the students who themselves were originally non-English speaking. Both this group and those from the U.K., Eire and N.Z. are
more highly represented as older students than they are among the younger students recently at school. There is thus evidence that aspiration or delayed accessibility operate differently for older persons born in or outside Australia.

Comparison of Figures 4.13 and 4.15 also indicates that younger students born outside Australia are not achieving higher education more often than their Australian born counterparts. Table 1.16 suggests that only a little more than 11% of the potential student population of this younger age group were born outside Australia. When allowance is made for the Asian born students in Figure 4.14, who would not have been recorded in Table 1.16, the proportions of overseas born are 12.4% and 11.7% in the universities and metropolitan C.A.E.s. At least through schooling the combination of aspiration and achievement of these immigrant students does not show up beyond the population proportion. From other studies that suggest that they are handicapped in achievement in school and from the findings above for their counterparts when older, it can probably be said that their aspiration for higher education must be above the Australian born norm for their representation to be as high as it is.

**Student's Period of Residence**

Some information on how long the students had been resident in Australia is available. As would be expected from the data on birthplace the country colleges have only 1.6% of their students who have been here between 1 and 6 years. This contrasts with 5.7% in the university sample. Another 11.8% of the university students have been resident between 7 and 20 years (cf. only 6.0% in country colleges). If one assumed that all of these students had come straight from school their characteristics can be compared with the data for the school population of 1971 in Table 1.16. Of these, 11.1% of the total population had lived in Australia for less than their lifetime and 4.1% had at that stage been resident for less than four years. These comparatively recent 'immigrants' to Australia appear to be doing better in achieving university places than their proportion in the population as a whole would suggest. Furthermore, if longer residence is more likely to lead to higher education then we would expect a higher proportion of the university sample to come from longer residence groups. There is, in fact, no evidence for this. The three residence periods 1-6, 7-12, and 13-20 years account for 5.7, 5.7 and 6.1 respectively. However, the findings for the newer residents in Australia have been based on the assumption that the university enrolments are only drawn straight from the school population.
Our other findings clearly indicate that this is not so and that many of
the recently arrived students are of mature age. A much more detailed
analysis of the interaction between age, place of schooling and period
of residence is needed before an answer could be given to the
apparently simple question on page 33 about the relations among length
of residence, schooling and chance of higher education.

Type of School

The great majority of students in higher education have attended
school in Australia. The type of school in which most of their secondary
education occurred is given in Figure 4.16. There are almost no sex
differences in the university sample. Males from government schools are more likely in metropolitan colleges whereas the reverse is true in country colleges. The latter are distinctly less popular with girls from independent schools - perhaps a reflection of the greater accessibility for education that the parents of girls in independent schools provide compared with the parents, particularly of girls, in rural government schools.

There are also very few female students in country colleges (and to a less extent in the other institutions), compared with males, who have attended technical schools - probably a reflection of the very limited availability of this type of education for girls in rural areas.
There is a clear tendency for more students from non-Catholic Independent schools to be found in the universities compared with either of the types of C.A.E. This is at the expense of the government schools since the Catholic schools are more or less evenly represented in both the universities and the C.A.E.s.

The relationship between the type of enrolment and the type of secondary school attended for most of the students' secondary education is given in Figure 4.17.

In the universities the highest likelihood of being enrolled full-time is for the students who went to non-Catholic independent secondary schools: almost 90% of the students from these schools are enrolled full-time. Students from technical schools, overseas schools and 'other' schools who are enrolled at universities are more likely than other students to be enrolled part-time. A similar relationship is shown for the students at the metropolitan colleges where 82% of the students from non-Catholic independent schools are enrolled full time compared with 75% of all students and only 58% of students from overseas secondary schools. As was the case with the university students there is little difference between the government schools and the Catholic independent schools. It is interesting to note that, despite the smaller numbers involved, it appears that the non-Catholic independent school students at the country colleges are less likely to be full-time than other country college students.

Comparison with Tables 1.17 and 1.18 indicates that the tertiary populations are representative of the senior school populations as far as Catholic schools are concerned, but that the likelihood of transition from other independent schools to higher education is greater than it is for students with government schooling, particularly the transition to university.

Data were available concerning the students' movement between types of school for the final year of their secondary education. The most significant movements, among the small percentages (5-10%) of students in the different samples who were involved, were all to government secondary schools for the final year of schooling. For example, 10% of students at universities and metropolitan C.A.E.s who had been in Catholic schools for most of their secondary education moved to government schools to complete it. In the country colleges sample, 19.4% of those with Catholic secondary backgrounds made this move. Students in non-Catholic independent schools to a lesser degree moved in the same
In a number of States technical schools did not offer full secondary education it was not surprising to find a larger fraction of this very small initial source of tertiary students changing to government schools for their final year. Since 5, 7 and 6% respectively for the three types of tertiary institution. Since in a number of States technical schools did not offer full secondary education it was not surprising to find a larger fraction of this very small initial source of tertiary students changing to government schools for their final year.

### Student's Schooling and Father's Background

Tables 4.1, 4.2 and 4.3 present the relation between the students' type of secondary school and their fathers' background characteristics of education, occupation and income. In the case of fathers' education, Table 4.1 shows a persistent tendency for fathers who have had tertiary education themselves to be more likely to have student children who have attended non-Catholic independent schools. In each sample students from Catholic schools are less likely to have had tertiary education. Fathers who have had only compulsory education account for the majority of the students in the types of C.A.E. but only 44% of the university sample have such fathers. There is a strong association in each sample between minimal parent education and a government schooling for the student. Students from Catholic schools are less likely to be associated with particular parental educational backgrounds except for the point already mentioned. The religious element in the case of these schools would lead to this pattern. As a
Table 4.2 RELATION FOR STUDENTS IN EACH TYPE OF INSTITUTION BETWEEN THEIR SECONDARY SCHOOLING AND THEIR FATHER'S OCCUPATIONS

<table>
<thead>
<tr>
<th>Student's Type of Secondary School</th>
<th>Father's Education</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Catholic</td>
<td></td>
<td>43.2</td>
<td>52.9</td>
<td>69.8</td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td>20.2</td>
<td>22.2</td>
<td>19.0</td>
</tr>
<tr>
<td>Non-Catholic</td>
<td></td>
<td>28.7</td>
<td>17.6</td>
<td>4.9</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>7.8</td>
<td>7.2</td>
<td>6.2</td>
</tr>
<tr>
<td>Total per cent</td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td></td>
<td>1441</td>
<td>2222</td>
<td>948</td>
</tr>
</tbody>
</table>

Table 4.3 RELATION BETWEEN STUDENT'S TYPE OF SECONDARY SCHOOL AND FATHER'S INCOME IN EACH TYPE OF INSTITUTION

<table>
<thead>
<tr>
<th>Student's Type of Secondary School</th>
<th>Father's Income</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>0-8000</td>
<td>8-16000</td>
<td>over 16000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td>58.8</td>
<td>58.1</td>
<td>35.3</td>
</tr>
<tr>
<td>Catholic</td>
<td></td>
<td>21.4</td>
<td>20.3</td>
<td>20.5</td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td>10.4</td>
<td>16.9</td>
<td>39.6</td>
</tr>
<tr>
<td>Non-Catholic</td>
<td></td>
<td>9.3</td>
<td>4.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Total per cent</td>
<td></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td></td>
<td>1656</td>
<td>1835</td>
<td>777</td>
</tr>
</tbody>
</table>
complement to the pattern for government schooling there is a clear trend towards independent schooling for increased father's education.

In Table 4.2 the relation of schooling with father's occupation is given.

Professional fathers for each sample have a greater tendency to have student children in non-Catholic independent schools than do other groups of parental occupations. Manual workers and non-Catholic independent schooling have little association and these families have mainly used government schools for their student children. In the universities the students from Catholic schools show an even representation among these parental occupations which is not evident elsewhere.

Father's income in relation to student's schooling is presented in Table 4.3.

In each sample there is a tendency for the children of the more wealthy fathers to be educated in non-Catholic independent schools. This is most marked in the universities where 35.3% of these wealthier students were at government schools compared with 58.8% of the children of the least wealthy fathers. A similar pattern exists in the metropolitan C.A.E.s but it is less marked in the country ones due to the low representation of students from Catholic schools with these most wealthy fathers. In fact, there appears to be a tendency for Catholic students with parents in this wealthy group to avoid these non-metropolitan C.A.E.s. Although there are many fewer students from the lowest income families who attended non-Catholic independent schools, they still account for 10.4% of this group of intake into the universities and 6.1% and 5.0% in the two types of C.A.E. respectively.

Composite S.e.s. and Student's Type of School

The regularity of these various trends between student's schooling and father's background are most clear when the composite s.e.s. variable is used. Table 4.4 presents these data.

The association of category 5 with non-Catholic independent schooling is most strong in the university sample. Here 32% of the students who come from families of s.e.s.5 are from these schools. This strong association leads to corresponding figures of 23% in the types of C.A.E.. Catholic students in the universities are much more likely to come from category 5 families than in the other two sectors (19.3 cf. 18.5% and 10.5%). The catholic students in the university are, in fact, evenly spread with a similar proportion of each of the family grouping according
<table>
<thead>
<tr>
<th>Student's Type of Secondary School</th>
<th>Universities Composite S.E.S.</th>
<th>Metropolitan Colleges Composite S.E.S.</th>
<th>Country Colleges Composite S.E.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
<tr>
<td>Government</td>
<td>66.4 60.1 58.3 44.5 41.9</td>
<td>65.2 62.0 58.8 51.9 46.6</td>
<td>74.7 74.3 67.7 65.0 61.7</td>
</tr>
<tr>
<td>Catholic</td>
<td>20.8 22.7 19.9 22.2 19.4</td>
<td>22.6 24.2 24.5 25.2 18.5</td>
<td>20.1 18.0 18.5 16.6 10.5</td>
</tr>
<tr>
<td>Independent</td>
<td>3.8 9.9 13.0 27.3 32.3</td>
<td>3.1 6.1 10.2 17.8 27.1</td>
<td>2.6 4.3 10.0 15.5 23.0</td>
</tr>
<tr>
<td>Non-Catholic</td>
<td>9.0 7.3 8.8 5.9 6.4</td>
<td>9.0 7.8 6.5 5.0 7.9</td>
<td>2.6 3.3 3.8 2.8 4.8</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total per cent</td>
<td>100 100 100 100 100</td>
<td>100 100 100 100 100</td>
<td>100 100 100 100 100</td>
</tr>
<tr>
<td>Total Number</td>
<td>893 912 963 981 1265</td>
<td>792 708 713 674 547</td>
<td>344 366 399 283 209</td>
</tr>
</tbody>
</table>
Table 4.5 RELATION BETWEEN STUDENT'S SECONDARY SCHOOLING AND FACULTY OF ENROLMENT: UNIVERSITIES SAMPLE

<table>
<thead>
<tr>
<th>Type of Secondary School</th>
<th>Faculty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Science</td>
</tr>
<tr>
<td>Government</td>
<td>57.1</td>
</tr>
<tr>
<td>Catholic Independent</td>
<td>20.0</td>
</tr>
<tr>
<td>Non-Catholic Independent</td>
<td>16.8</td>
</tr>
<tr>
<td>Other</td>
<td>6.1</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>1040</td>
</tr>
</tbody>
</table>

to the variable. Students from non-Catholic independent schools make up a very small proportion (13.5%, 9.0% and 6.9%) of the lowest two s.e.s. groupings compared with their share of the two highest s.e.s. groups (58.9%, 44.6% and 38.5%).

Student's Schooling and Father's Country of Origin

For the students in each type of tertiary institution there were similar relationships between the type of school the student had attended and the father's country of origin. The non-Catholic independent schools had smaller proportions of the students who had fathers born outside Australia. The government schools had educated more of these 'immigrant' students although Catholic schools shared this task equally among those with fathers of non-English speaking background.

Student's Schooling and Faculty of Enrolment

Tables 4.5, 4.6 and 4.7 show the relationship between the type of secondary school students attended and their faculty of enrolment.

In the universities students from non-Catholic independent schools are more likely to be found in the professional faculties of medicine, law and engineering in that order. Law is popular with students from Catholic schools whereas students from government schools are distinctly under-
Table 4.6 RELATION BETWEEN STUDENT'S SECONDARY SCHOOLING AND FACULTY OF ENROLMENT: METROPOLITAN COLLEGES SAMPLE

<table>
<thead>
<tr>
<th>Type of Secondary School</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Medicine</th>
<th>Other</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>61.8</td>
<td>51.2</td>
<td>59.1</td>
<td>59.1</td>
<td>63.2</td>
<td>55.5</td>
<td>55.6</td>
<td>1979</td>
</tr>
<tr>
<td>Catholic Independent</td>
<td>18.4</td>
<td>28.4</td>
<td>18.5</td>
<td>24.6</td>
<td>16.4</td>
<td>15.6</td>
<td>25.5</td>
<td>796</td>
</tr>
<tr>
<td>Non-Catholic Independent</td>
<td>12.8</td>
<td>11.0</td>
<td>15.3</td>
<td>11.1</td>
<td>10.5</td>
<td>24.4</td>
<td>11.8</td>
<td>409</td>
</tr>
<tr>
<td>Other</td>
<td>6.9</td>
<td>9.5</td>
<td>7.0</td>
<td>5.1</td>
<td>9.8</td>
<td>4.4</td>
<td>7.0</td>
<td>250</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>3434</td>
</tr>
<tr>
<td>Total Number</td>
<td>375</td>
<td>825</td>
<td>372</td>
<td>1096</td>
<td>408</td>
<td>45</td>
<td>313</td>
<td>3434</td>
</tr>
</tbody>
</table>

Table 4.7 RELATION BETWEEN STUDENT'S SECONDARY SCHOOLING AND FACULTY OF ENROLMENT: COUNTRY COLLEGES SAMPLE

<table>
<thead>
<tr>
<th>Type of Secondary School</th>
<th>Science</th>
<th>Commerce</th>
<th>Arts</th>
<th>Education</th>
<th>Engineering</th>
<th>Other</th>
<th>Not Stated</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>55.4</td>
<td>38.6</td>
<td>48.1</td>
<td>73.8</td>
<td>80.0</td>
<td>71.3</td>
<td>80.3</td>
<td>1112</td>
</tr>
<tr>
<td>Catholic Independent</td>
<td>18.0</td>
<td>26.6</td>
<td>22.2</td>
<td>17.5</td>
<td>16.7</td>
<td>16.5</td>
<td>11.7</td>
<td>278</td>
</tr>
<tr>
<td>Non-Catholic Independent</td>
<td>20.8</td>
<td>30.7</td>
<td>14.8</td>
<td>5.7</td>
<td>0.0</td>
<td>9.5</td>
<td>6.9</td>
<td>157</td>
</tr>
<tr>
<td>Other</td>
<td>5.8</td>
<td>4.0</td>
<td>14.8</td>
<td>2.9</td>
<td>3.3</td>
<td>2.6</td>
<td>1.1</td>
<td>54</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>1601</td>
</tr>
<tr>
<td>Total Number</td>
<td>260</td>
<td>75</td>
<td>27</td>
<td>906</td>
<td>30</td>
<td>115</td>
<td>188</td>
<td>1601</td>
</tr>
</tbody>
</table>
represented in law and medicine and over-represented in education - a course of study that obtains a less than representative number from both sorts of independent school.

In the metropolitan C.A.E.s students from government schools are fairly evenly spread through the faculties. Catholic school students appear most strongly in commerce and least in the paramedical courses - perhaps a reflection of the sex bias towards males that persists in this sector of secondary schooling. In contrast, students from non-Catholic independent schools are well represented in these increasingly attractive (requiring high achievement) paramedical courses. A more varied scene exists in the country college sample which may be partly due to the large number (11.7%) of this sample who did not indicate the faculty of their enrolment. Government school students were very under-represented in commerce, arts and science and over-represented in engineering. Catholic students were again attracted to commerce, as were the students from the other independent sector who continued to be very under-represented in education, although now present in science at twice their overall proportion.

Location of Student's School and Father's Background

Upper professional fathers are under-represented in all non-metropolitan locations. Similarly, students whose fathers have had tertiary education and earn more than $16,000 are much more likely to have had their secondary schooling in the metropolitan cities of Australia. These co-incidences of metropolitan location of the students' backgrounds and the parental factors that tend to associate with enrolment in higher education hold good for each of the types of institution. Their association together is portrayed more vividly by using the composite s.e.s. variable.

When the age of the enrolling students is considered, there does not appear to be much indication that older students come more commonly from non-metropolitan areas. In other words, the older students do not compensate for the lower likelihood students from these areas have of enrolling in higher education, as they do for other of the background characteristics considered earlier.

Similarly, analysis in Figure 4.18 of the effect of age of enrolment on the ultimate enrolment prospects of students from the three main types of secondary schools shows no compensation for the original differential effects. Among the older group of students in universities (21 plus) all three of these school types are somewhat less represented than they are among the younger students.
The students who were educated abroad prior to their arrival in Australia are the group who make up for these under-representations from the main sources of Australian schooling.

**Between School and Enrolment in Higher Education**

It is clear from the overall statistics in Table 1.5 and from the age structures of the students in Figures 4.2, 4.4 and 4.5 that very significant numbers of students are now entering higher education - at least the universities and metropolitan C.A.E.s - after a period away from school. It is time to look at some aspects of this post-school experience.
Table 4.8 DISTRIBUTION OF WHEN STUDENTS, BY SEX, QUALIFIED FOR THE TERTIARY COURSE THEY ARE NOW COMMENCING IN EACH TYPE OF TERTIARY INSTITUTION

<table>
<thead>
<tr>
<th>When Qualified</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male %</td>
<td>Female %</td>
<td>Male %</td>
</tr>
<tr>
<td>Last year</td>
<td>75.2</td>
<td>75.1</td>
<td>70.4</td>
</tr>
<tr>
<td>1 year ago</td>
<td>6.0</td>
<td>6.5</td>
<td>7.1</td>
</tr>
<tr>
<td>2 years ago</td>
<td>2.5</td>
<td>2.2</td>
<td>4.6</td>
</tr>
<tr>
<td>More than 2 years</td>
<td>13.4</td>
<td>15.4</td>
<td>16.8</td>
</tr>
<tr>
<td>Not stated</td>
<td>0.9</td>
<td>0.9</td>
<td>1.1</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3002</td>
<td>2078</td>
<td>1947</td>
</tr>
</tbody>
</table>

Table 4.9 DISTRIBUTION, BY AGE, OF WHEN STUDENTS QUALIFIED TO ENTER THEIR TERTIARY COURSE FOR EACH TYPE OF INSTITUTION

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Last 2 Years</td>
<td>More than 2 Years</td>
<td>Not Stated</td>
</tr>
<tr>
<td>17</td>
<td>1653</td>
<td>99.4</td>
<td>0.0</td>
</tr>
<tr>
<td>18</td>
<td>1497</td>
<td>99.4</td>
<td>0.4</td>
</tr>
<tr>
<td>19</td>
<td>403</td>
<td>84.9</td>
<td>14.4</td>
</tr>
<tr>
<td>20-21</td>
<td>319</td>
<td>47.6</td>
<td>50.5</td>
</tr>
<tr>
<td>22-24</td>
<td>329</td>
<td>39.2</td>
<td>59.5</td>
</tr>
<tr>
<td>25-30</td>
<td>447</td>
<td>44.7</td>
<td>52.6</td>
</tr>
<tr>
<td>31-40</td>
<td>280</td>
<td>49.3</td>
<td>48.5</td>
</tr>
<tr>
<td>40+</td>
<td>105</td>
<td>53.4</td>
<td>44.8</td>
</tr>
<tr>
<td>Not Stated</td>
<td>47</td>
<td>95.7</td>
<td>4.3</td>
</tr>
</tbody>
</table>

We begin by considering when the students qualified to enrol for the course of study they entered in 1976. Table 4.8 gives this information according to the sex of the students in each type of institution.

In the universities males and females present a similar picture with 15.9 and 17.6% qualifying more than 2 years before 1976. In the types of C.A.E. a quite different situation emerges with an even larger fraction of males (21.4 and 15.8% respectively) but a much smaller fraction of females (8.9 and 4.0%).
Table 4.9 presents the same variable by the age of the students. The initial three ages present obvious findings but from 22-30 half the enrollees had not qualified in the past two years which means they had substantially deferred higher education or only recently considered it. Students in the 30 plus age groupings show an increase in the number who have qualified recently but there are still a large fraction who presumably were qualified much earlier to enrol.

A similar picture is presented by the information about how many of the students enrolled for higher education straight from school. Table 4.10 gives these data.

The universities have the highest overall proportion and these males tend to come straight from school whereas in the C.A.E.s the reverse is true. In each type of institution at least 20% had not come straight from school. This proportion is surprising only in the country colleges from what had already been presented about the age structure of the students.

Some finer detail begins to emerge when the number of years since original schooling is considered. Table 4.11 presents this information.

Perhaps a particularly significant figure among the substantial
Table 4.11 DISTRIBUTION OF NUMBER OF YEARS STUDENTS, BY SEX, HAVE SPENT SINCE SCHOOLING\(^1\) AND COMMENCING THIS TERTIARY COURSE

<table>
<thead>
<tr>
<th>Years Since School</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males %</td>
<td>Females %</td>
<td>Males %</td>
</tr>
<tr>
<td>None</td>
<td>65.5</td>
<td>60.9</td>
<td>53.6</td>
</tr>
<tr>
<td>1</td>
<td>8.8</td>
<td>7.1</td>
<td>11.0</td>
</tr>
<tr>
<td>2</td>
<td>4.0</td>
<td>2.7</td>
<td>4.6</td>
</tr>
<tr>
<td>3 - 5</td>
<td>6.8</td>
<td>6.4</td>
<td>10.6</td>
</tr>
<tr>
<td>6 - 10</td>
<td>6.6</td>
<td>7.7</td>
<td>10.7</td>
</tr>
<tr>
<td>More than 10</td>
<td>7.1</td>
<td>14.3</td>
<td>8.7</td>
</tr>
<tr>
<td>Not Stated</td>
<td>1.2</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3002</td>
<td>2078</td>
<td>1947</td>
</tr>
</tbody>
</table>

\(^1\) For mature age students, schooling means original schooling whether or not they may have undertaken some further schooling more recently.

A proportion (at least a quarter, except for females in country colleges) who had a break before this enrolment, is the 14.3% of females in the universities whose break was more than 10 years. There are, however, 13.7% and 19.4% of males in the universities and metropolitan C.A.E.s respectively who have had breaks of more than 6 years.

Two obvious questions are: what have persons been doing between school and enrolling, and what sort of persons do not enrol straight from school?
Experience Between School and Higher Education

Work Experience

Table 4.12 shows the fraction of males and females in each type of institution who have had work experience (other than vacation or part-time experience) prior to enrolment.

One third of both the male and female university students have had work experience other than vacation employment. In the C.A.E.s the figures are less for females. Males in C.A.E.s, however, are more likely than males enrolling at universities to have previous work experience.

The nature of this previous occupation is shown in Figure 4.20.

There are a number of striking differences in the type of work these students have had. It is much more likely that university students (25.6% males and 37.8% females) have been previously employed in professional occupations than the students in the C.A.E.s (about 12% overall). This suggests that this group of students is either upgrading a previous tertiary qualification, or embarking on the preparation for a second career, or further self education at this level. From the faculty

<table>
<thead>
<tr>
<th></th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>Yes</td>
<td>33.9</td>
<td>35.0</td>
<td>48.7</td>
</tr>
<tr>
<td>No and Not Stated</td>
<td>66.1</td>
<td>65.0</td>
<td>51.3</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3002</td>
<td>2078</td>
<td>1947</td>
</tr>
</tbody>
</table>
Figure 4.19 THE NATURE OF THE WORK EXPERIENCE OF STUDENTS, BY SEX, IN EACH TYPE OF INSTITUTION

**Universities**

- N: M 1018, F 727
- n.s.: M 7.5%, F 6.9%

**Metropolitan Colleges**

- N: M 948, F 412
- n.s.: M 2.7%, F 9.5%

**Country Colleges**

- N: M 261, F 166
- n.s.: M 9.2%, F 10.2%
enrolment pattern of older students in the C.A.E.s (Figure 4.5, page ??) it is not surprising to find that 30.9% of the males in metropolitan C.A.E.s have had their work experience in business. The work experience of more than 10% of the females in each type of institution was as housewives.

Previous Tertiary Experience

Between 30 and 40% of the university males and females had had some previous tertiary education. Much smaller proportions in the C.A.E.s had so studied except for males in the metropolitan C.A.E.s for whom this proportion is 40%. Only 20% of the females in the metropolitan C.A.E.s had had such experience and 25% of males and 15% of females in the country colleges.

Figure 4.20 indicates the nature of the previous experiences of tertiary education.

The persistent feature of the previous tertiary education of these students is the large proportion of them who have previously attended university. Among the university sample 13.3% of the males and 9.4% of the females had at some stage been previously enrolled at a university. Likewise 12.9% of males and 5.1% of females among students at metropolitan C.A.E.s had earlier been at university. Even in the country colleges with their lower overall proportion of students with previous tertiary education experience the commonest previous experience for males (9.8%) was university.

Technical college experience was the other major form of earlier education and this was particularly so for males (13.9%) in the metropolitan C.A.E.s. There is no way of knowing how accurately the respondents distinguished between former experience at a C.A.E. or technical college but if the experience was more than 10 years ago none of it should have been recorded as at a C.A.E. A number of the females (7.3%) at university had previously undergone teacher training and it can be presumed that most of these would have so qualified - accounting for probably more than half of the females at university who had worked previously in some sort of professional position. 152 university females reported previous teachers college experience and 256 university females reported previous professional employment.

The Census information concerning previous highest education is available for all commencing students in higher education in 1976 and is given in Table 4.13.
Figure 4.20  PREVIOUS EXPERIENCE OF TERTIARY EDUCATION FOR STUDENTS, BY SEX, IN EACH TYPE OF INSTITUTION

1 The percentages cannot be summed because students may have had more than one type of previous tertiary education.
Table 4.13 DISTRIBUTION OF PREVIOUS HIGHEST QUALIFICATION OF STUDENTS, BY SEX, COMMENCING COURSES IN UNIVERSITIES AND C.A.E.s in 1976

<table>
<thead>
<tr>
<th>Universities</th>
<th>C.A.E.s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
</tr>
<tr>
<td>University</td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td>2.2</td>
</tr>
<tr>
<td>Partial</td>
<td>12.6</td>
</tr>
<tr>
<td>C.A.E.</td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td>0.7</td>
</tr>
<tr>
<td>Partial</td>
<td>1.3</td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td>*</td>
</tr>
<tr>
<td>Partial</td>
<td>**</td>
</tr>
<tr>
<td>Final School</td>
<td>77.0</td>
</tr>
<tr>
<td>Other Aust.</td>
<td>2.3</td>
</tr>
<tr>
<td>Overseas</td>
<td>3.8</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.1</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>18163</td>
</tr>
</tbody>
</table>

1 Constructed from Table 16, University Statistics 1976, Part 1 Students, Reference No. 13.7, Australian Bureau of Statistics; and Table 11, Colleges of Advanced Education 1976, Reference No. 13.10, A.B.S.

2 Excludes higher degree enrolments and students who are commencing diploma and other non-degree courses in universities.

* Included in C.A.E. completed.

** Included in C.A.E. partial.
The population from which our sample has been drawn is not quite the same because post-school education at technical college has not been included, so that exact comparisons are not easy to draw. However, the Census refers to 'previous highest qualification' and may therefore under-estimate the real extent of previous post-school or tertiary educational experience.

**Previous Experience and Faculty of Enrolment**

In the universities more than half (58.1%) of the group with previous professional experience were enrolled in arts, with science (10%) and commerce (10%) being the next most popular faculties. In fact, arts, as the faculty of enrolment, accounts for more of each of the types of previous work experience than any other faculty - 80.2% of the housewives. The three professional faculties - engineering, law and medicine - together account for less than 10% of these deferred or older students. Whether there are barriers to these faculties that specially affect the factors of our model for entry would seem to be worth careful exploration, since at least one of these faculties is short of students in most institutions and the other professions may benefit from a share of these more 'mature' persons.

A quite different pattern of enrolment holds in the C.A.E.s. Arts is by no means dominant and the group of ex-housewives are now heavily (70.7%) enrolled in education. The ex-professional group are evenly spread in the metropolitan C.A.E.s with 23.5, 19.4, 18.4, 16.3 and 15.3% in commerce, engineering, arts, education and science respectively. The ex-business group are not surprisingly heavily enrolled in commerce (63.6%) which also has the largest group (28.7%) of the Other Salaried workers. In the country colleges, education is the dominant faculty for enrolments from all groups - 68.8, 51.4, 47.6 and 39.0% for Housewives, Other Salaried, Business and Professional respectively.

**Previous Experience and Family Background**

Figure 4.21 shows the proportion of students in each s.e.s. background group who have previous work experience.

Overall, students at the metropolitan colleges are most likely to have previous work experience. For the universities there seems to be a relationship between s.e.s. category and the likelihood of previous work experience but this relationship does not appear to hold for the other types of institution.
The previous experiences of the students in the samples with tertiary education are shown in Tables 4.14 (a) (b) and (c). These tables show, for each type of institution, the percentage of the students in each of the s.e.s. categories who report that they have had each kind of tertiary education experience. It should be noted that it is not valid to sum the row percentages in these tables to obtain the total percentage of students previously enrolled in tertiary education because students may have been enrolled in more than one type of tertiary institution before the current enrolment.
Table 4.14 PERCENTAGE OF STUDENTS WITH EACH TYPE OF PREVIOUS TERTIARY EDUCATION EXPERIENCE FOR EACH S.E.S. CATEGORY:

(a) Universities Sample

<table>
<thead>
<tr>
<th>Composite S.E.S.</th>
<th>Type of Previous Enrolment</th>
<th>University %</th>
<th>C.A.E. %</th>
<th>Technical %</th>
<th>Teachers %</th>
<th>Other %</th>
<th>Total Students N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>10.5</td>
<td>4.9</td>
<td>9.5</td>
<td>5.8</td>
<td>2.1</td>
<td>904</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>11.0</td>
<td>5.5</td>
<td>5.7</td>
<td>5.7</td>
<td>1.9</td>
<td>926</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>12.1</td>
<td>4.6</td>
<td>6.9</td>
<td>4.3</td>
<td>1.3</td>
<td>978</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>10.0</td>
<td>4.9</td>
<td>4.8</td>
<td>3.6</td>
<td>2.3</td>
<td>996</td>
</tr>
<tr>
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<td></td>
<td>13.9</td>
<td>3.2</td>
<td>2.5</td>
<td>2.9</td>
<td>1.7</td>
<td>1276</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>11.7</td>
<td>4.5</td>
<td>5.6</td>
<td>4.3</td>
<td>1.9</td>
<td>5080</td>
</tr>
</tbody>
</table>

(b) Metropolitan Colleges Sample

<table>
<thead>
<tr>
<th>S.E.S.</th>
<th>Type of Previous Enrolment</th>
<th>University %</th>
<th>C.A.E. %</th>
<th>Technical %</th>
<th>Teachers %</th>
<th>Other %</th>
<th>Total Students N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>8.1</td>
<td>6.0</td>
<td>13.0</td>
<td>1.8</td>
<td>2.0</td>
<td>798</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>6.4</td>
<td>3.8</td>
<td>10.1</td>
<td>1.7</td>
<td>2.2</td>
<td>714</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>9.1</td>
<td>4.0</td>
<td>9.8</td>
<td>1.7</td>
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<td>3.8</td>
<td>6.9</td>
<td>1.8</td>
<td>2.3</td>
<td>682</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>15.7</td>
<td>4.2</td>
<td>7.1</td>
<td>1.6</td>
<td>3.6</td>
<td>549</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9.5</td>
<td>4.4</td>
<td>9.6</td>
<td>1.7</td>
<td>2.4</td>
<td>3466</td>
</tr>
</tbody>
</table>

(c) Country Colleges Sample

<table>
<thead>
<tr>
<th>S.E.S.</th>
<th>Type of Previous Enrolment</th>
<th>University %</th>
<th>C.A.E. %</th>
<th>Technical %</th>
<th>Teachers %</th>
<th>Other %</th>
<th>Total Students N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>4.0</td>
<td>2.0</td>
<td>6.1</td>
<td>1.2</td>
<td>0.3</td>
<td>346</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>6.2</td>
<td>2.7</td>
<td>3.2</td>
<td>0.8</td>
<td>1.6</td>
<td>370</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4.7</td>
<td>2.5</td>
<td>4.7</td>
<td>1.0</td>
<td>0.7</td>
<td>400</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>7.0</td>
<td>3.5</td>
<td>4.2</td>
<td>0.7</td>
<td>1.4</td>
<td>284</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>10.0</td>
<td>1.0</td>
<td>6.7</td>
<td>2.4</td>
<td>2.9</td>
<td>209</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6.0</td>
<td>2.4</td>
<td>4.8</td>
<td>1.1</td>
<td>1.2</td>
<td>1609</td>
</tr>
</tbody>
</table>
In the universities sample the most frequently reported type of previous tertiary education was university education which was reported by nearly 12% of university commencing students. It is interesting to note that, at the universities, students from s.e.s. category 5 have the highest likelihood of previous university education but the lowest likelihood of previous enrolment in most other types of tertiary education.

For the metropolitan college students the most frequently reported previous types of tertiary education are university and technical colleges. Again, there is a strong tendency for students from higher s.e.s. backgrounds to be more likely to report previous university enrolment. Previous C.A.E. and technical college experience is reported most frequently by students from the lowest s.e.s. category.

At the non-metropolitan colleges the overall rate of previous tertiary enrolment is noticeably lower than at the universities and the C.A.E.s but, as is the case with university students, previous university study is the most likely form of previous study to be reported. Again, there is a tendency for students from the highest s.e.s. category to be more likely to report previous university study. S.e.s. appears to have little effect on the likelihood that the student will report other types of previous tertiary education experience.

Previous Experience and Secondary Schooling

Figure 4.22 shows the proportion of students from each type of secondary school who had work experience before their current enrolment in higher education.

Inspection of Figure 4.22 indicates that for all types of institution the overseas students are far more likely than all other groups of students to have previous work experience. The non-Catholic independent students are, in general, less likely to have had previous work experience although this effect is less pronounced at the metropolitan colleges than at the universities and the country colleges.

Tables 4.15 (a) (b) and (c) present, for each type of institution, the percentage of students coming from each main type of secondary school who have previously enrolled in each type of tertiary institution. As was the case with Tables 4.14 (a) (b) and (c) the row percentages in these three tables cannot be summed to obtain the
percentage of students from each type of secondary school who have previous tertiary experience because it is possible for a student to have enrolled in more than one type of tertiary institution prior to the current enrolment.

The most noticeable feature of Tables 4.15 (a) (b) and (c) is the tendency for the students who completed their schooling overseas to be more likely to have previous tertiary education experience. This may be a result of the older average age of these students or a tendency for them to engage in some other form of study in their home countries before coming to Australia. The high likelihood that students who completed their secondary education overseas have previous technical
Table 4.15 PERCENTAGE OF STUDENTS WITH EACH TYPE OF PREVIOUS TERTIARY EDUCATION EXPERIENCE FOR EACH TYPE OF SECONDARY SCHOOL ATTENDED:

(a) Universities Sample

<table>
<thead>
<tr>
<th>Type of Secondary School Attended</th>
<th>Type of Previous Enrolment</th>
<th>University %</th>
<th>C.A.E. %</th>
<th>Technical %</th>
<th>Teachers %</th>
<th>Other %</th>
<th>Total Students N</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td></td>
<td>10.6</td>
<td>4.6</td>
<td>5.5</td>
<td>4.3</td>
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<td>2669</td>
</tr>
<tr>
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<td>11.5</td>
<td>4.4</td>
<td>5.8</td>
<td>5.6</td>
<td>1.8</td>
<td>1049</td>
</tr>
<tr>
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<td>12.5</td>
<td>3.7</td>
<td>2.6</td>
<td>2.1</td>
<td>1.5</td>
<td>925</td>
</tr>
<tr>
<td>Non-Catholic</td>
<td></td>
<td>19.1</td>
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<td>11.0</td>
<td>5.7</td>
<td>4.7</td>
<td>299</td>
</tr>
<tr>
<td>Overseas</td>
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<td>12.5</td>
<td>9.7</td>
<td>19.4</td>
<td>4.2</td>
<td>2.8</td>
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</tr>
<tr>
<td>Other</td>
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<td>4.5</td>
<td>10.6</td>
<td>10.6</td>
<td>7.6</td>
<td>66</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>11.7</td>
<td>4.5</td>
<td>5.6</td>
<td>4.3</td>
<td>1.9</td>
<td>5080</td>
</tr>
</tbody>
</table>

(b) Metropolitan Colleges Sample

<table>
<thead>
<tr>
<th>Type of Secondary School Attended</th>
<th>Type of Previous Enrolment</th>
<th>University %</th>
<th>C.A.E. %</th>
<th>Technical %</th>
<th>Teachers %</th>
<th>Other %</th>
<th>Total Students N</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td></td>
<td>8.4</td>
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<td>8.9</td>
<td>1.2</td>
<td>1.9</td>
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</tr>
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<td>7.9</td>
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<td>2.0</td>
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<td>14.9</td>
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</tr>
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<td>7.5</td>
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</tr>
<tr>
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<td>2.2</td>
<td>3.3</td>
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</tr>
<tr>
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<td>15.6</td>
<td>6.3</td>
<td>9.4</td>
<td>0.0</td>
<td>6.3</td>
<td>32</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9.5</td>
<td>4.4</td>
<td>9.6</td>
<td>1.7</td>
<td>2.4</td>
<td>3466</td>
</tr>
</tbody>
</table>

(c) Country Colleges Sample

<table>
<thead>
<tr>
<th>Type of Secondary School Attended</th>
<th>Type of Previous Enrolment</th>
<th>University %</th>
<th>C.A.E. %</th>
<th>Technical %</th>
<th>Teachers %</th>
<th>Other %</th>
<th>Total Students N</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td></td>
<td>5.0</td>
<td>2.2</td>
<td>4.3</td>
<td>0.9</td>
<td>0.8</td>
<td>1112</td>
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<tr>
<td>Catholic</td>
<td></td>
<td>7.9</td>
<td>2.5</td>
<td>4.7</td>
<td>1.4</td>
<td>1.1</td>
<td>278</td>
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<td>4.5</td>
<td>1.3</td>
<td>4.5</td>
<td>157</td>
</tr>
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<td>4.5</td>
<td>18.2</td>
<td>9.1</td>
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<td>22</td>
</tr>
<tr>
<td>Overseas</td>
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<td>15.6</td>
<td>0.0</td>
<td>3.1</td>
<td>32</td>
</tr>
<tr>
<td>Other</td>
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<td>25.0</td>
<td>0.0</td>
<td>12.5</td>
<td>0.0</td>
<td>0.0</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6.0</td>
<td>2.4</td>
<td>4.8</td>
<td>1.1</td>
<td>1.2</td>
<td>1609</td>
</tr>
</tbody>
</table>
tertiary education experience lends support to the second view. If the effect was solely a result of age then one would expect all types of previous tertiary enrolment to show the same effect.

The students who received their secondary education at non-Catholic independent schools are less likely than other students to have previously enrolled at technical colleges, especially those whose current enrolment is in universities and metropolitan colleges. At the metropolitan colleges the students from the non-Catholic independent schools are noticeably more likely than other students to have previously enrolled at university.

Delay of Entry to Higher Education

The students in the survey were asked if they had entered higher education immediately from school. It should be noted that students who answered yes to this question did not all officially defer their studies. Table 4.10 showed the proportion of students who did not enter higher education immediately after their secondary schooling by sex and type of institution.

Overall, almost one quarter of students do not go directly from secondary school to higher education. At the C.A.E.s the male students are more likely to delay entry to higher education while at the universities the female students are somewhat more likely to delay entry. Males attending the country colleges are the most likely group to delay entry to higher education with almost 30% not entering immediately.

Students who did not enter higher education immediately after completion of secondary schooling were asked to report their reasons for the delay. A number of reasons were suggested to the students and the distribution of responses is shown in Figure 4.23. It should be noted that it was possible for a student to give more than one reason for delay of entry and as a result the total at the bottom of the table is the total number of reasons advanced by the students, not the total number of students who delayed their entry to higher education.

Lack of qualification accounted for less than 20% of the reasons for delay of entry. The commonest reason given was that outside experience would be useful. Insufficient finance was a more common response from females in each type of institution and made up one quarter of the reasons given by female university students.
Tertiary institutions vary in their policies concerning formal deferment. Several, like Monash University, did actively promote the possibility. For example, in 1973, Monash granted formal deferment (approval of a subsequent place) to 357 students in 6 faculties, i.e. about one in ten of the first year enrolment. Of this group 159 did take up their assured place by enrolling in 1974.

If students giving the first two reasons are considered to be school leavers with definite plans for higher education, they would contribute about 7% of the year’s enrolment in the universities and a rather higher figure in the C.A.E.s. If those with insufficient
finance are also included the proportion who wish or need to defer is certainly over 10%.

Family Background and Delay of Entry

Tables 4.16 (a) (b) and (c) present the reasons for delay of enrolment for different composite s.e.s. families.

In each type of institution, students indicating insufficient finance are more likely to come from the families with s.e.s. 1 and 2.

In the universities, wanted a break from schooling is more common among the higher s.e.s. families but this is not the case in the C.A.E.s, and at the metropolitan ones the lower s.e.s. categories tend to be commoner. In the universities again, students from families of s.e.s. 5 are strongly represented among those who thought outside experience useful. This is not evident in the C.A.E.s. The lowest s.e.s. families in the universities and the metropolitan C.A.E.s account for the greatest proportions of those with no original intention of higher education. These families also tend to provide more of those in each type of institution who were not qualified from school to enrol for higher education.

The students from lower s.e.s. families tended not to aspire so commonly and also higher education for them was less accessible. They also, as a result of school, had achieved less than their counterpart students from families of higher s.e.s. who had delayed entry.

Secondary Schooling and Delay of Entry

The distribution of reasons for delay that were given by students from different types of secondary school are given in Tables 4.17 (a) (b) and (c).

In the universities, students from State schools were more likely to present as reasons not qualified or insufficient finance than were students from non-Catholic independent schools who quite rarely gave these reasons. Catholic students presented the various reasons fairly evenly except that they seem less likely to have no original intention of higher education.

The responses of ex-students from non-Catholic Independent and State schools in the metropolitan C.A.E.s followed the same pattern but even more strongly with 64.8% of the not qualified responses from State schools and 56.3% of the insufficient finance ones.
Table 4.16 DISTRIBUTION OF REASONS FOR DELAY BY THE STUDENT'S FAMILY COMPOSITE S.E.S. VARIABLE

(a) Universities Sample

<table>
<thead>
<tr>
<th>Composite S.E.S.</th>
<th>Break from school %</th>
<th>Outside experience %</th>
<th>No intention %</th>
<th>Not qualified %</th>
<th>Insufficient finance %</th>
<th>Other reason %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15.9</td>
<td>14.1</td>
<td>26.5</td>
<td>26.4</td>
<td>32.3</td>
<td>28.2</td>
</tr>
<tr>
<td>2</td>
<td>16.9</td>
<td>15.7</td>
<td>25.2</td>
<td>20.1</td>
<td>20.2</td>
<td>11.7</td>
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<td>19.4</td>
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<td>12.6</td>
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<td>15.6</td>
<td>10.4</td>
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<td>19.4</td>
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<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Reasons</td>
<td>201</td>
<td>255</td>
<td>147</td>
<td>144</td>
<td>248</td>
<td>103</td>
</tr>
</tbody>
</table>

(b) Metropolitan Colleges Sample

<table>
<thead>
<tr>
<th></th>
<th>Break from school %</th>
<th>Outside experience %</th>
<th>No intention %</th>
<th>Not qualified %</th>
<th>Insufficient finance %</th>
<th>Other reason %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>19.3</td>
<td>38.2</td>
<td>35.9</td>
<td>41.9</td>
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<td>22.0</td>
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<td>3</td>
<td>20.6</td>
<td>19.8</td>
<td>22.8</td>
<td>19.3</td>
<td>20.0</td>
<td>27.1</td>
</tr>
<tr>
<td>4</td>
<td>19.4</td>
<td>23.8</td>
<td>8.9</td>
<td>15.9</td>
<td>10.0</td>
<td>8.5</td>
</tr>
<tr>
<td>5</td>
<td>14.9</td>
<td>13.4</td>
<td>7.3</td>
<td>13.8</td>
<td>6.3</td>
<td>8.5</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Reasons</td>
<td>175</td>
<td>202</td>
<td>123</td>
<td>145</td>
<td>160</td>
<td>59</td>
</tr>
</tbody>
</table>

(c) Country Colleges Sample

<table>
<thead>
<tr>
<th></th>
<th>Break from school %</th>
<th>Outside experience %</th>
<th>No intention %</th>
<th>Not qualified %</th>
<th>Insufficient finance %</th>
<th>Other reason %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>17.6</td>
<td>21.8</td>
<td>18.4</td>
<td>32.2</td>
<td>28.1</td>
<td>35.5</td>
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<td>2</td>
<td>23.5</td>
<td>28.6</td>
<td>23.7</td>
<td>22.0</td>
<td>26.3</td>
<td>29.0</td>
</tr>
<tr>
<td>3</td>
<td>20.6</td>
<td>16.8</td>
<td>28.9</td>
<td>23.7</td>
<td>19.3</td>
<td>16.1</td>
</tr>
<tr>
<td>4</td>
<td>22.1</td>
<td>14.3</td>
<td>18.4</td>
<td>15.3</td>
<td>17.5</td>
<td>3.2</td>
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<td>5</td>
<td>16.2</td>
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<td>10.5</td>
<td>6.8</td>
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<td>16.1</td>
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<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Reasons</td>
<td>68</td>
<td>119</td>
<td>38</td>
<td>59</td>
<td>57</td>
<td>31</td>
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</tbody>
</table>
Table 4.17 REASONS FOR DELAY BY THE STUDENT'S SECONDARY SCHOOLING

(a) Universities Sample

<table>
<thead>
<tr>
<th>Type of Secondary School</th>
<th>Break from School %</th>
<th>Outside School Experience %</th>
<th>No intention %</th>
<th>Not qualified %</th>
<th>Insufficient finance %</th>
<th>Other reasons %</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>47.3</td>
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<td>48.3</td>
<td>50.7</td>
<td>54.0</td>
<td>44.7</td>
</tr>
<tr>
<td>Catholic Independent</td>
<td>22.9</td>
<td>19.2</td>
<td>16.3</td>
<td>23.6</td>
<td>21.4</td>
<td>18.4</td>
</tr>
<tr>
<td>Non-Catholic Independent</td>
<td>17.4</td>
<td>20.0</td>
<td>14.3</td>
<td>6.3</td>
<td>6.0</td>
<td>14.6</td>
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<tr>
<td>Other</td>
<td>9.0</td>
<td>11.0</td>
<td>19.1</td>
<td>15.3</td>
<td>17.7</td>
<td>18.4</td>
</tr>
<tr>
<td>Not Stated</td>
<td>3.5</td>
<td>2.4</td>
<td>2.0</td>
<td>4.2</td>
<td>0.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total reasons</td>
<td>201</td>
<td>255</td>
<td>147</td>
<td>144</td>
<td>248</td>
<td>103</td>
</tr>
</tbody>
</table>

(b) Metropolitan Colleges Sample

| State                    | 58.9                | 48.0                        | 52.0          | 64.8            | 56.3                   | 42.4           |
| Catholic Independent     | 24.6                | 26.7                        | 22.0          | 16.6            | 18.1                   | 23.7           |
| Non-Catholic Independent | 9.7                 | 9.4                         | 9.8           | 6.2             | 3.7                    | 8.5            |
| Other                    | 5.7                 | 14.9                        | 14.6          | 11.7            | 18.7                   | 25.4           |
| Not Stated               | 1.1                 | 1.0                         | 1.6           | 0.7             | 3.1                    | 0.0            |
| Total per cent           | 100                 | 100                         | 100           | 100             | 100                    | 100            |
| Total Reasons            | 175                 | 202                         | 123           | 145             | 160                    | 59             |

(c) Country Colleges Sample

| State                    | 70.6                | 59.7                        | 76.3          | 69.5            | 68.4                   | 71.0           |
| Catholic Independent     | 17.6                | 21.8                        | 15.8          | 11.9            | 17.5                   | 22.6           |
| Non-Catholic Independent | 10.3                | 15.1                        | 2.6           | 8.5             | 3.5                    | 3.2            |
| Other                    | 1.5                 | 2.5                         | 5.3           | 8.5             | 10.5                   | 3.2            |
| Not Stated               | 0.0                 | 0.8                         | 0.0           | 1.7             | 0.0                    | 0.0            |
| Total per cent           | 100                 | 100                         | 100           | 100             | 100                    | 100            |
| Total Reasons            | 68                  | 119                         | 38            | 59              | 57                     | 31             |
The influence of cultural factors on delayed entry can be inferred to some extent from the data in Table 4.18 (a) (b) and (c) which present, for each type of reason given, the proportion of reasons reported by students from each country of origin.

Australian origin students predominate in wanting a break from school - particularly in the C.A.E.s. Students from the other English speaking countries are more likely to have had no intention or insufficient finance than the other reasons. Students from non-English speaking countries are not likely to report that they had not intended to enrol in higher education.

One concluding comment can be made with confidence. Students who delay entry to higher education have a greater resemblance to the Australian population as a whole in their s.e.s. characteristics than do students who enter direct from school. Conditions that encourage delayed entry and mature age entry can be expected to enhance this equality of opportunity for higher education and to recover talent that early education or immediate accessibility is at present not revealing or wasting.
Table 4.18 REASONS FOR DELAY BY FATHER’S BIRTHPLACE

(a) Universities Sample

<table>
<thead>
<tr>
<th>Father’s Birthplace</th>
<th>Break from school</th>
<th>Outside experience</th>
<th>No intention</th>
<th>Not qualified</th>
<th>Insufficient finance</th>
<th>Other reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>66.2</td>
<td>62.4</td>
<td>59.9</td>
<td>61.1</td>
<td>59.3</td>
<td>53.4</td>
</tr>
<tr>
<td>UK, Eire, New Zealand</td>
<td>15.4</td>
<td>17.7</td>
<td>26.5</td>
<td>22.2</td>
<td>21.0</td>
<td>23.3</td>
</tr>
<tr>
<td>Europe</td>
<td>10.4</td>
<td>12.2</td>
<td>7.5</td>
<td>9.0</td>
<td>10.5</td>
<td>9.7</td>
</tr>
<tr>
<td>Asia</td>
<td>1.5</td>
<td>3.1</td>
<td>4.1</td>
<td>3.5</td>
<td>3.2</td>
<td>6.8</td>
</tr>
<tr>
<td>Other</td>
<td>6.5</td>
<td>4.7</td>
<td>2.1</td>
<td>3.5</td>
<td>5.2</td>
<td>5.9</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.7</td>
<td>0.8</td>
<td>1.0</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total Reasons</td>
<td>201.0</td>
<td>255.0</td>
<td>147.0</td>
<td>144.0</td>
<td>248.0</td>
<td>103.0</td>
</tr>
</tbody>
</table>

(b) Metropolitan Colleges Sample

| Australia                 | 70.3              | 57.4               | 69.9         | 59.3          | 51.3                 | 45.8          |
| UK, Eire, New Zealand     | 14.2              | 17.8               | 18.7         | 19.3          | 23.7                 | 20.3          |
| Europe                    | 10.3              | 10.9               | 5.7          | 13.8          | 14.4                 | 16.9          |
| Asia                      | 0.6               | 7.4                | 1.6          | 2.1           | 5.0                  | 10.2          |
| Other                     | 3.5               | 6.0                | 3.2          | 4.9           | 3.7                  | 1.7           |
| Not Stated                | 1.1               | 0.5                | 0.8          | 0.7           | 1.9                  | 5.1           |
| Total per cent            | 100.0             | 100.0              | 100.0        | 100.0         | 100.0                | 100.0         |
| Total Reasons             | 175.0             | 202.0              | 123.0        | 145.0         | 160.0                | 59.0          |

(c) Country Colleges Sample

| Australia                 | 86.8              | 78.2               | 81.6         | 81.4          | 66.7                 | 80.6          |
| UK, Eire, New Zealand     | 8.8               | 7.6                | 13.2         | 11.9          | 19.3                 | 9.7           |
| Europe                    | 1.5               | 10.1               | 5.3          | 3.4           | 5.3                  | 3.2           |
| Asia                      | 1.5               | 0.8                | 0.0          | 0.0           | 5.3                  | 3.2           |
| Other                     | 1.5               | 2.5                | 0.0          | 3.4           | 1.8                  | 3.2           |
| Not Stated                | 0.0               | 0.8                | 0.0          | 0.0           | 1.8                  | 0.0           |
| Total per cent            | 100.0             | 100.0              | 100.0        | 100.0         | 100.0                | 100.0         |
| Total Reasons             | 68.0              | 119.0              | 38.0         | 59.0          | 57.0                 | 31.0          |
Chapter 5
THE EFFECT ON ENROLMENT OF
THE PLURALITY OF HIGHER EDUCATION

Until the 1960s, except in N.S.W., 'choice of tertiary education' was virtually a non-issue if this meant, as now, education beyond a full secondary schooling. Only N.S.W. had more than one university, and the universities were the only institutional form of education that required successful completion of secondary education to the matriculation level before students could enrol. In N.S.W. the establishment of the University of N.S.W. in metropolitan Sydney in the first half of the 1950s began to raise for secondary students in that State, what is now a major question in all States of Australia: Which institution of higher education shall I attempt to enter?

This aspect of 'choice' was generally apparent as soon as the States of Queensland, Victoria and South Australia established their second universities in the 1960s. However, 'choice' became a much more complex issue following the establishment of the binary system in 1966. Not only was there a choice of universities for most Australian students, but also there were now C.A.E.s which offered courses of study, some of which overlapped with those in universities, and some of which were new ones hitherto not available or unrecognised at the tertiary level.

An example of this upgrading of a course of study was the vocational education of primary teachers. Prior to the mid-60s, this had been available only in teachers colleges which had entry requirements below that of completion of secondary education and which, as institutions, were nearly all formally part of the State education departments. Since 1966 these institutions have become autonomous C.A.E.s, some of which are still oriented to teacher training while others now offer more diverse courses. Their programmes of teacher education have become fully tertiary in character. Similar programmes are also now available in several universities and in some C.A.E.s which originally were not involved in teacher education.

The combination of courses of study with the variety of tertiary institutions are now both numerous and confusing. Most States have by now moved to a system of co-ordinated admission for tertiary education. This co-ordination involves all or most of the tertiary institutions in a State and aims to provide a number of functions. First, there is the provision of accurate information to secondary students and others wishing to consider tertiary education. Secondly, a mechanism is provided
for students to register a series of preferences concerning their choice of tertiary education. Thirdly, by combining these preferences with the performance of the students in relation to the criteria that apply for tertiary entrance, and the number of students for each course which each institution is seeking, offers are made to students. After each round of offers is made, the complex process is repeated until each course in each institution has its places either filled or there are no further students with acceptable achievements who have listed that course as a priority choice.

It will be clear that this co-ordinated process is one that is very much concerned with the variables of aspiration, achievement and availability. If more than one tertiary institution offers the same course of study, availability has increased. However, from the point of view of the student this increased availability only becomes a reality if all of these institutions are accessible. For example, the existence of parallel courses in the universities of Sydney, Melbourne and the other State capitals prior to 1955 did not constitute, for a large number of students, a plurality of availability. A course of study which would involve the costs of living away from 'home' was quite inaccessible for most of them.

The enormous array of courses of study (in some States at more than 20 institutions) has certainly raised the number of choices open to intending students. However, if a student remains ignorant of some of these possibilities, he will not aspire to them. Furthermore, he may know of several courses that interest him but not fully appreciate the subtle interplay between the existence of these courses and the quota scores for entrance to them. Exactly how to optimise the chance of attaining one's preferences is an extremely complex matter and probably reduces the degree of choice that most students are able to exercise.

The present study provides some findings on two basic aspects of choice: entry to institution of first choice and enrolment in course of first choice. Some of the characteristics of students who are more likely to have attained their first choices will also be presented. Our study does not provide any information about the dynamics of choice or the extent to which the students' choices match the range of choices offered by the hydra of Australian tertiary education. If the extent of failure to secure first choice is considered to be great enough for certain types of students, institutions or courses, others may be encouraged to pursue these more fundamental aspects of choice.
Choice implies that there are preferred institutions and courses. Failure to achieve one's first choice may lead to acceptance of an institution or course from lower in the hierarchy of a student's preferences. Some other studies (e.g. Dunn et al., 1969a) have suggested that there is considerable agreement among aspiring tertiary students about some of these hierarchies. If this is the case then the findings on the realisation of choice will only be valid if the sampling procedure has drawn students who are representative of all students with respect to choice hierarchies.

Several earlier studies have touched on the issue of choice. Dunn et al. (the Monash report 1969a) collected quite extensive data on the choice of tertiary education by male students in the final years of Victorian secondary schools. In those early days of the binary system, it was found that these students knew more about the requirements and possibilities of courses in the university sector than they did about those in C.A.E.s. Within the limits of their data there was some suggestion that C.A.E.s were more favourably perceived by students outside the metropolitan area. Victoria is a State which has a dual system of secondary education, particularly for males, and the choice of tertiary education was by no means the same for the students in these two types of schools. A number of factors were identified as being influential on students' choices. These included personal preferences, success at relevant subjects, security of occupational outcome, contact with persons already in the occupation and parental expectations. That study also followed students through the process of preference and selection and included some information on how students responded to failure of their first preference or choice.

Horne and Wise (1970) at the same time studied students enrolled in engineering and business studies in C.A.E.s throughout Australia. They reported that there had been a shift of preference as a result of the realities of the selection procedure and the experience of college education. About a quarter of the students, however, declared that they would still prefer to be at a university for their studies.

Fensham (1970) discussed the interactive features of the entry to tertiary education that existed as the binary system developed and as quotas differentiated the possibilities for entry between universities in the same State. In the late 1960s there was still evidence of institutional bias in favour of some types of student background. This factor made some students' choices more likely despite lower levels of
achievement. This review also discusses the interesting early study of Wyeth (1957) which has relevance to the aspiration for and accessibility of higher education.

More recently, a number of studies have referred to choice. Beighton and Gallagher (1976) drew on data gathered in 1974 by the Department of Education and the Australian Union of Students. They reported that students who stem from non-professional families are disadvantaged in their choice of course and institution. The backgrounds of these students make a number of courses less accessible than they are to other types of students. Certain courses, with which are associated grants that provide living allowances, are therefore more likely to be chosen by students from non-professional family backgrounds. This ground for accepting a course of study applied particularly to school teaching prior to 1974, when fees still applied for independent students and un-tagged living allowances were only available on the limited basis of family means tests under the Commonwealth Scholarship scheme. Watkins (1975) found some evidence at the University of New England that the choice of a number of courses there had been based on quite inadequate perceptions of the courses they chose to enter.

The large study by Anderson et al (1975) on Regional Colleges discusses the process of choice and a number of aspects of its outcome as they may relate to these colleges. They point out that social behaviour such as a choice of tertiary education is almost always multi-determined and over-determined. The process is such a complex one to investigate that the data collected from the simple questions of surveys will almost certainly lead to an inadequate account of how a student really dealt with the choices before him. In the study of these regional colleges the students were found to exhibit a higher degree of dependence on external rewards in choosing their courses than do students entering universities. The students in regional colleges also tended to rate geographical proximity as influential in their choice while students in metropolitan colleges appear to be more influenced by the actual course offered. Beswick, in another chapter of that report, was able to point to a number of possible sources of the sex differences that are evident in students' choices, for example, of primary teacher education and of para-medical studies.

Students' Achievements of Choice in 1976

Information is available on two basic choices concerning higher education. The first is the student's choice of an institution and the second is the choice of a particular course or programme within that institution. We do
have data that provide insight into the bases for these choices and further studies are needed in this area, particularly of groups identified as having higher or lower than average attainment of their choices.

An important point to be remembered when interpreting the data about both choice of course and choice of institution is that the data which will be presented are for the students who actually enrolled rather than for students who applied. Ideally, investigations of the extent to which students attain their choices of institutions and courses should be based on applicants rather than on those who actually gain entrance. To illustrate the nature of the distortion introduced by this factor consider the students who apply for medicine. Medicine, being a popular choice of students, attracts many applicants for relatively few places so the proportion of applicants who get into medicine must be less than for other courses. However, when the students who have actually entered medicine are considered we find that at the universities 87% of students in the courses grouped as medicine have attained their first choice of course compared with only 81% for all university students. This point should be kept in mind when interpreting the results presented in this chapter.

Table 5.1 presents the basic information on choice of institution and course. Among the types of institution there is not a great deal of variation in the proportion of the students who achieved their first choice of both course and institution. At the metropolitan colleges the proportion is 75% compared with 72% at the universities and 68% at the country colleges. The variation in the proportion missing both their first choice of institution and their first choice of course is greater with 8% of university students missing both choices compared with 10% of metropolitan college students and 12% of country college students.

Table 5.1 CHOICE OF COURSE AND CHOICE OF INSTITUTION BY TYPE OF INSTITUTION

<table>
<thead>
<tr>
<th>Choice of Institution</th>
<th>Choice of Course</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>% First</td>
<td>% Not First</td>
<td>% First</td>
</tr>
<tr>
<td>First</td>
<td></td>
<td>72.3</td>
<td>9.0</td>
<td>74.9</td>
</tr>
<tr>
<td>Not First</td>
<td></td>
<td>10.7</td>
<td>7.9</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>68.4</td>
<td>17.1</td>
<td>2.1</td>
</tr>
</tbody>
</table>

1 Cases where either the choice of institution question or the choice of course question was not answered have been excluded from the table.
The biggest differences among the types of institution are for the proportion of students who attained their first choice of institution but not their first course choice. Only 2% of students at the country colleges were in this category compared with 11% at the universities. The low numbers at the country colleges are probably attributable to the predominance of teacher education courses at the country colleges. This has resulted in few students who could not attain their course of first choice enrolling for another course at the country colleges. The complementary effect is also found. Students at the country colleges are the most likely to have gone to a less preferred institution to undertake their most preferred course.

Choice and Sex

Table 5.2 shows that there are no large differences between the institutional choice attainment of the sexes except in the country colleges.

In these country institutions a slightly lower percentage of females have enrolled in the institution of their first choice. However, Table 5.2 shows that a surprisingly high percentage of enrolling students indicated that they were in the institution (not just the type of institution) of their first choice. More than 4 in 5 of the university students and almost that fraction in the metropolitan colleges were in this position. Even for female students in the country colleges, 2 out of 3 were in the college of their first choice.

Table 5.3 shows students' attainment of preferred course of study and in conjunction with Table 5.2 it can be seen that students at C.A.E.s are more likely to attain their first choice of course than they are to attain their first choice of institution. This is not surprising if there is some tendency for students to aspire to study a chosen course at a university rather than at a C.A.E. The fact that the attainment of first course choices is lower among males in the universities than is their choice of institution may be related to a tendency for students to accept enrolment offers in faculties other than their first choice rather than not attend the university to which they aspired.

The largest differences between the two sorts of choice are in the country colleges where only 15.6% of males and 12.7% of females are not in the course of their first choice although about twice this fraction would have preferred some other institution.
Table 5.2  STUDENT'S CHOICE OF INSTITUTION BY SEX

<table>
<thead>
<tr>
<th>Choice of Institution</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male %</td>
<td>Female %</td>
<td>Male %</td>
</tr>
<tr>
<td>First</td>
<td>83.0</td>
<td>82.3</td>
<td>78.6</td>
</tr>
<tr>
<td>Not First</td>
<td>16.7</td>
<td>17.2</td>
<td>21.0</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.3</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3002</td>
<td>2078</td>
<td>1947</td>
</tr>
</tbody>
</table>

Table 5.3  STUDENT'S CHOICE OF COURSE OF STUDY BY SEX

<table>
<thead>
<tr>
<th>Choice of Course</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male %</td>
<td>Female %</td>
<td>Male %</td>
</tr>
<tr>
<td>First</td>
<td>79.4</td>
<td>82.9</td>
<td>84.5</td>
</tr>
<tr>
<td>Not First</td>
<td>19.9</td>
<td>16.7</td>
<td>14.8</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.6</td>
<td>0.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3002</td>
<td>2078</td>
<td>1947</td>
</tr>
</tbody>
</table>
Choice and Age

The attainment of the two sorts of choice by students in the younger and older age groups are given in Tables 5.4 and 5.5. These figures indicate that the older students are considerably more likely to be enrolled in courses and institutions of their first choice. The differences are greater for the choice of institution which may reflect a greater unwillingness among the older students to travel to a more distant institution. Thirty one per cent of the younger students at the country colleges and 25% of the younger students at the metropolitan colleges did not gain admission to their course of first choice.

Table 5.4 STUDENT'S CHOICE OF INSTITUTION BY AGE GROUP

<table>
<thead>
<tr>
<th>Choice of Institution</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>17-21 22 plus</td>
<td>17-21 22 plus</td>
<td>17-21 22 plus</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>First</td>
<td>81.6 86.4</td>
<td>75.1 90.8</td>
<td>67.9 88.8</td>
</tr>
<tr>
<td>Not First</td>
<td>18.1 13.0</td>
<td>24.5 8.4</td>
<td>31.3 11.2</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.3 0.7</td>
<td>0.4 0.7</td>
<td>0.8 0.0</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100 100</td>
<td>100 100</td>
<td>100 100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3872 1161</td>
<td>2579 841</td>
<td>1461 134</td>
</tr>
</tbody>
</table>

Table 5.5 STUDENT'S CHOICE OF COURSE OF STUDY BY AGE GROUP

<table>
<thead>
<tr>
<th>Choice of Course</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17-21 22 plus</td>
<td>17-21 22 plus</td>
<td>17-21 22 plus</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>First</td>
<td>78.5 88.7</td>
<td>82.6 91.6</td>
<td>83.6 94.0</td>
</tr>
<tr>
<td>Not First</td>
<td>21.0 10.6</td>
<td>16.7 8.3</td>
<td>14.8 5.2</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.5 0.7</td>
<td>0.7 0.2</td>
<td>1.6 0.7</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100 100</td>
<td>100 100</td>
<td>100 100</td>
</tr>
<tr>
<td>Total Number</td>
<td>3873 1167</td>
<td>2579 841</td>
<td>1461 134</td>
</tr>
</tbody>
</table>
Choice and Enrolment

Tables 5.6 and 5.7 show the relationships between the two choice variables and type of enrolment. In each type of institution a higher percentage of the part-time students are in the institution and course of their first choice than are the full-timers. The latter is not surprising since a student is only rarely going to make the effort to study part-time a course that is not his first preference. However, one might have expected that a number of the part-time students would have preferred another institution but which may not have been accessible to them. On the other hand, the students may have responded to the question without their present form of enrolment in mind. The largest difference in attainment of institutional choice between these two types of students is found in the country C.A.E.s but there are very few part-timers and still more than 2 in 3 of the full-timers are there by first choice.

Table 5.6 STUDENT'S CHOICE OF INSTITUTION BY TYPE OF ENROLMENT

<table>
<thead>
<tr>
<th>Choice of Institution</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full time %</td>
<td>Part time %</td>
<td>Full time %</td>
</tr>
<tr>
<td>First</td>
<td>81.3</td>
<td>91.0</td>
<td>83.5</td>
</tr>
<tr>
<td>Not First</td>
<td>18.3</td>
<td>8.6</td>
<td>15.8</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.4</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>4168</td>
<td>912</td>
<td>2605</td>
</tr>
</tbody>
</table>

Table 5.7 STUDENT'S CHOICE OF COURSE OF STUDY BY TYPE OF ENROLMENT

<table>
<thead>
<tr>
<th>Choice of Course</th>
<th>Universities</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full time %</td>
<td>Part time %</td>
<td>Full time %</td>
</tr>
<tr>
<td>First</td>
<td>78.6</td>
<td>91.0</td>
<td>83.5</td>
</tr>
<tr>
<td>Not First</td>
<td>20.8</td>
<td>8.6</td>
<td>15.8</td>
</tr>
<tr>
<td>Not Stated</td>
<td>0.6</td>
<td>0.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>4168</td>
<td>912</td>
<td>2605</td>
</tr>
</tbody>
</table>
Choice and Faculty

As far as faculty is concerned, there is not a wide range of attainment of institutional choice for students in universities. Students of medicine and education report the highest percentages of achievement—88.5% and 89.6%. Arts students on the other hand are lowest with 81.1%. The spread of attainment of course choice is wider with science lowest at 73.6% and education highest at 88.3%, just a little ahead of the other professional courses. It appears that about a quarter of science and commerce students had originally wished to undertake other studies. These are probably courses which are in our categories of medicine, law or arts since in most universities these require higher academic achievements for selection.

In the metropolitan colleges, science students are lowest attainers of institutional choice with 76.6% while arts and medicine are highest at 82.1% and 86.7% respectively. Choice of course has a different pattern, with arts (90.2%) and engineering (90.5%) being highest. Science is lowest at 80.3%, but 19.4% would have preferred another course, presumably medicine, veterinary science or dentistry—or possibly speech therapy which usually requires considerably higher achievement than the other therapy courses.

Only 65.5% of education students in country colleges are in the institution of first choice. Eighty five per cent of education students indicated that they were in their course of first choice. Commerce and arts with 92.2% and 88.9% are the highest attainers of course choice and science at 77.2% again the lowest.

Choice and Family Background

There is little to be said about family background and attainment of institutional choice. The extremes for the university students from families with the five values of the composite s.e.s. variable are 81.9% and 83.6% with no trend and a similar lack of difference or trend holds in the metropolitan C.A.E.s. In the country colleges the students from families with the lowest s.e.s. value are less likely (62.7%) to attain first choice than those from families in all other categories (70.9%).

Examination of the data on the contributing variables does not reveal one that has a special relation with institutional choice. The range of variation with fathers' or mothers' education, occupation or income, are all very small in both the universities and the metropolitan C.A.E.s and similar to the range for the composite s.e.s. in the country colleges. A similar lack of variation characterises the analysis of choice of course with the family background variables. A range of five percentage
points usually covers the choice attainment proportions for all the sub-
groups of students that these variables produce. The actual attainments
are less in the universities than in the two types of C.A.E. For
example, the ten groupings of university students from their fathers'
occupations have attainments of first choice of course between 79.0% and
85.7%, and between 77.8% and 83.0% for the eight groupings from fathers'
educations. In the metropolitan C.A.E.s these ranges are 83.4% to 86.3%
and 81.1% to 86.3% (one of the smaller groups has 91.0%). There is,
however, in these various sets of data some appearance of a consistent
pattern in which the groups with the family indices that point to
higher socio-economic status - professional occupations, tertiary
education and high incomes - achieve less often their first choice of
course than do students from lower s.e.s. families. This pattern also
appears in the data of course choice for the groupings based on the
composite s.e.s. variable. In each of the types of tertiary institution
the students from families with the lowest s.e.s. value attain their
first choice of course of study a little more frequently than those
from families of s.e.s.5 - universities: 81.9% cf. 79.2%; metropolitan
C.A.E.s: 86.0% cf. 83.2%; country C.A.E.s: 86.7% cf. 80.4%. If these
differences are not the result of chance fluctuations they may reflect
higher aspirations on the part of high s.e.s. students with accompanying
greater risk of failure to achieve course of first choice.

Choice and Father's Birthplace

Students from families with different cultural backgrounds (father's
birthplace) do show more variation in the achievement of institutional
choice. The values in the universities range from lows of 75.5% and 76.0%
for students from Asian and European families to a high 87.0% for those
whose families are in or were from the U.K., Eire and N.Z. The students
of Australian families lie in between at 83.7%. A similar pattern exists
in the metropolitan C.A.E.s although the Asian group at 70.4% is now
distinctly lower than those from the non-English speaking European
countries - 76.9%. The relative failure of students from Asian and
European family backgrounds to attain their first choice of institution
is noteworthy.

In the universities the students from non-English speaking backgrounds
have a lower likelihood of attaining their course of first choice than
other students. The Asian students (72.3%) and the students whose fathers
are from non-English speaking European countries (74.7%) are much less
likely to attain their course of first choice than are the students with
Australian-born fathers (81.8%) or the students whose fathers are from the U.K., Eire or N.Z. (85.7%).

A difference which is smaller, but in the same direction, is evident in the data from the metropolitan C.A.E.s.

Choice and Other Variables

An interesting finding relating to choice of institution is that students from capital cities who are attending country colleges have a low likelihood of being in the institution of first choice: 59.2%.

For all types of institution there is a relationship between the number of years since school and the likelihood of attaining the institution of first choice. This effect is strong in the metropolitan colleges where only 74% of students, who completed secondary schooling immediately prior to enrolment, were in the institution of first choice compared with over 92% of students, who had left school more than five years before enrolment. At the country colleges 67% of those who entered immediately and 93% of those with a delay of more than five years were in the institution of first choice.

Students who reported previous experience in a professional occupation had a very high attainment of both institution and course choice. This went as high as 95% for choice of institution in the metropolitan colleges.

In all types of institution, for choice of course and institution, part-time students are more likely to gain their first choice. The highest attainment of first choice is in the universities where 91% of part-time students are enrolled in course of first choice. Given the circumstances of part-time students, failure to obtain first choice is likely to result in a decision not to enrol.

As far as place of residence as a student is concerned, those students in the universities and metropolitan colleges who live in their 'own homes' are most likely, by a substantial amount, to have attained first institution and first course of study. These groups report about 90% attainment of first choice compared with about 80% for most of the other residential situations. These students are, in the main, older than the others which is consistent with the findings on the relationship between age and choice.

References


Financial Assistance to Students

There has probably always been some community concern about providing financial aid to needy university students. At the University of Melbourne, for example, a committee of Council which reported in 1913 considered, among other things, the question of making it a 'free institution' by abolishing tuition fees (Scott, 1936). This course of action was rejected by the committee but in 1919 the University instituted a student loan scheme supported by funds from the Victorian government. Attendance at the University of Western Australia was free until the 1950s: Commonwealth financial aid to the University then became conditional on fees being charged. It was not until 1943 that the Commonwealth government introduced a national programme designed to provide financial aid to students by making grants available. The Commonwealth Financial Assistance Scheme paid fees and living allowances, subject to a means test, for about 1,700 students a year until the Commonwealth Scholarship Scheme was introduced in 1951. Large numbers of ex-service men and women were also encouraged to pursue advanced study after World War II through the creation in 1944 of the Commonwealth Reconstruction Training Scheme.

The rapid expansion of higher education in the 1960s made additional provision necessary and in 1966 the Commonwealth Scholarship Scheme was replaced by two new assistance programmes: the Commonwealth University Scholarship Scheme and the Commonwealth Advanced Education Scholarship Scheme. In 1966 about 6,000 awards were made available under the first of these and 1,000 under the second. Academic merit was the sole basis for the offer of these awards and they were only available to students enrolled full-time in approved courses and who were not under a bond. Together with Technical Scholarships these schemes provided substantial financial support for students and a total of 480,000 awards were made in the period 1951 to 1973. In addition to this, about three million dollars were made available in 1973 to universities and colleges of advanced education so that they could provide grants or loans to individual students who found themselves in difficult financial circumstances. State governments also assisted students, about 50,000 in 1974, by providing

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1 Much of the material in this section has been drawn from: Tertiary Education Assistance Scheme (1975).
grants to trainee teachers in return for an undertaking to work for a number of years in the State school system. It has been estimated that in 1968 about 37% of the 90,000 university students were not in receipt of any form of financial assistance, about 57% had their fees entirely paid and the remainder received some form of aid (Brennan, 1971).

It was increasingly recognised that the Commonwealth schemes, because of the competitive basis on which they were awarded, did nothing to help needy students who were unable to win a scholarship so in 1974 the federal government made a major change to the policy of providing aid to students. Fees were abolished and the Tertiary Education Assistance Scheme replaced all of the earlier provisions. Awards under T.E.A.S. are means-tested but are not competitive. In addition, students over the age of twenty-five, or who are married, or who have been independent of their parents for two years, are granted the full allowance. In 1974 some 650,000 students were helped financially by the abolition of fees and of these about 57,000 qualified for a means-tested allowance.

In this chapter we explore the effect of fee abolition, first by examining what students say about their decision to enrol had there been fees and secondly, by seeing whether those who claimed that they would not have enrolled are from social groups whose representation in higher education is marginal. But first we present data on the living allowances received by the students who were surveyed.

Living Allowances

Students responding to the survey were asked to state which, if any, of four different types of living allowance they were receiving. In this section the living allowances being received will be reported and some indication of the different types of students receiving living allowances will be provided. The living allowances being received by the students are shown in Table 6.1.

The question on living allowances was asked in four parts (cf. Appendix A1.2 and for that reason it is not legitimate to sum the percentages in the table to obtain the percentage of students at each type of institution who are receiving a living allowance. The table shows that the proportion of students receiving each type of living allowance, with the exception of private employer traineeship, is greatest at the country colleges. The number receiving the T.E.A.S. allowance is similar at the various types of institution but the proportion of students receiving a teacher training allowance is very different with only 8% of university students receiving-
Table 6.1 TYPES OF LIVING ALLOWANCES BEING RECEIVED BY STUDENTS

<table>
<thead>
<tr>
<th>Living allowance</th>
<th>Universities % Receiving</th>
<th>Metropolitan colleges % Receiving</th>
<th>Country colleges % Receiving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tertiary Education Assistance</td>
<td>30.7</td>
<td>35.6</td>
<td>40.8</td>
</tr>
<tr>
<td>Teacher training</td>
<td>7.7</td>
<td>19.7</td>
<td>41.7</td>
</tr>
<tr>
<td>State or Commonwealth cadetship</td>
<td>0.5</td>
<td>1.3</td>
<td>2.9</td>
</tr>
<tr>
<td>Private employer traineeship</td>
<td>1.1</td>
<td>2.5</td>
<td>1.0</td>
</tr>
<tr>
<td>None of above</td>
<td>3049</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>5080</td>
<td>3466</td>
<td>1609</td>
</tr>
</tbody>
</table>

a teacher training allowance compared with 42% of country college students. Despite the possibility of students receiving more than one type of living allowance it seems safe to conclude from the data presented in Table 6.1 that the students at the colleges, and especially at the country colleges, are more likely than the university students to be receiving a living allowance.

The next five tables to be presented in this section examine the relationships between the sex, age, faculty or school, residence during term and s.e.s. background of the students and the likelihood that a student receives the T.E.A.S. allowance or a teacher training allowance.

Table 6.2 shows the percentage of male and female students who report that they are receiving the T.E.A.S. allowance or the teacher training allowance. The table shows that 937 male university students in the sample are receiving the T.E.A.S. allowance and that this represents 31.2% of male students. A slightly smaller proportion of female university students is receiving the T.E.A.S. allowance (29.9%).

Table 6.2 shows that female students are much more likely than male students to report that they are receiving the teacher training allowance. This difference is to be expected because most students engaged in teacher training are female. The sex differences are much smaller for the T.E.A.S. allowance and are not in a consistent direction. Forty-six per cent of the male students at the country colleges report that they receive a T.E.A.S. allowance compared to only 37% of the female students. This difference can be partly accounted for by the large proportion of country college female students receiving a teacher training allowance (51%) and the greater likelihood that males will enrol at agricultural colleges.
Table 6.2 LIVING ALLOWANCES BY SEX OF STUDENT

<table>
<thead>
<tr>
<th>Living allowance</th>
<th>Sex</th>
<th>Universities</th>
<th>Metropolitan colleges</th>
<th>Country colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>% of N</td>
<td>N</td>
<td>% of N</td>
</tr>
<tr>
<td>Tertiary Education Assistance</td>
<td></td>
<td>receiving</td>
<td>receiving</td>
<td>receiving</td>
</tr>
<tr>
<td>M</td>
<td>3002</td>
<td>31.2</td>
<td>1947</td>
<td>31.0</td>
</tr>
<tr>
<td>F</td>
<td>2078</td>
<td>29.9</td>
<td>1519</td>
<td>41.5</td>
</tr>
<tr>
<td>Teacher training</td>
<td>M</td>
<td>3002</td>
<td>5.7</td>
<td>1947</td>
</tr>
<tr>
<td>F</td>
<td>2078</td>
<td>10.6</td>
<td>1519</td>
<td>34.1</td>
</tr>
<tr>
<td>Total students</td>
<td>5080</td>
<td>3466</td>
<td>1606</td>
<td></td>
</tr>
</tbody>
</table>

Table 6.3 LIVING ALLOWANCES BY AGE OF STUDENT

<table>
<thead>
<tr>
<th>Living allowance</th>
<th>Age</th>
<th>Universities</th>
<th>Metropolitan colleges</th>
<th>Country colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>% of N</td>
<td>N</td>
<td>% of N</td>
</tr>
<tr>
<td></td>
<td>receiving</td>
<td>receiving</td>
<td>receiving</td>
<td>% of N</td>
</tr>
<tr>
<td>Tertiary Education Assistance</td>
<td>17</td>
<td>1653</td>
<td>37.0</td>
<td>1118</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>1497</td>
<td>32.4</td>
<td>940</td>
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<td></td>
<td>19</td>
<td>403</td>
<td>32.0</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>319</td>
<td>27.6</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>22-24</td>
<td>329</td>
<td>25.5</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td>25-30</td>
<td>447</td>
<td>20.8</td>
<td>349</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>280</td>
<td>13.6</td>
<td>183</td>
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<tr>
<td></td>
<td>Over 40</td>
<td>105</td>
<td>16.2</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Not stated</td>
<td>47</td>
<td>27.7</td>
<td>46</td>
</tr>
<tr>
<td>Teacher training</td>
<td>17</td>
<td>1653</td>
<td>9.6</td>
<td>1118</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>1497</td>
<td>12.3</td>
<td>940</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>403</td>
<td>5.5</td>
<td>290</td>
</tr>
<tr>
<td></td>
<td>20-21</td>
<td>319</td>
<td>4.7</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>22-24</td>
<td>329</td>
<td>0.9</td>
<td>257</td>
</tr>
<tr>
<td></td>
<td>25-30</td>
<td>447</td>
<td>0.7</td>
<td>349</td>
</tr>
<tr>
<td></td>
<td>31-40</td>
<td>280</td>
<td>0.7</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>Over 40</td>
<td>105</td>
<td>0.0</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Not stated</td>
<td>47</td>
<td>6.4</td>
<td>46</td>
</tr>
<tr>
<td>Total students</td>
<td>5080</td>
<td>3466</td>
<td>1609</td>
<td></td>
</tr>
</tbody>
</table>


The relationship between age and the likelihood that the student will receive an allowance is shown in Table 6.3. The younger the student the greater the chance that he will report receiving an allowance: the only exception to this result is for the country college students reporting receipt of a T.E.A.S. allowance. For country students the proportion on the T.E.A.S. allowance does not decrease until students over the age of 21 are considered and even then the decrease is both smaller and slower than for other groups.

The relationship between faculty and the percentage of students receiving allowances is shown in Table 6.4. Some of the entries in the table are '0': this indicates that there are no students in the sample enrolled in these faculties. The '0' entries indicate that although there are students enrolled in these faculties in the sample none reports receiving the allowance.

Table 6.4 LIVING ALLOWANCES BY FACULTY OF STUDENT

<table>
<thead>
<tr>
<th>Living allowance</th>
<th>Faculty</th>
<th>Universities</th>
<th>Metropolitan colleges</th>
<th>Country colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>% of N receiving</td>
<td>N</td>
</tr>
<tr>
<td>Tertiary Education Assistance</td>
<td>Science</td>
<td>1047</td>
<td>33.0</td>
<td>381</td>
</tr>
<tr>
<td></td>
<td>Commerce</td>
<td>687</td>
<td>25.2</td>
<td>832</td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>1808</td>
<td>31.0</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>163</td>
<td>22.7</td>
<td>1104</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td>436</td>
<td>32.6</td>
<td>411</td>
</tr>
<tr>
<td></td>
<td>Law</td>
<td>273</td>
<td>27.1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medical</td>
<td>348</td>
<td>31.6</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>318</td>
<td>37.1</td>
<td>314</td>
</tr>
<tr>
<td>Teacher training</td>
<td>Science</td>
<td>1047</td>
<td>7.9</td>
<td>381</td>
</tr>
<tr>
<td></td>
<td>Commerce</td>
<td>687</td>
<td>3.3</td>
<td>832</td>
</tr>
<tr>
<td></td>
<td>Arts</td>
<td>1808</td>
<td>10.3</td>
<td>379</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td>163</td>
<td>21.5</td>
<td>1104</td>
</tr>
<tr>
<td></td>
<td>Engineering</td>
<td>436</td>
<td>0.5</td>
<td>411</td>
</tr>
<tr>
<td></td>
<td>Law</td>
<td>273</td>
<td>0.0</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Medical</td>
<td>348</td>
<td>0.0</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>318</td>
<td>18.9</td>
<td>314</td>
</tr>
</tbody>
</table>

Total students 5080 3466 1420

1 There are 189 not stated cases on the variable Faculty for country colleges.
The proportion of students receiving T.E.A.S. at the universities does not vary greatly with faculty. Science students, arts students, engineering students, medicine students and 'other' students all have more than a 30% chance of reporting receipt of the T.E.A.S. allowance. Commerce students and education students are least likely to receive this allowance. The large proportion of education students at university receiving the teacher training allowance can account for the smaller numbers receiving T.E.A.S. allowances. When the metropolitan colleges are considered the education students show a high likelihood of receiving the T.E.A.S. allowance and a high likelihood of receiving a teacher training allowance. It would appear that almost all education students at metropolitan colleges are on one of these allowances. Other faculties where a large proportion of students at the metropolitan colleges receive the T.E.A.S. allowance are sciences, arts, medicine and 'other'. The figures for the medicine students should be treated with caution since the number of students in the sample studying medicine subjects at metropolitan colleges is small. At the country colleges the number of cases is small for most faculty groups but science, commerce, education and engineering students are more likely than arts and 'other' students to report receipt of the T.E.A.S. allowance.

Table 6.5 shows the effect of the type of residence of the students during term on the percentage receiving each type of allowance. The T.E.A.S. allowance is most likely to be received by students who are living in a college or hall of residence or are sharing with friends, and least likely to be received by students who are living in their own homes. The place where the students intend to live will have some correlation with their eligibility for the T.E.A.S. allowance; students who are living in their own homes are likely to be older and more likely to have accumulated resources which would make them ineligible for the T.E.A.S. allowance. Some students may be living at home during term only because they are not eligible for the T.E.A.S. allowance. This effect would lead to the observed result that the students living at home are less likely to be on a T.E.A.S. allowance. Teacher training allowances show a much less ordered pattern. The large numbers of students studying to be teachers at the country colleges, many of them living away from their homes, leads to a large proportion on the teacher training allowance. At the metropolitan colleges the group with the highest likelihood of receiving the teacher training allowance is those students living in a college or hall of residence. Other groups have much lower proportions of students receiving the teacher training allowance. At the universities the number of students who report...
receiving the teacher training allowance is small but by far the majority of the students are living at home with parents or relatives. It should be remembered when interpreting these results that we have sampled only students commencing courses. It is likely that there is a substantial movement of students from living with parents or relatives at home to other residence arrangements during the course of study.

The relationship between the socio-economic status background of the student and the likelihood that he will receive an allowance is shown in Table 6.6. The values of the s.e.s. variable are defined in Appendix A1.3. The relationship between the s.e.s. background of students and the likelihood that they will report receiving an allowance is strongly affected by the type of allowance being considered. For the teacher training allowance there is no relationship between s.e.s. and receipt of the allowance but there is a strong relationship for the T.E.A.S. allowance. At all types of institution the students from lower s.e.s. backgrounds are much more likely to be receiving the T.E.A.S. living allowance. This relationship is a reflection of the fact that the T.E.A.S.
In summary, the proportion of students receiving living allowances is greatest at the non-metropolitan colleges followed by the metropolitan colleges and the universities. The allowance most frequently reported is the T.E.A.S. followed by the teacher training allowance, but the difference between the numbers reporting these two is very small at the non-metropolitan colleges where almost 42% of students report being in receipt of the teacher training living allowance. Female students are more likely to receive the teacher training allowance than male students and younger students are more likely than older students to be receiving allowances. The most important, though obvious, effect found when the faculty of enrolment was considered was that the education students were most likely to be receiving the teacher training allowances. Students living at home with parents or relatives, in colleges or halls of residence or sharing with friends were most likely to be receiving allowances and students living in their own homes were least likely. Finally, students from higher s.e.s. backgrounds were less likely to be receiving the T.E.A.S. allowances but there was no relationship found between s.e.s. and the likelihood that the student would be receiving a teacher training allowance.

Table 6.6 LIVING ALLOWANCE BY S.E.S. BACKGROUND OF STUDENT

<table>
<thead>
<tr>
<th>Living allowance</th>
<th>S.E.S.</th>
<th>Universities</th>
<th>Metropolitan colleges</th>
<th>Country colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>% of N receiving</td>
<td>N</td>
</tr>
<tr>
<td>Tertiary Education Assistance</td>
<td>1 (Low)</td>
<td>904</td>
<td>46.3</td>
<td>798</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>926</td>
<td>42.0</td>
<td>714</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>978</td>
<td>36.2</td>
<td>723</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>996</td>
<td>22.4</td>
<td>682</td>
</tr>
<tr>
<td></td>
<td>5 (High)</td>
<td>1276</td>
<td>13.6</td>
<td>549</td>
</tr>
<tr>
<td>Teacher training</td>
<td>1 (Low)</td>
<td>904</td>
<td>6.2</td>
<td>798</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>926</td>
<td>9.0</td>
<td>714</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>978</td>
<td>7.5</td>
<td>723</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>996</td>
<td>7.0</td>
<td>682</td>
</tr>
<tr>
<td></td>
<td>5 (High)</td>
<td>1276</td>
<td>8.5</td>
<td>549</td>
</tr>
</tbody>
</table>

Total students | 5080 | 3466 | 1609

Living allowance is a means-tested allowance but the teacher training allowance is not.
The Effect of the Abolition of Fees on Enrolments

Students included in the survey were asked what their enrolment would have been if fees had been charged in 1976 and the remainder of this chapter examines the responses to this question. The likelihood that various types of student would say that they would defer or not enrol if fees were charged in 1976 is considered.

Before examining the factors influencing the effect of the abolition of fees some comments are in order on the use of the responses to the question on fees to make inferences about the effect of the abolition of fees. There are five important difficulties which make inferences about the effect of the abolition of fees suspect.

The first is that the population which was sampled is the population of students who actually enrolled in 1976. Any students who would have gained entry during 1976 but did not do so because fees have been abolished are not members of the population being sampled. Presumably, the number of places in tertiary institutions has not been affected by the abolition of fees so those students who would have deferred or not enrolled if fees had been charged would have been replaced by other students. The ideal population composition comparison would be between the 1976 student population with fees and the 1976 student population without fees. Of course this is impossible, but the point being made is that the composition of the students replacing those who would defer or not enrol should be taken into account.

The second difficulty is that the students were asked if they would defer or not enrol if fees were charged rather than actually responding to the levying of fees. Numerous studies have shown that the responses to hypothetical questions do not mirror behaviour in a real situation. The effect of this difficulty cannot be assessed directly.

The third problem is closely associated with the second and relates to the possibility that students may have had some incentive to reply that they would defer or not enrol if fees were charged. For the students the survey was essentially a neutral experience: the forms were anonymous, their responses would not affect them in any direct way and the questions were non-threatening and straightforward. However, there is a possibility that some students, when confronted with the question of fees, very reasonably did not know whether they would defer, not enrol, take out a loan or take some other action. For these students the anticipation that the survey might, at some stage, have some influence on policy could tip the balance in favour of saying that they would defer
or not enrol. In other words, they would be likely to say that they would be more seriously affected by the reintroduction of fees than was in fact the case.

The fourth problem which should be considered is the effect on student responses of the fact that fees were abolished in 1974. It seems reasonable that the further one is away from being obliged to pay fees the more difficult would paying fees be felt to be. Thus it might have been expected that the percentage of students saying that they would have deferred or not enrolled would increase when the questionnaire was administered in 1975, and increase further in 1976. This pattern is supported by the data. For example, for universities this percentage was 11.7 in 1974, 20.4 in 1975, and 21.3 in 1976.

Finally, many of the students at the institutions surveyed did not respond to the questionnaire. It is implicitly assumed in the interpretation of the data that students who did not respond are identical to those who did. The construction of the analysis samples has been designed to reduce the effect of this problem but it is likely that the students included in the analysis sample are not perfectly representative of all students.

On the surface it would appear that all these objections could have been overcome by taking baseline data on the student composition in 1973 and comparing this with the enrolment in 1974. There are two problems with this approach. First, the effect of natural changes in the characteristics of students enrolling for tertiary education could not be separated from the effect of the abolition of fees without also taking earlier years into account and attempting a time series analysis. Second, since the abolition of fees was a political decision, unanticipated in 1973 (and previous years), the collection of such baseline data was impossible. In conclusion, since the reported intentions of the students enrolling in 1976 are the best data available for the examination of the effect of the abolition of fees on the composition of the student population it is these data which have been used.

Data collected at Melbourne and Monash universities provide an estimate of the size of the changes in the social composition of students occurring at the time fees were abolished. Overall, there is little evidence in these data of a change in the social composition of students entering Melbourne and Monash coincident with the abolition of fees. For example, between 1962 and 1972 the percentage of students entering Melbourne university coming from families where the fathers' occupation was classified as professional ranged from 23% to 29% with no indication of a trend. In 1972 the percentage from professional backgrounds was 26%, in
Table 6.7  ACTUAL ENROLMENT BY ENROLMENT IF FEES WERE LEVIED: UNIVERSITY STUDENTS

<table>
<thead>
<tr>
<th>Enrolment if fees levied</th>
<th>Actual enrolment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-time %</td>
<td>Part-time %</td>
</tr>
<tr>
<td>Full-time</td>
<td>69.1</td>
<td>2.4</td>
</tr>
<tr>
<td>Part-time</td>
<td>8.4</td>
<td>73.2</td>
</tr>
<tr>
<td>External</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Would have deferred</td>
<td>10.4</td>
<td>6.1</td>
</tr>
<tr>
<td>Would not enrol</td>
<td>10.6</td>
<td>15.9</td>
</tr>
<tr>
<td>Not stated</td>
<td>0.9</td>
<td>2.0</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>4168</td>
<td>912</td>
</tr>
</tbody>
</table>

1974 it was 25%, in 1975 27% and in 1976 29%. At the other end of the scale the percentage whose father was from the craftsman, production and process worker and labourer classification ranged from 14% to 18% between 1962 and 1972 and reached 19% in 1974, 21% in 1975 but decreased again to 17% in 1976.

The general picture given by these data from Melbourne and Monash is that fluctuations from year to year are of such a size as to mask any small effects which may have occurred when fees were abolished. Tables showing the changes in various social characteristics of students entering Melbourne and Monash universities are presented in Appendix A2.1. These tables have been more generally discussed in Chapter 2.

The next three tables report the expected effect of fees on the enrolment of students at the three types of institution by the actual type of enrolment. This will give an indication of the size of the effect. Later tables will focus on the types of students reporting that their enrolment would have been affected by fees.

Table 6.7 shows, for university students, the actual enrolment by the envisaged enrolment if fees had been charged. The first point to note is that 21% of the students enrolling in 1976 say that they would either have deferred their university enrolment or would not have enrolled at all if fees had been continued. This effect is similar irrespective of the current type of enrolment but there is a tendency for full-time students to anticipate deferment of their enrolment while part-time students are more likely not to enrol at all. The full-time university students appear the most likely group to be affected by fees with only 69% of full-time
Table 6.8 ACTUAL ENROLMENT BY ENROLMENT IF FEES WERE LEVIED:
METROPOLITAN COLLEGE STUDENTS

<table>
<thead>
<tr>
<th>Enrolment if fees levied</th>
<th>Actual enrolment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-time</td>
</tr>
<tr>
<td>Full-time</td>
<td>66.1</td>
</tr>
<tr>
<td>Part-time</td>
<td>9.3</td>
</tr>
<tr>
<td>External</td>
<td>0.5</td>
</tr>
<tr>
<td>Would have deferred</td>
<td>9.7</td>
</tr>
<tr>
<td>Would not enrol</td>
<td>13.1</td>
</tr>
<tr>
<td>Not stated</td>
<td>1.4</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>2605</td>
</tr>
</tbody>
</table>

students stating that they would continue to study full-time. The anticipated alternatives for the full-time students include not enrolling, deferring and studying part-time in that order of likelihood. Seventy three per cent of part-time students stated that they would continue to study part-time if fees were charged with the most likely alternative course of action being not enrolling at all, reported by 16% of part-time university students. Six per cent of part-time students said that they would have deferred their study while 2% said that they would study full-time. This last figure is interesting and may be accounted for by a preference of some part-time students to 'plunge in' and complete their study incurring a financial debt rather than tolerating a difficult financial situation for a longer period of time in addition to the normal difficulties of part-time study.

The categories of enrolment included in the table can, to some extent, be considered as a scale of intensity of enrolment. If this is done then it is possible to calculate the proportion of university students whose enrolment would have been less intense if fees had been charged. This number is slightly less than the number of students who stated that their enrolment would have been different if fees had been charged since a few of the students indicated that their enrolment would have been more intense with fees. Twenty nine per cent of the university students stated that they would have had a less intense enrolment if fees had been charged in 1976.

Table 6.8 shows the same information as Table 6.7 except that the table relates to students at the metropolitan colleges. The first point
Table 6.9  ACTUAL ENROLMENT BY ENROLMENT IF FEES WERE LEVIED:
COUNTRY COLLEGE STUDENTS

<table>
<thead>
<tr>
<th>Enrolment if fees levied</th>
<th>Actual enrolment</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Full-time</td>
<td>Part-time</td>
<td>Total</td>
</tr>
<tr>
<td>Full-time</td>
<td>60.6</td>
<td>3.1</td>
<td>59.4</td>
</tr>
<tr>
<td>Part-time</td>
<td>5.3</td>
<td>56.3</td>
<td>6.3</td>
</tr>
<tr>
<td>External</td>
<td>1.3</td>
<td>3.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Would have deferred</td>
<td>14.3</td>
<td>6.3</td>
<td>14.1</td>
</tr>
<tr>
<td>Would not enrol</td>
<td>15.9</td>
<td>21.9</td>
<td>16.0</td>
</tr>
<tr>
<td>Not stated</td>
<td>2.7</td>
<td>9.4</td>
<td>2.9</td>
</tr>
<tr>
<td>Total per cent</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total Number</td>
<td>1577</td>
<td>32</td>
<td>1609</td>
</tr>
</tbody>
</table>

to note is that the proportion of students at metropolitan colleges who would have deferred or not enrolled if fees were charged is almost identical to the proportion for the universities at 20%.

The two tables are very similar, the only difference worthy of special note being that the part-time students in metropolitan colleges are less likely to be affected by fees than their counterparts at universities. This may be a result of some part-time students attending metropolitan colleges being paid to attend by employers who would also be prepared to pay any fees. When the measure of the effect of fees on the intensity of enrolment is calculated for the metropolitan college students it is found that 28% of the students would have a less intense enrolment if fees were charged compared with 29% of university students. It can be concluded from Tables 6.7 and 6.8 that the overall effect of the abolition of fees on the actual types of enrolment would be very similar at metropolitan colleges and universities.

Table 6.9 shows the actual enrolment and the hypothetical enrolment for the students attending country colleges. The pattern of actual enrolments at country colleges included in the survey is markedly different from the pattern of enrolments at metropolitan colleges and at universities. A far greater proportion of the students are full-time. The students at country colleges are far more likely to be affected by fees since 30% of the students would have deferred or not enrolled if fees had been charged. The greater likelihood of students attending country colleges to defer or not enrol occurs irrespective of the actual current enrolment. The tendency for the full-time students to be more
likely than the part-time students to defer rather than not enrol is also found for country college students. Thirty one per cent of the students enrolled at country colleges indicated that their enrolment would have been less intense if fees had been charged in 1976.

There seem to be two aspects of this greater vulnerability of the students at the non-metropolitan colleges. The first is simply that they are more likely to be affected by fees: the greater likelihood that students at the non-metropolitan colleges will be affected by fees may be partly due to the greater proportion of these students living away from home. The travel and accommodation costs which must be met by these students would be expected to make them more financially vulnerable. For students in this situation one would expect the reintroduction of fees to be a more severe deterrent to study. The second aspect of the greater vulnerability of the country college students is the smaller number attending part-time courses. This may reflect a smaller number of part-time courses available. Students who are unable to change their enrolment from full-time to part-time are almost certain to either defer or not enrol at all.

The remainder of this chapter considers the attributes of students and the effect that their attributes have on the likelihood that they would defer or not enrol if fees were charged.

Characteristics of Students Likely to be Affected by Fees

The series of figures which follow present, for a number of independent variables (sex, age, faculty of enrolment, term residence, location of home, type of secondary school attended, parental income, education and occupation), the likelihood that a student would either defer his or her enrolment or not enrol if fees had been charged in 1976.

Sex

Figure 6.1 shows the relationship between the likelihood of deferral or non-enrolment by sex for each type of institution. One of the two important features of Figure 6.1 has already been noted: this is the greater general likelihood that students at country colleges will defer enrolment or will not enrol. The second major feature is that for all types of institution women are more likely to defer or not enrol than men. The sex difference is greater for the universities and the metropolitan colleges than it is for the country colleges. The most obvious reason for
Figure 6.1 PERCENTAGE OF STUDENTS WHO WOULD DEFER OR WOULD NOT ENROL.
IF FEES WERE CHARGED IN 1976 BY SEX AND TYPE OF INSTITUTION

- **METROPOLITAN COLLEGES**
  - Universities: N: M 1947, F 1519
  - Country Colleges: N: M 3002, F 2078

- **COUNTRY COLLEGES**
  - N: M 682, F 924

---

<table>
<thead>
<tr>
<th>Sex</th>
<th>Metropolitan Colleges</th>
<th>Country Colleges</th>
</tr>
</thead>
<tbody>
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<td>Universities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>M 1947, F 1519</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Universities</td>
<td>Country Colleges</td>
</tr>
<tr>
<td></td>
<td>M 3002, F 2078</td>
<td></td>
</tr>
<tr>
<td>N: M 682, F 924</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 6.2  PERCENTAGE OF STUDENTS WHO WOULD DEFER OR WOULD NOT ENROL IF FEES WERE CHARGED IN 1976 BY AGE AND TYPE OF INSTITUTION

**UNIVERSITIES**

N: 5080,  
n.s.: 19.2%

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
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<tr>
<td>31-40</td>
<td>29.3</td>
</tr>
<tr>
<td>&gt;40</td>
<td>29.6</td>
</tr>
</tbody>
</table>

**METROPOLITAN COLLEGES**

N: 3466  
n.s. 23.9%

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
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</tr>
<tr>
<td>31-40</td>
<td>27.9</td>
</tr>
<tr>
<td>&gt;40</td>
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</table>

**COUNTRY COLLEGES**

N: 1609  
n.s. 21.4%

<table>
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<th>Age Group</th>
<th>Percentage</th>
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<tr>
<td>18</td>
<td>28.0</td>
</tr>
<tr>
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<td>22-24</td>
<td>37.5</td>
</tr>
<tr>
<td>25-30</td>
<td>46.8</td>
</tr>
<tr>
<td>31-40</td>
<td>47.4</td>
</tr>
<tr>
<td>&gt;40</td>
<td>222</td>
</tr>
</tbody>
</table>
this sex difference is that in Australia, while it is almost certain that a male will be required to work in order to support himself and possibly a family as well, many women can still realistically anticipate being provided for after marriage or working in some relatively unskilled occupation in order to provide extra money for the family. This would create a greater incentive for males to undergo any financial difficulty which might be incurred by payment of fees in the hope of a larger income in the long term. A second reason for the sex difference is that males may find work for supplementary income while they are studying both easier to obtain and more lucrative. This would make it easier for a male to afford the cost of the fees. A third possibility is that the present pattern of sex roles might make tertiary education less attractive to women and they might therefore be less willing to undergo some hardship in order to continue their studies. Finally, it is possible that parents are less likely to be willing to make financial sacrifices to enable women to achieve a higher education.

Age

Figure 6.2 shows the effect of the age of the student on the likelihood of deferral or non-enrolment. There is a noticeable tendency for the students in the older age groups to be more likely to defer or not enrol than young students although the nature of this effect differs among the institutions. At the universities: the students aged less than 20 have less likelihood than students 20 or older, while at the metropolitan colleges the discontinuity appears to be between the early and late 20s. The pattern for the students at the country colleges is less clear although students between the ages of 22 and 40 are very likely to report that they would defer or not enrol if fees were charged in 1976. The result that students aged between the early 20s and about 40 are most likely to report that they would defer or not enrol can be accounted for by noting that students in these age groups are most likely to have financial responsibility for a family of procreation. In addition, many of these students have already been working so presumably have some earning capacity established and have the experience of an income which enables them to have some luxuries and savings. For such people a return to the rather meagre income of a student is not very attractive and the prospect of paying fees may be more likely to discourage them from enrolling. Finally, younger students are more likely to have their fees paid for them by their parents.
Figure 6.3 PERCENTAGE OF STUDENTS WHO WOULD DEFER OR NOT ENROL IF FEES WERE CHARGED BY FACULTY AND TYPE OF INSTITUTION

**UNIVERSITIES**

<table>
<thead>
<tr>
<th>Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td>19.8%</td>
</tr>
<tr>
<td>Commerce</td>
<td>17.9%</td>
</tr>
<tr>
<td>Arts</td>
<td>26.2%</td>
</tr>
<tr>
<td>Education</td>
<td>24.5%</td>
</tr>
<tr>
<td>Engineering</td>
<td>14.0%</td>
</tr>
<tr>
<td>Law</td>
<td>18.4%</td>
</tr>
<tr>
<td>Medicine</td>
<td>15.8%</td>
</tr>
<tr>
<td>Other</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

N: 5080

**METROPOLITAN COLLEGES**

<table>
<thead>
<tr>
<th>Type</th>
<th>Percent</th>
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</thead>
<tbody>
<tr>
<td>Science</td>
<td>18.1%</td>
</tr>
<tr>
<td>Commerce</td>
<td>11.9%</td>
</tr>
<tr>
<td>Arts</td>
<td>26.1%</td>
</tr>
<tr>
<td>Education</td>
<td>26.0%</td>
</tr>
<tr>
<td>Engineering</td>
<td>15.3%</td>
</tr>
<tr>
<td>Law</td>
<td>13.3%</td>
</tr>
<tr>
<td>Medicine</td>
<td>24.2%</td>
</tr>
<tr>
<td>Other</td>
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</table>

N: 3466

**COUNTRY COLLEGES**

<table>
<thead>
<tr>
<th>Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
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<td>21.2%</td>
</tr>
<tr>
<td>Commerce</td>
<td>19.5%</td>
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<td>Education</td>
<td>34.0%</td>
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<tr>
<td>Engineering</td>
<td>26.7%</td>
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<tr>
<td>Law</td>
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</tr>
<tr>
<td>Medicine</td>
<td>24.2%</td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

N: 1420
School or Faculty of Enrolment

The relationship between the school or faculty of enrolment and the likelihood that the student would report that he would defer or not enrol if fees were charged is presented in Figure 6.3. The most noticeable feature of the figure is that the arts and education students are much more likely than other students to be affected by fees at all types of institution. Students in medicine, law and commerce are generally less likely to be affected by fees. Education students at the country colleges are much more likely to report that they would defer or not enrol than education students in other types of institution. The majority of the students enrolled at the country colleges are in education which may, to some extent, account for the greater likelihood that the country college students will report being affected by fees. It has already been shown that almost all the education students at the country colleges are receiving some form of living allowance and the apparently greater vulnerability to fees may be, in part, a result of students inferring that if fees were to be reintroduced the living allowances would also be affected.

There seems to be a relationship between the expected income which follows after a degree and the likelihood that a student will report being affected by fees. The high income faculties such as law, medicine and commerce have students who show a lower vulnerability to fees. This may be because such students come from backgrounds which make them less vulnerable to fees. A second possibility is that such students have made a more defined career choice than other students and may be less prepared to pursue other alternatives.

Residence During Term

Figure 6.4 shows the likelihood of deferral or non-enrolment for the students by term-residence situation and the type of institution attended. For all types of institution the students living at home with parents or relatives are the least likely to defer or not enrol. For the university students, the group next least likely to defer or not enrol is the students living in a college or hall of residence. University students who are flatting or boarding are the most likely to report that they would defer or not enrol if fees were charged. At the metropolitan colleges those boarding or in 'other' situations, have a higher likelihood of deferral or non-enrolment than the others. The non-metropolitan colleges show a rather different pattern with students living in their own homes.
Figure 6.4  PERCENTAGE OF STUDENTS WHO WOULD DEFER OR WOULD NOT ENROL IF FEES WERE CHARGED IN 1976 BY TERM RESIDENCE AND TYPE OF INSTITUTION

UNIVERSITIES

N:  5080  
n.s.:33.3%

METROPOLITAN COLLEGES

N:  3466  
n.s.:16.6%

COUNTRY COLLEGES

N:  1609  
n.s.:25.0%
or boarding having the highest likelihood of deferring or not enrolling.

Part of the difference between the country students and the other students may be due to differences in the distribution of the students with respect to term residence. Fifty three per cent of the university students are living with parents or relatives and 15% are living in colleges or halls of residence. For the metropolitan colleges the figures are 60% and 4% respectively. Thus it can be seen that a large proportion of the students at the metropolitan colleges and the universities are residing with their parents or relatives in situations where their likelihood of deferring or not enrolling if fees were charged is low. In contrast only 20% of the country college students are living with parents or relatives and 62% are living in colleges or halls of residence where the likelihood of deferral or non-enrolment as a result of fees being charged is greater. This effect is able to account for some of the difference in likelihood of deferral or non-enrolment between non-metropolitan college students and other students but by no means all of it, as can be seen by noting that within each term-residence group the country college students have the highest likelihood of deferral or non-enrolment.

Socio-economic Status

A number of questions which were asked in the survey can be interpreted as providing some indication of the socio-economic status of the parents, and therefore the students in the sample. Four of these variables will now be considered in order to obtain some indication of the influence of the socio-economic status of the parents on the likelihood that students will defer or not enrol if fees are charged. Many of the variables which have already been considered have been interpreted as having an effect on the likelihood of deferral or non-enrolment via their relationship with the current financial situation of the students. For many of the students in the survey the socio-economic status of the parents will provide an important indicator of current financial status. The four variables to be considered are the type of school attended by the students, the education, occupation and income of the students' fathers.

Type of School Attended

Figure 6.5 shows the relationship between the type of school attended and the likelihood that a student would defer or not enrol if fees were charged, for each type of institution. The students attending independent non-Catholic schools have a much lower likelihood than the other students
Figure 6.5  PERCENTAGE OF STUDENTS WHO WOULD DEFER OR NOT ENROL IF FEES WERE CHARGED BY TYPE OF SECONDARY SCHOOL ATTENDED FOR THE MAJORITY OF SECONDARY EDUCATION AND TYPE OF INSTITUTION

**UNIVERSITIES**

N: 5080  
n.s.: 22.8%

**METROPOLITAN COLLEGES**

N: 3466  
n.s.: 25.0%

**COUNTRY COLLEGES**

N: 1609  
n.s.: 37.5%
of deferring or not enrolling if fees were charged. The differences between the State high school students and the Catholic students are all in the direction of Catholic school students having a higher likelihood of deferral or non-enrolment. The figure strongly supports the argument that students from more affluent backgrounds are less likely to be affected by fees. A strong effect from the type of school attended would be expected since the students attending independent schools have already been paying fees for several years. What is not so obvious is why the Catholic schools show a similar rate of deferral and non-enrolment to the State secondary schools. Although the fees paid at the Catholic schools are lower, on average, than those paid at the independent non-Catholic schools one might have expected that the students at the Catholic schools would show a rate of deferral or non-enrolment between that of the State school students and that of the students attending independent schools. It may be that the lower aspiration of Catholics for higher education (cf. Chapter 6) makes the Catholics more likely to be deterred by the imposition of fees.

Income of Father

Turning to the more direct measures of socio-economic status, Figure 6.6 shows the likelihood that a student would defer or not enrol in 1976 if fees were charged by the income of the fathers of the students. It is recognised that the income of the father is not the best possible measure of the amount of money available to the family for the payment of university fees but it is the most appropriate income index recorded in the survey.

There were a large number of 'not stated' cases on the measure of fathers' income. When the survey was administered there was no response category for 'no father'. This means that a number of the 'not stated' cases could have occurred because students could not state the income of a non-existent father, or they may have responded that the father had no income thus making the interpretation of that category a little ambiguous. On the other hand, many students would not know the income of their parents and, in the absence of instructions, might fail to answer the question rather than make an estimate. Questions about income traditionally lead to the highest 'not stated' rates in social surveys. In this case, it was between 8% and 10% for those students included in the analysis samples.

The figure shows that the income of the father has a strong effect on
Figure 6.6 PERCENTAGE OF STUDENTS WHO WOULD DEFER OR NOT ENROL IF FEES WERE CHARGED BY INCOME OF FATHER AND TYPE OF INSTITUTION

UNIVERSITIES

N: 5080
n.s.: 25.0%

METROPOLITAN COLLEGES

N: 3466
n.s.: 25.1%

COUNTRY COLLEGES

N: 1609
n.s.: 26.5%
the likelihood of deferral or non-enrolment for all groups of students whose fathers' income is greater than $6,000. The income of the father would not have a great deal of effect if it was lower than this since very little income would be available after paying basic living expenses to go towards any relief from fee payment. Students whose father was earning less than $6,000 would be likely to be supporting themselves through their tertiary education since little assistance could be available from their parents and hence the impact of fees on these students would be much greater. Where the father was earning more than $6,000 the amount by which his income exceeds $6,000 is strongly associated with a reduction in the likelihood that his son or daughter would defer or not enrol if fees were to be charged. These results are not surprising and are consistent with the conclusion that the socio-economic status of students is associated with the amount of finance available to them which is in turn associated with the extent of their vulnerability to the effects of having to pay fees.

Father's Education

Figure 6.7 shows the relationship between the education of the father and the likelihood of deferral or non-enrolment if fees were charged. For all types of institution there is a relationship, with the likelihood of deferral or non-enrolment decreasing as the education of the father increases. The effect is a little clouded for the country colleges, perhaps partly because of instability as a result of some small groups.

The effect is not as marked as the relationship between the income of the father and the likelihood of deferral or non-enrolment. This would be expected if the underlying cause of the relationship with socio-economic status was due to financial status and the consequent ability of parents to assist their children with the cost of tertiary education. On the other hand, one could expect the education of the parents to influence their children through providing values which would make them more likely to aspire to a tertiary education, even when there are severe financial obstacles to enrolment. The present data do not provide any firm evidence on this point one way or the other but it should be remembered that the relationship between socio-economic status and deferral or non-enrolment will be influenced by the values of the students and their parents as well as by their financial situations.
Figure 6.7 PERCENTAGE OF STUDENTS WHO WOULD DEFER OR NOT ENROL IF FEES WERE CHARGED IN 1976 BY EDUCATION OF FATHER AND TYPE OF INSTITUTION

**UNIVERSITIES**

<table>
<thead>
<tr>
<th>Education of Father</th>
<th>Percentage</th>
<th>Type of Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>29.4%</td>
<td>Completed 5-6 yrs second</td>
</tr>
<tr>
<td>Some secondary</td>
<td>24.1%</td>
<td>Completed 5-6 yrs second</td>
</tr>
<tr>
<td>Completed 4 yrs 2nd</td>
<td>22.0%</td>
<td>Some tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 5-6 yrs 2nd</td>
<td>18.9%</td>
<td>Completed tertiary (uni)</td>
</tr>
<tr>
<td>Completed 5-6 yrs 2nd</td>
<td>18.4%</td>
<td>Completed tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 4 yrs 2nd</td>
<td>19.7%</td>
<td>Completed tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 3 yrs 2nd</td>
<td>18.0%</td>
<td>Completed tertiary (uni)</td>
</tr>
<tr>
<td>Completed 2 yrs 2nd</td>
<td>11.9%</td>
<td>Completed tertiary (uni)</td>
</tr>
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N: 5080  
n.s.: 23.6%

**METROPOLITAN COLLEGES**

<table>
<thead>
<tr>
<th>Education of Father</th>
<th>Percentage</th>
<th>Type of Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>26.4%</td>
<td>Completed 5-6 yrs second</td>
</tr>
<tr>
<td>Some secondary</td>
<td>21.0%</td>
<td>Completed 5-6 yrs second</td>
</tr>
<tr>
<td>Completed 4 yrs 2nd</td>
<td>17.7%</td>
<td>Some tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 5-6 yrs 2nd</td>
<td>18.2%</td>
<td>Some tertiary (uni)</td>
</tr>
<tr>
<td>Completed 5-6 yrs 2nd</td>
<td>21.6%</td>
<td>Completed tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 4 yrs 2nd</td>
<td>15.8%</td>
<td>Completed tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 3 yrs 2nd</td>
<td>17.8%</td>
<td>Completed tertiary (uni)</td>
</tr>
<tr>
<td>Completed 2 yrs 2nd</td>
<td>15.1%</td>
<td>Completed tertiary (uni)</td>
</tr>
</tbody>
</table>

N: 3466  
n.s.: 21.5%

**COUNTRY COLLEGES**

<table>
<thead>
<tr>
<th>Education of Father</th>
<th>Percentage</th>
<th>Type of Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>41.1%</td>
<td>Completed 5-6 yrs second</td>
</tr>
<tr>
<td>Some secondary</td>
<td>32.7%</td>
<td>Completed 5-6 yrs second</td>
</tr>
<tr>
<td>Completed 4 yrs 2nd</td>
<td>30.3%</td>
<td>Some tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 5-6 yrs 2nd</td>
<td>20.7%</td>
<td>Some tertiary (uni)</td>
</tr>
<tr>
<td>Completed 5-6 yrs 2nd</td>
<td>26.9%</td>
<td>Completed tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 4 yrs 2nd</td>
<td>17.0%</td>
<td>Completed tertiary (non uni)</td>
</tr>
<tr>
<td>Completed 3 yrs 2nd</td>
<td>17.6%</td>
<td>Completed tertiary (uni)</td>
</tr>
<tr>
<td>Completed 2 yrs 2nd</td>
<td>17.1%</td>
<td>Completed tertiary (uni)</td>
</tr>
</tbody>
</table>

N: 1609  
n.s.: 31.6%
Father's Occupation

Figure 6.8 shows the likelihood of deferral or non-enrolment for each category of occupation of father.

The figure gives a clue to the effect of the values of the parents versus the financial situation of the parents in determining the response of the students to the hypothetical question about fees. The students whose fathers were of lower professional occupational status were more likely to defer or not enrol than the students whose fathers were large scale managers or employers. It would be expected that the former group would include persons with more educationally oriented values while the latter group would be more financially secure. Since the students whose fathers were lower professional were more likely to defer than the students whose fathers were large scale managers or employers it can be tentatively concluded that the influence of the financial situation on accessibility is a more important determinant of the response to the levying of fees than the aspiration for higher education.

Turning now to the other features of the figure it can be seen that generally speaking there is a relationship between the occupational status of the father and the likelihood that the student would defer or not enrol if fees were charged. However, the categories of intermediate non-manual worker, clerical and related worker, foreman and skilled worker and semi-skilled worker, do not differ very much from one another. It may be that this lack of effect found at these lower levels of occupational status parallels the lack of effect found for the lower levels of income where it was suggested that there was not sufficient finance available to assist the students with fees.

Socio-economic Status Background of the Students

The development of a scale to measure the s.e.s. background of the students in the samples described in Appendix A1.3 and the distribution of the students on this scale is reported in Chapter 3. In the present section the relationship between the s.e.s. background of the students, as measured by the scale of s.e.s., and the likelihood that the student will report that he would defer or not enrol if fees were levied is examined. Figure 6.9 shows the relationship for students attending the three types of institution.

The results in Figure 6.9 indicate that if students' intentions were carried out there would be a change in the socio-economic status distribution of tertiary students. This can be seen from the result
Figure 6.8 PERCENTAGE OF STUDENTS WHO WOULD DEFER OR WOULD NOT ENROL IF FEES WERE CHARGED IN 1976 BY OCCUPATION OF FATHER AND TYPE OF INSTITUTION

UNIVERSITIES
N: 5080
n.s.: 25.6%

METROPOLITAN COLLEGES
N: 3466
n.s.: 26.1%

COUNTRY COLLEGES
N: 1609
n.s.: 23.6%
Figure 6.9 PERCENTAGE OF STUDENTS WHO WOULD DEFER OR WOULD NOT ENROL IF FEES WERE CHARGED IN 1976 BY S.E.S. BACKGROUND OF STUDENT AND TYPE OF INSTITUTION

UNIVERSITIES
N: 5080

METROPOLITAN COLLEGES
N: 3466

COUNTRY COLLEGES
N: 1609
that the students of lower s.e.s. are more likely to defer or not enrol if fees are levied. To obtain some indication of the effect of fees on the s.e.s. distribution Table 6.10 estimates the change in the s.e.s. distribution of students at the universities which would occur if fees were re-introduced according to the reported intentions of students enrolled in 1976. It should be noted that the results presented in Table 6.10 assume that the students who would defer or not enrol would be replaced by students with the same characteristics as those students who would not defer and would enrol if fees were charged in 1976.

Table 6.10 shows that although there is a strong relationship between the s.e.s. background of the student and the likelihood that he will defer or not enrol if fees are levied, the presence or absence of fees makes only a relatively small difference to the s.e.s. composition of the university student population. An indication of the mean s.e.s. category can be obtained by assuming that the distances between adjacent s.e.s. categories are all equal. When this is done it can be estimated that the levying of fees would increase the mean s.e.s. of the university students from 3.16 to 3.29. The standard deviation of the s.e.s. distribution of the university students is 2.07 so this shift in the mean is equivalent to a shift of .063 standard deviations. In numerical terms, in the sample of 5080 university students assuming that students who deferred or did not enrol were replaced by students with equivalent s.e.s. characteristics to those who remained, there would be 181 fewer lower s.e.s. students (categories 1 and 2) and 191 more higher s.e.s. students (categories 4 and 5). The percentage of students who were of lower s.e.s. would decrease by 3.5 per cent.

Table 6.10 EFFECT OF THE ABOLITION OF FEES ON THE SOCIO-ECONOMIC STATUS COMPOSITION OF UNIVERSITY STUDENTS

<table>
<thead>
<tr>
<th>S.E.S. category</th>
<th>Current enrolment N</th>
<th>% who would defer or not enrol</th>
<th>Students remaining If no students replaced N</th>
<th>%</th>
<th>If students replaced1 N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Low)</td>
<td>904</td>
<td>17.8</td>
<td>608</td>
<td>15.2</td>
<td>772</td>
</tr>
<tr>
<td>2</td>
<td>926</td>
<td>18.2</td>
<td>692</td>
<td>17.3</td>
<td>878</td>
</tr>
<tr>
<td>3</td>
<td>978</td>
<td>19.3</td>
<td>762</td>
<td>19.0</td>
<td>967</td>
</tr>
<tr>
<td>4</td>
<td>996</td>
<td>19.6</td>
<td>832</td>
<td>20.8</td>
<td>1056</td>
</tr>
<tr>
<td>5 (High)</td>
<td>1276</td>
<td>25.1</td>
<td>1109</td>
<td>27.7</td>
<td>1407</td>
</tr>
<tr>
<td>Total</td>
<td>5080</td>
<td>100</td>
<td>4003</td>
<td>100</td>
<td>5080</td>
</tr>
</tbody>
</table>

1 If deferring or not enrolling students are replaced by students with the same s.e.s. characteristics as those who remain.
Table 6.11  EFFECT OF THE ABOLITION OF FEES ON THE SOCIO-ECONOMIC STATUS COMPOSITION OF METROPOLITAN COLLEGE STUDENTS

<table>
<thead>
<tr>
<th>S.E.S. category</th>
<th>Current enrolment</th>
<th>% who would defer or not enrol</th>
<th>Students remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>If no students replaced</td>
</tr>
<tr>
<td>1 (Low)</td>
<td>798</td>
<td>23.0</td>
<td>25.5</td>
</tr>
<tr>
<td>2</td>
<td>714</td>
<td>20.6</td>
<td>22.4</td>
</tr>
<tr>
<td>3</td>
<td>723</td>
<td>20.9</td>
<td>20.0</td>
</tr>
<tr>
<td>4</td>
<td>682</td>
<td>19.7</td>
<td>16.8</td>
</tr>
<tr>
<td>5 (High)</td>
<td>549</td>
<td>15.8</td>
<td>14.0</td>
</tr>
<tr>
<td>Total</td>
<td>3466</td>
<td>100</td>
<td>20.2</td>
</tr>
</tbody>
</table>

Table 6.12  EFFECT OF THE ABOLITION OF FEES ON THE SOCIO-ECONOMIC STATUS COMPOSITION OF COUNTRY COLLEGE STUDENTS

<table>
<thead>
<tr>
<th>S.E.S. category</th>
<th>Current enrolment</th>
<th>% who would defer or not enrol</th>
<th>Students remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>If no students replaced</td>
</tr>
<tr>
<td>1 (Low)</td>
<td>346</td>
<td>21.5</td>
<td>41.7</td>
</tr>
<tr>
<td>2</td>
<td>370</td>
<td>23.0</td>
<td>35.4</td>
</tr>
<tr>
<td>3</td>
<td>400</td>
<td>24.9</td>
<td>25.7</td>
</tr>
<tr>
<td>4</td>
<td>284</td>
<td>17.7</td>
<td>24.0</td>
</tr>
<tr>
<td>5 (High)</td>
<td>209</td>
<td>13.0</td>
<td>18.7</td>
</tr>
<tr>
<td>Total</td>
<td>1609</td>
<td>100</td>
<td>30.1</td>
</tr>
</tbody>
</table>

Table 6.11 presents the effect of the abolition of fees on the s.e.s. composition of the metropolitan college students. The results found in Table 6.10 are repeated in Table 6.11. A large relationship between s.e.s. background and the likelihood of deferral or non-enrolment if fees were levied has only a relatively small effect on the s.e.s. composition of the metropolitan student population. Repeating the mean calculation which was done for the university students we find that the mean s.e.s. value for the metropolitan colleges would increase from 2.85 to 2.92. Since the standard deviation of the s.e.s. distribution of the metropolitan college students is 1.93 this is equivalent to a shift of .036 standard deviations. For the sample of 3466 metropolitan college students there would be 72 fewer lower s.e.s. students and 71 more higher s.e.s. students. The percentage of students who were of lower s.e.s. would decrease by 2.1 per cent.

Table 6.12 presents the same results for the country college students.
The effect of the levying of fees on the mean s.e.s. of the country college students is to change the mean from 2.78 to 2.92 or .079 times the standard deviation of 1.76. There would be 85 fewer lower s.e.s. students and 60 more higher s.e.s. students in the sample of 1609 country colleges students and the percentage of students who were of lower s.e.s. would decrease by 5.2 per cent. The interested reader can, by using the method shown in Tables 6.10 to 6.12 and the data presented in Figures 6.1-6.8, produce estimates of the effect of the abolition of fees on the composition of the student populations for the other variables discussed in this chapter. If the percentage results obtained are applied to the population characteristics of commencing students (reported in Chapter 4) estimates of the shifts in the numbers of students in various categories can be obtained.

Summary and Conclusions

In order to investigate the effects of fee abolition students were asked: 'What type of course would you have taken this year (1976) if there had still been tuition fees?' There are some difficult methodological issues to be confronted in interpreting the responses to this question and the results presented in this chapter should be taken as an upper estimate of the effect of the abolition of fees.

A little over 20% of all students claimed that if there had been fees they would not have enrolled or would have had to defer their enrolment. The university and metropolitan college students are less vulnerable to the levying of fees than students at the country colleges. It was reported that the students at the country colleges are more likely to be living away from home, in colleges or halls of residence, and therefore more likely to be receiving a living away from home allowance if studying education. Fewer opportunities for part-time study are available at the country colleges. The parental income of students attending country colleges is lower than for other students. For these reasons students at the country colleges are more likely to report that they would defer or not enrol if fees were levied in 1976.

The relationship between the s.e.s. composite variable and the likelihood that students reported that they would defer or not enrol if fees had been levied in 1976 is very strong for all types of institution. At the universities almost 33% of students in the lowest s.e.s. category said that they would defer or not enrol compared with only 13% of the students in the highest s.e.s. category. At the metropolitan colleges the effect was somewhat
less marked with 26% of the lowest s.e.s. students and 14% of the highest s.e.s. students reporting that they would defer or not enrol. At country colleges these percentages were 42% and 19% respectively.

The financial situation of the students provided the best explanation of the effects of fee abolition on the likelihood of deferral or non-enrolment. Although no direct measures of the financial situations of the students were used in the survey, throughout this chapter the financial situation of the students has been used as the most plausible explanation of the way in which the variables discussed affect the likelihood of deferral or non-enrolment. This seems reasonable since the most immediate effect of the payment of fees is on the financial situation of the student.

Two logically independent groups of variables were affecting the financial situation of the students: the socio-economic status background of the students and their age or stage of life characteristics. The socio-economic status background effect was interpreted as an effect of the financial resources of the students' parents on the ability to pay fees and be able to continue to study although the possibility of transmitted values was also considered. The age effect was a little more complicated. Younger students were less likely to be affected by fees for two important reasons. First, their parents were more likely to provide them with financial assistance and, second, they have a greater stake in obtaining an education and a great deal to gain. The older students were regarded as being more vulnerable because they were less likely to have these characteristics and because they had greater financial commitments and would have to undergo a greater relative financial deprivation in order to continue their studies.

If it is assumed that all those who said that they would have deferred or not enrolled behaved accordingly, and that such students were replaced by other students with identical s.e.s. characteristics to those who remained, then it is possible to obtain estimates of the effects of fee abolition on the s.e.s. composition of the student population. These estimates indicate that, for the universities, the percentage of students in the lowest two s.e.s. categories would have been reduced by 3.5%. In the metropolitan colleges the reduction would have been 2.1% and in the country colleges 5.2%. It can be concluded that although the abolition of fees has probably affected a very great number of individual students and enabled many to enrol who would have otherwise been unable to do so, the effect of the abolition of fees on the composition of the student population has probably been relatively small.
A more direct 'before and after' measure is provided by data from Melbourne and Monash universities. Data reported in Appendix A2.1 show that any effect of the abolition of fees on the s.e.s. composition of students at Melbourne and Monash universities has been small. However, the annual fluctuations in those data are of the same order of size as the theoretical change calculated from the survey data. If our estimates of the effect of fee abolition is reasonably accurate its magnitude is such that it would probably not be detected in the Melbourne and Monash data. The importance of the Melbourne and Monash data for our study lies in the fact that it is the only source of information on s.e.s. related characteristics of students covering the period before and after the abolition of fees.

The categories of students presently under-represented in higher education would have been most affected by the re-introduction of fees: part-time students, women, older students, country residents and students of lower s.e.s. Presumably, the participation of each of these groups in higher education is more marginal than for full-time, male, young, metropolitan, and high s.e.s. groups because of disabling factors. The reintroduction of fees would, for these groups, according to the students' own report, lead to a lower intensity of participation than it would for the already well represented groups.

The conclusion must be that the effect of fee abolition on the social composition of students in higher education is small although large numbers of individuals are affected by the presence or absence of fees and those who are so affected are disproportionately from the lower s.e.s. and other under-represented groups.

References

Chapter 7

CONCLUSIONS

The two principal aims of this study were to describe the social composition of students in higher education and to assess the effects of the abolition of fees. The data were derived from a national sample of commencing students drawn from institutions of higher education throughout Australia and the analyses were based on data collected in 1976, except for the data from Melbourne and Monash Universities which was collected in 1977. The data were analysed separately for each of the three types of institution: universities, metropolitan colleges and country colleges. These distinctions were maintained throughout because it was known that their student populations differ considerably. In this chapter we will first present a brief summary of the characteristics of the students, consider their social composition, the effects of the abolition of fees, and finally, the policy implications of the findings of the study.

About 60% of university students are male and the proportion of males in the metropolitan colleges is only slightly less; in the country colleges, however, males make up just under half of the student numbers. Students are in the main young and enter higher education immediately after school or within a year or two of leaving: nearly 70% are aged under 20 on enrolment and less than 10% are aged 30 or over. Of the 10-15% who enrol more than two years after leaving school about half obtained their entry qualification only one or two years previously.

In both universities and colleges of advanced education the younger students are much more likely to be from families of higher social status, to have attended a private school, to be of Australian parentage and to be Australian born. Colleges enrol a higher proportion of older male students than universities but the reverse is the case with females, reflecting the tendency of girls entering teacher education to enrol soon after leaving school.

The proportion of students who attended State secondary schools ranges from 53% in universities to almost 70% in country colleges. University students are the most likely to have attended non-Catholic independent schools (18%) while country college students are least likely (10%).

Students in the country colleges are least likely to be enrolled part-time (only 2%) while metropolitan college students are most likely (25%). In the universities sample, 18% of students were enrolled part-time.
The majority of those entering degree and diploma studies in universities and colleges of advanced education are young school leavers whose parents themselves have more than average education. The fathers of these students are likely to be from professional, managerial or white collar occupational groups and to have an income well above average. Not unconnected with this pattern is the high representation of students from non-Catholic independent schools. Migrants are under-represented, particularly migrants of non-British origin; however Australian born children of migrants participate at a rate not too much below that which would be expected from their numbers in the population. The greater difficulty of access for country students is reflected in their proportionately lower participation.

The social composition of students in higher education appears to have changed little over time. The few pre-war studies and the large number of post-war studies all show that the higher status social groups (indicated by father's education, occupation or income, or the type of school the student attended) are consistently over-represented. The factors of over-representation, about 2 for father having a professional occupation and about 8 for father having a university degree, seem to remain constant over time. This result is not surprising since those families with higher education and professional occupations provide the environment and the role model needed for their children to aspire to higher education and attain higher achievement. As the competition for entry to higher education intensifies due to greater availability of scholarships or of living allowances or by abolition of fees, then the need to achieve highly to secure entry is likely to be increased. This may be more easily met by those from family backgrounds with some familiarity with the academic tasks that are involved.

Within higher education the social composition varies with the type of institution, type of enrolment and metropolitan or country location. The order, from highest to lowest on the composite s.e.s. index, is: university full-time, university part-time, metropolitan C.A.E. full-time, metropolitan C.A.E. part-time and country C.A.E. A similar order is obtained if the indicator is secondary education at a non-Catholic independent school.

To understand these results it is necessary to appreciate that universities and colleges of advanced education do not offer an identical range of courses.
Education for the socially prestigious professions of medicine (and law with one or two exceptions) is available only in universities. Engineering, which is of middle prestige ranking, is represented about equally in universities and metropolitan C.A.E.s. Students preparing for the relatively low ranking occupation of teaching, the majority being female, are about 7 times more numerous in metropolitan colleges than in universities, and are a majority of all country college students. It should be remembered, however, that a large number of arts and science students in universities subsequently enrol in a diploma of education course.

Training for some professions of lower prestige, such as nursing and other para-medical occupations, is available only in C.A.E.s. Colleges of advanced education therefore cater more for the relatively low prestige professions. Where training for a profession, e.g. engineering, is available in both types of institution, the universities tend to attract students from higher s.e.s. backgrounds.

The effect of fee abolition on the overall social composition of students entering higher education in the two or three years since this measure was introduced, does not seem to have been large. According to the students' own statements, which must be taken as an upper estimate, the number of students in the lowest two s.e.s. categories has increased by between 3 and 4%. Examination of the various categories of data for the Melbourne and Monash Universities before and after the change reveal no differences which could be attributed with confidence to abolition of fees. Annual and random fluctuations in the proportions within these universities between 1962 and 1976 are as large as the estimates derived from the students' reports. Entry to these two institutions in most faculties requires high achievement. That is, the values of this condition of entry are such that enrolments in these institutions are not so susceptible to a change in the accessibility condition alone. In some other institutions where enrolment was less competitive, fee abolition had a greater effect according to the students' own statements. Unfortunately there are no before and after measures for these institutions, but it is reasonable to assume that the majority of students advantaged from fee abolition will have been from backgrounds which tended to reduce achievement and consequent entry to competitive institutions.
While the limited evidence from this study suggests a conclusion that fee abolition has had only small fractional effects on the social composition of new students in Australian higher education in 1974-76, the absolute numbers of students affected each year are substantial.

All students are affected in so far as they (or their families) are not expending approximately $15 per week that their predecessors (unless on scholarships or studentships) paid out as fees. This undoubtedly will have affected in various ways the quality of their participation. Large numbers of students are also affected in more quantitative terms, that is, their enrolment would have been different if fees still existed. (From the students' reports the upper estimates would be 7850 in universities, 7340 in metropolitan C.A.E.s and 1870 in country C.A.E.s - 17050 in total.) These students are disproportionately from the lower s.e.s. and other under-represented groups.

We have seen that the social composition of students in higher education has been relatively stable over several decades despite the changes which have taken place during that time: changes which have seen a great expansion of universities and colleges, a rising retention rate to 12th year in secondary school, a growth in general affluence of the population and the introduction of many egalitarian measures. There is still much social inequality and economic hardship in society but its roots are deep in the social fabric; and it would be unlikely that a simple change at one particular point in the system, such as the abolition of fees, would have any great effects on the social composition of students in higher education. Most of the socially handicapping circumstances have had their effect well before students even get to the point of seeking a place in higher education.

In speculating on further policy changes we must ask first why we would want to change our system of higher education and this in turn requires us to understand what its purposes are. There are many perspectives on this question: the economist who asks if higher education provides a private or a social benefit, the manpower planner who sees it as a supplier of high level vocational expertise, the social liberal who sees it as a source of enlightened citizens. Higher education itself could not provide a single perspective unless it is that its purpose is to develop the intellects (whether or not there is a vocational application) of those in the community whose talents are suited to this purpose.
If we take the last perspective, that the purpose of higher education is the education of talented intellects, including many for professional service, it is reasonable to assume that there must still be many talented individuals who do not enter higher education. We have already pointed out that several important social groups remain under-represented in higher education: e.g. women, migrants, older people, the rural community and lower s.e.s. groups. Since intellectual ability is not correlated with such social categories it follows that there must still be a large reservoir of untapped talent. Whether or not proportionate numbers of talented persons from all significant social sectors participate in higher education will depend on aspirations and their academic achievements. While there is no reason why all groups in a community should aspire equally for higher education, we referred in an earlier chapter to groups with unfulfilled aspirations. For these potential students there are some practical policy options.

One would be to remove those barriers which cause talented young people to fall by the wayside early in the educational process. A great deal has already been achieved in this respect and there are fewer reports than previously of highly talented students being forced to drop out of school because of economic difficulty. Nevertheless, the drop-outs are two thirds of those who start school (if dropping-out is defined as leaving before twelfth year) and are more likely to be from the poorer and the less well educated families. It might be that there is little more the schools can do to compensate for the effect of poor family environment and that any strategy for change should be directed at improving those family circumstances which lead to what has been called 'the cycle of self-perpetuating poverty'.

The second approach to broadening access to higher education is to encourage and assist more adults to enrol. Already the statistics show a striking trend for more older people to enter college and university in Australia, although two-thirds of all entering students are still aged less than 19. The advantage of compensatory procedures which promote re-entry to education for older persons is that a high level of motivation can generally be assumed. The early disabling effects of some s.e.s. backgrounds decrease with age. The opportunity to enrol at a later age is more likely to be taken by the socially less well-placed migrants and lower s.e.s. students. However, the problem of increasing adult entry is not one of overcoming
financial burdens but also one of academic admission criteria, and relatively larger proportions of persons with lower s.e.s. backgrounds are likely to take advantage of special entry schemes. The larger numbers of older students entering C.A.E.s is a reflection of easier access (the competitive law and medical faculties in universities generally enrol young students with high scholastic achievement) and possibly of a preference for the more practically oriented C.A.E. courses. Overall the increasing enrolment of older students makes students in higher education a little more representative of the entire population. Many older applicants will be people whose circumstances prevented them from qualifying for entry at the end of secondary school. For a significant increase in the number of older students there would need to be a considerable extension of special entry schemes, and far more publicity for them.

Our results suggest that the abolition of fees has, at best, had a significant effect on the accessibility of higher education to about one fifth of those enrolling. However, we also infer that it is not likely that many upper s.e.s. students of mediocre ability have been replaced by able lower s.e.s. students. At worst the abolition of fees can be seen as a further benefit to the economically advantaged by transferring funds from the average taxpayer to a student body drawn to a great extent from the more affluent sections of society.

Any future move to extend opportunity for higher education must, we suggest, proceed from a precise statement of social policy aims and an adequate analysis of the target groups. The strategy should have twin foci: the talented individual whose circumstances limit accessibility, and institutions which retain overly rigid admissions procedures and inflexible conditions of availability of courses.
Appendix 1

A1.1 THE METHODS USED IN THE STUDY

The survey described in this report had two major aims. The first was to provide a description of the population of students in higher education in Australia and the second was to make an assessment of the effect of the abolition of fees on the composition of the student population. A subsidiary aim was to provide individual universities and colleges with information concerning the characteristics of their students. In this appendix the methods used in the study will be described.

The Institution Sample

The first data collection work for the survey was undertaken in 1974 when a limited number of universities were surveyed. The 1974 results have been made available in three preliminary reports (Moran and Kelly, 1975; Moran and Kelly, 1976; Barnard and Kelly, 1976). In 1975 more universities and some colleges of advanced education were surveyed but these data are not included in the main analyses reported here. The 1975 frequency distributions for each variable measured were reported in Barnard, (1976). In 1976 all universities, except Melbourne and Monash, were included in the survey. These two universities could not be included in the survey until 1977 because they were conducting a similar, but not identical, study of their own. For 1975 and 1976 the Melbourne and Monash data were made available to our project but could not be analysed in the same way as our own data. In 1977 both Melbourne and Monash were able to administer our questionnaire to their entering students. For the purposes of the analyses reported herein the 1977 Melbourne and Monash data were included along with the 1976 data for the other universities. In 1976 data was collected at 59 of the 79 colleges of advanced education. For reasons described below not all the institutions surveyed have been included in the data analyses. Table A1.1 shows the institutions on which the analyses reported in this volume are based.

At all stages of the analyses (with the exception of the construction of the scale of socio-economic status) the data were divided into three sets: universities, metropolitan colleges and country colleges. A metropolitan college was defined as a college located in a city with a population greater than 100,000. The decision to draw separate samples for universities, metropolitan colleges and country colleges, and to maintain these distinctions throughout the analysis requires some comment. The reasons for this break-up were first, that universities and colleges are
distinctive because of the different purposes attributed to them (colleges are intended to provide high level education with a strong practical emphasis while universities are intended to provide courses, including vocational ones, in which there is a strong theoretical emphasis) and because many empirical studies, for example Anderson et al, (1975), have shown that universities and colleges attract students who as a group have somewhat different motivational characteristics and tend to be from different s.e.s. backgrounds (see Chapter 2). Second, the distinction between metropolitan and country C.A.E.s was made because of the known difference in the characteristics of the students who attend them. Universities on the other hand are, with two exceptions, located in large metropolitan cities and furthermore there is evidence of marked uniformity across universities of students’ motivational and s.e.s. characteristics. A study by Anderson and Western (1969) has reported that the main differences between university students in Australia occur between faculties, irrespective of whether the faculties are in the same or different institutions.

Table A1.1  STATUS OF INSTITUTIONS WITH RESPECT TO THE SAMPLE

<table>
<thead>
<tr>
<th>Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Included</td>
</tr>
<tr>
<td>Australian National</td>
</tr>
<tr>
<td>Flinders</td>
</tr>
<tr>
<td>Griffith</td>
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<tr>
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</tr>
<tr>
<td>Western Australia</td>
</tr>
<tr>
<td>Wollongong</td>
</tr>
<tr>
<td>Excluded</td>
</tr>
<tr>
<td>Adelaide</td>
</tr>
<tr>
<td>New England</td>
</tr>
</tbody>
</table>
Metropolitan Colleges

Included

Brisbane Kindergarten Teachers College
Burnley Horticultural College
Catholic College of Education
Christ College
Churchlands Teachers College
Claremont Teachers College
College of Nursing
Footscray Institute of Technology
Gordon Institute of Technology
Graylands Teachers College
Kelvin Grove C.A.E.
Kingston C.A.E.
Ku-ring-Gai C.A.E.
Mercy College
Mount Gravatt C.A.E.
Mount Lawley Teachers College
Murray Park C.A.E.
Nepean C.A.E.
North Brisbane C.A.E.
New South Wales Institute of Technology
Queensland Institute of Technology
Salisbury C.A.E.
South Australian Institute of Technology
State College of Victoria, Burwood
State College of Victoria, Geelong
State College of Victoria, Rusden
State College of Victoria, Toorak
State College of Victoria, Institute of Catholic Education
Tasmanian C.A.E.
Victorian College of the Arts

Excluded

Adelaide C.A.E.
Catholic Teachers College
Canberra C.A.E.
Emily McPherson College
Guild Teachers College
Newcastle C.A.E.
Preston Institute of Technology
Royal Melbourne Institute of Technology
State College of Victoria, Melbourne
Sturt C.A.E.
Sydney Teachers College
Torrens C.A.E.
Western Australian Institute of Technology
Western Australian Secondary Teachers College
Metropolitan Colleges (contd.)

**Not Sampled**

Alexander Mackie C.A.E.
Caulfield Institute of Technology
Cumberland College of Health Sciences
Good Samaritan Teachers College
Lincoln Institute
New South Wales State Conservatorium of Music
Prahran C.A.E.
Queensland Conservatorium of Music
State College of Victoria, Hawthorn
Swinburne College of Technology
Sydney College of the Arts
Sydney Kindergarten Teachers College
Victorian College of Pharmacy
Wollongong Institute of Education

**Country Colleges**

**Included**

Armidale C.A.E.
Dookie Agricultural College
Goulburn C.A.E.
Longerenong Agricultural College
Mitchell C.A.E.
Queensland Agricultural College
Roseworthy Agricultural College
State College of Victoria, Bendigo
State College of Victoria, Frankston
Townsville C.A.E.
Victorian School of Forestry, Creswick

**Excluded**

Ballarat C.A.E.
Capricornia Institute of Advanced Education
Gippsland Institute of Advanced Education
Hawkesbury Agricultural College

**Not Sampled**

Bendigo Institute of Technology
Darling Downs Institute of Advanced Education
Milperra C.A.E.
Northern Rivers C.A.E.
Riverina C.A.E.
Warrnambool Institute of Advanced Education
The Student Sample

The student group which was the target for the survey was students commencing approved courses for the first time. To be included students had to be enrolling for a first or second bachelors degree at the universities or a first or second bachelors degree or diploma at the colleges. At a later stage of the survey external students were excluded from the analyses.

The very large size of the population of higher education students meant that it was necessary to rely on the enrolment procedures of the individual institutions to collect the data. The initial sampling was done with the co-operation of a contact person in each of the institutions where the survey was administered. At the time of enrolment the students were asked to complete the questionnaire along with the other enrolment forms. The forms were completed by the students and then forwarded to the Tertiary Education Research Centre at the University of New South Wales where they were read to magnetic tape using the document reading machine in the Educational Testing Centre. The forms were scanned as they were received and any form which contained less than four responses was not included.

Preliminary analyses of the response rates for the institutions and the fit of the sample to the populations of students indicated that there was extensive sampling bias. In some student groups the response rates were very low. As a result of variations in the procedures for enrolment at the various institutions certain groups within the population had been considerably under-sampled and in some cases missed entirely. It was decided that procedures to reduce the resulting bias should be developed and executed. The first step was to determine the characteristics of the population on the variables considered relevant to the adequacy of the sample.

The factor which proved to be most important in determining the extent to which the samples could be constructed to correspond to the characteristics of the population was the availability of population data. Four variables were considered: age, sex, faculty of enrolment and type of enrolment. The returns which are sent each year from the institutions to the Tertiary Education Commission (formerly the Australian Universities Commission and the Commission on Advanced Education) include a table which provides information on the sex, type of enrolment and the faculty of enrolment of the students. It was decided that this table would provide the basis for the sample construction. Age was omitted for two reasons:
first, the age classification used in the returns to the Commission differs from the one used on the survey form; second, the age of students is not available by faculty of enrolment for commencing students. Faculty of enrolment and type of enrolment (full-time/part-time status) were considered important variables to include because it seems likely that many of the omissions in the sampling were due to missing whole groups of students at enrolment time. Since these variables are important in the organisation of the enrolment procedures at the institutions it was considered that they would be important variables to use to correct the sample.1

The sampling of external students was so poor that these students were excluded from the analysis samples leaving only full-time and part-time students to be considered on the type of enrolment variable.

The population characteristics were extracted from the returns to the Tertiary Education Commission and the authors wish to thank the Commission for supplying these data. A procedure for mapping the faculty and school names used in the returns onto the 20 category classification used on the survey form was developed. This resulted in a 20 by 2 by 2 matrix of population numbers for each of the institutions submitting returns to the Commission.

At this point the response rate for each of the institutions was examined and institutions whose response rate was less than 40% were excluded because it was considered that those students who had responded could be so different from those who had not that it would be safer to exclude the institution completely. Institutions where the response rate was greater than 40% but less than about 60% were examined to determine whether there was evidence of extensive sampling bias. If extensive bias was identified (based on the judgements of the researchers) the institution was excluded. Table A1.1 showed three lists of institutions in each type: the institutions which were not sampled, the institutions sampled but excluded because the response rate was too low or there was evidence of extensive bias, and the institutions where the responding students were considered eligible for inclusion in the constructed analysis samples.

1 Careful consideration was given to the alternative method of matching respondents from each institution to the sex, PT/FT and faculty parameters for that institution. Apart from the work involved in matching 1440 cells for 18 universities (and many more for colleges) it was concluded that since the analysis was not concerned with comparing institutions, or variables systematically related to institutions within the university or college sectors, there was no advantage in this procedure.
The structure of the analysis samples was determined by the distribution of the variables faculty, sex and type of enrolment in the population. Tables 4.1, 4.2 and 4.3 in Chapter 4 show the characteristics of the student populations on these variables. Each cell in the table contains a certain proportion of the students enrolled and the aim of the sample construction was to ensure that the samples contained the same proportions of cases in each of the cells of the tables. Tables A1.2, A1.3 and A1.4 show the required sample proportions in each of the cells of the tables. The tables also show the sample cases eligible for inclusion in the analysis samples.

The next step in the creation of the analysis samples was to determine the size of the samples required. For the universities and the metropolitan colleges a sample size of 5,000 was decided upon since it was thought that samples of this size would provide sufficient precision to identify any important effects in the data and would have the practical advantage of being small enough to be conveniently managed on the computer. For the country colleges, it was intended that the analysis sample should be as large as practicable since the total number of cases sampled was only 2,465.

Originally, all cases where the sex, type of enrolment or faculty of enrolment was not known were not considered eligible for the analysis samples. For the country colleges the sampling bias was so great that to provide an analysis sample approximating the characteristics of the population of country college students would have meant reducing the sample size to a very small number. For this reason the analysis sample for the country colleges consists of all the eligible students including those whose sex, or faculty of enrolment were not known. Only the external students, students whose type of enrolment was not known and those as institutions which were excluded have been excluded from the analysis sample for the country colleges. Consideration of the sampling exercise for the metropolitan colleges data indicated that a substantially better fit of the analysis sample data to the population characteristics could be achieved by reducing the size of the analysis sample. The analysis sample ideal was therefore reduced to 4,000.

Each cell in the sex, type of enrolment and faculty of enrolment matrix was considered separately and a random sample of the eligible cases was drawn so that the number of cases drawn would be the number required to make that cell contain the same proportion of cases in the analysis sample that the cell contained as a proportion of the cases in
Table A1.2 REQUIRED PROPORTIONS OF CASES IN EACH CELL AND THE SAMPLE CASES ELIGIBLE FOR INCLUSION IN THE ANALYSIS SAMPLES: UNIVERSITIES

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Table A1.4  REQUIRED PROPORTIONS OF CASES IN EACH CELL AND THE SAMPLE CASES ELIGIBLE FOR INCLUSION IN THE ANALYSIS SAMPLES: COUNTRY COLLEGES

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the population. Since each case was considered individually and was selected by the random sampling procedure with a probability equal to the proportion of the eligible cases required, the number of cases actually included for each cell in the analysis samples was not exactly equal to the number of cases which would be selected for the ideal analysis samples. This was the first source of deviation of the analysis sample characteristics from the population characteristics. However, a far more serious source of deviation was due to the number of cases required for the analysis sample being, for some cells, greater than the number of cases eligible for inclusion. As was noted before, this problem was so serious for the country colleges that all eligible cases had to be used for the analysis sample. For the universities the problem was not serious at all, the only group affected being the part-time females enrolled in 'other' faculties where 36 cases were required in the analysis sample but only 22 eligible cases had answered the questionnaire. The situation for the metropolitan colleges was somewhere between these extremes with some groups being under-represented in the analysis sample but most groups having a very close correspondence between the ideal number of cases and the actual number of cases included in the analysis sample. Tables A1.5, A1.6 and A1.7 show, for the universities, metropolitan colleges and the country colleges respectively, the actual and ideal numbers of cases in each cell for the analysis samples. Another way of expressing the content of these tables is as documentation of the deviation of the analysis samples from the characteristics of the population data. Where the actual number of cases is equal to the ideal number of cases the representation of that group is as it should be. Where the actual number of cases is greater than the ideal number of cases the representation is greater than it should be and, conversely, where the actual number of cases is less than the ideal number of cases the representation is less than it should be. The sampling was actually done by specifying the number of cases required and then sampling to obtain that number of cases: 5,000 for the university sample and 4,000 for the metropolitan college sample. Tables A1.5, A1.6 and A1.7, however, are reconstructed according to the actual sample sizes achieved: 5,080 for the universities, 3,466 for the metropolitan colleges and 1,609 for the country colleges. It should be noted that the sample size for the universities is greater than 5,000 mainly because of sampling fluctuation but for the metropolitan colleges

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1 Due to rounding error the target university sample size was set to 5,018 rather than 5,000.
Table A1.5  IDEAL ANALYSIS SAMPLE AND ACTUAL ANALYSIS SAMPLE: UNIVERSITIES

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Table A1.6 IDEAL ANALYSIS SAMPLE AND ACTUAL ANALYSIS SAMPLE: METROPOLITAN COLLEGES

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<td>231</td>
<td>122</td>
<td>104</td>
</tr>
<tr>
<td>Building, Surveying</td>
<td>9</td>
<td>11</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>101</td>
<td>121</td>
<td>148</td>
<td>163</td>
</tr>
<tr>
<td>Total</td>
<td>1102</td>
<td>1223</td>
<td>1361</td>
<td>1382</td>
</tr>
</tbody>
</table>

Number of Faculty

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1102</td>
<td>1223</td>
</tr>
</tbody>
</table>

Note: The table above presents the comparison between ideal and actual analysis samples for various faculties in metropolitan colleges, categorized by full-time and part-time employment, along with the number of male and female faculty members. The figures indicate the deviation from the ideal analysis to the actual analysis, highlighting areas where improvements might be necessary.
Table A1.7  IDEAL ANALYSIS SAMPLE AND ACTUAL ANALYSIS SAMPLE: COUNTRY COLLEGES

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Full-time</th>
<th></th>
<th>Part-time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td></td>
<td>Ideal</td>
<td>Actual</td>
<td>Ideal</td>
<td>Actual</td>
</tr>
<tr>
<td>Agriculture</td>
<td>110</td>
<td>182</td>
<td>26</td>
<td>47</td>
</tr>
<tr>
<td>Applied Science</td>
<td>44</td>
<td>21</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td>Architecture</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Arts</td>
<td>65</td>
<td>2</td>
<td>73</td>
<td>8</td>
</tr>
<tr>
<td>Commerce/Economics</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Dentistry</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Education</td>
<td>202</td>
<td>262</td>
<td>521</td>
<td>644</td>
</tr>
<tr>
<td>Engineering</td>
<td>71</td>
<td>10</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Law</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Medicine</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Music</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Science/Biological Sciences</td>
<td>13</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Social Work</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Vet. Sciences</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Paramedical Studies</td>
<td>3</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Computer Studies</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Commercial and Business Studies</td>
<td>112</td>
<td>57</td>
<td>32</td>
<td>7</td>
</tr>
<tr>
<td>Building, Surveying</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>45</td>
<td>56</td>
<td>38</td>
<td>56</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>666</td>
<td>597</td>
<td>721</td>
<td>791</td>
</tr>
</tbody>
</table>

1 192 cases whose sex or faculty was not known have not been included in this table. (For 189 of these cases the faculty and in 3 cases the sex was not known.) In consequence the total ideal cases is 1609, the number in the country analysis sample, but only 1417 of the actual 1609 cases have been included within the table.
the difference between 3,466 and 4,000 is mainly due to some cells in
the table being short of eligible cases.

Some comments on the effects of these procedures are in order. First,
the exclusion of external students, those who were not commencing approved
courses, and post graduate and higher degree students means that the
results of the present survey cannot be automatically generalised to all higher
education students. Second, the knowledge that there are wide differences
between institutions implies that the results found for the Australia-wide
analysis samples cannot be expected to hold within particular institutions.
Third, it might be argued that to correct a biased sample on the basis of
three variables means that the bias will remain on any other variables
which might conceivably be biased. This criticism, while valid, is not as
serious as it might appear for two reasons. First, the sampling procedures
were executed within the framework of type of enrolment and faculty
variables used by institutions to organise their enrolments. As a result,
type of enrolment and faculty can be expected to be important sources of
bias in the sample rather than results of the bias in the sample and
therefore correcting on these variables should have a powerful effect in
reducing the extent of bias on other variables. Second, the correction of
the sampling on the basis of sex, type of enrolment and faculty of
enrolment will have the effect of correcting the sample, to a certain
extent, on all variables which are correlated with sex, type of enrolment
and faculty of enrolment. Finally, it should be noted that the correction
of the sampling was not a resounding success. For the universities the
correction can be considered satisfactory, for the metropolitan colleges
a little worse and for the non-metropolitan colleges considerable caution
should be used when generalising from our data to the Australia-wide
population. Table A1.7 of this appendix should be of some assistance to
the reader who wishes to make such generalisations.

The Questionnaire and the Information Obtained

A major concern of the study is the type of enrolment which students
make in higher education: whether university or college, country or city,
part-time or full-time; which faculty or course; and whether the
enrolment follows directly after secondary school or after a delay,
perhaps due to employment. The decision to enrol is seen as the outcome
of various sociological, psychological and educational conditions in the
students' life history. This study examines several aspects of the
students' parental and family background, and the type of secondary school
attended. The questionnaire used to elicit the information to explore the paths to various types of enrolment is included at the end of this section.

The important concept of social background requires some discussion. The literature review in Chapter 2 indicates that social class, as measured by a status ordering of father's occupation, has been the focus of a large number of studies of students, particularly in the last 15 years. Social policy makers and reformers have also used parental occupation as a measure of the equality with which educational opportunities are distributed through the community. The Schools Commission and the Poverty Commission, for instance, give considerable attention to findings which showed that children from working class families have low participation rates in the upper levels of education. The Labor government, in abolishing tuition fees for higher education in 1974, expressed the belief that this would facilitate the entry to universities and colleges of more children from working class backgrounds.

It was essential to obtain information about the occupations of students' parents, particularly father's occupation, to form measures which could gauge participation across higher education, and which would enable comparisons to be made with earlier studies and with the Census of the Australian population.

As the questionnaires were to be filled in by students themselves in a form which could be processed by a document-reading machine (for direct transfer of the data to computer tape) it was necessary to devise a classification of occupations so that students could readily mark the category into which their parents' occupations fell. After consideration of various alternatives the question devised was based on the code definitions which had been used in the Australian National University's Education Research Unit's (E.R.U.) national-wide study of colleges of advanced education. The form of the question allowed for classification of each of father's and mother's occupation into one of 10 categories (see questionnaire). Use of this particular classification had the advantage that it could be related to the Broom, Jones and Zubrzycki (1968) hierarchical ordering of the Census occupational groupings. There was the further advantage of direct comparison being possible with the E.R.U.'s surveys of college and matriculation students.

As a check on the reliability of self-rating by students the questionnaire included an open question in which students were asked to:
Describe the present or last main occupation of your father (or male guardian) and your mother. State both grade and nature of occupation e.g. senior clerk in bank, head teacher in state primary school, motor mechanic employed in garage, owner/manager of jam factory employing 20 men.

PLEASE DO NOT USE general terms such as teacher, engineer, manager, without further specification.

Father ...........................................................
Mother ...........................................................

To check the consistency of the two sets of answers a sample of 1,705 cases (the entire 1975 returns from the University of Sydney, University of Adelaide, Sydney Teachers College and Mt Gravatt C.A.E.) was examined.

Trained coders, using the classification system developed by Anderson et al (1975) (which was also the basis of the pre-coded format) scored the descriptive responses. The two sets of results were compared for consistency by correlation and cross-tabulation.

Comparison showed that 87% of the pairs of responses were given the same classification by the two methods. In 8% of the cases students located their father's occupation in a 'higher' group than the coders and in 5% the students used a 'lower' group. Only 6% of the total number of cases were discrepant by more than one position in the rank order. The correlation between the two distributions was +.94.

The number of consistent classifications and the upwards and downwards shifts for each occupational group is shown in Table A1.8. Of the 224 discrepancies in the classification 49% differed by one position in the order, 17% by two positions and 34% by three or more positions. The number of positions shifted by the over-estimating and under-estimating students is shown in Table A1.9.

In the 46 instances where the students classified their father's occupation three or more positions higher than the coder, half were 'small scale employer' rather than 'foreman and skilled worker'. In the 30 instances where the students classified their father's occupation three or more positions lower than the coder half were 'intermediate non-manual worker' rather than 'lower professional'.

1 For the cross-tabulation analysis the order of the groups was in the questionnaire from upper professional (high) to farm owner (low), as in Table A1.8. For the correlation farm owner was located between small scale employer and intermediate non-manual. Since only two of the 114 classifications of farm owner were discrepant the location of this group has little effect on the calculation of reliability.
Table A1.8 DISCREPANCIES BETWEEN THE GROUPING OF FATHERS' OCCUPATIONS ACCORDING TO STUDENTS' PRE-CODED RESPONSES AND CODERS' CLASSIFICATION OF STUDENTS' DESCRIPTIVE ANSWERS (NUMBER OF CASES)

<table>
<thead>
<tr>
<th>Fathers' Occupations</th>
<th>Students' Classification</th>
<th>Student and Coder the same</th>
<th>Coder higher</th>
<th>Coder lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Professional</td>
<td>283</td>
<td>238</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>Lower Professional</td>
<td>191</td>
<td>131</td>
<td>16</td>
<td>44</td>
</tr>
<tr>
<td>Large scale Employer or Manager</td>
<td>186</td>
<td>169</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Small scale Employer or Manager</td>
<td>309</td>
<td>293</td>
<td>4</td>
<td>12</td>
</tr>
<tr>
<td>Intermediate Non-Manual</td>
<td>139</td>
<td>113</td>
<td>11</td>
<td>15</td>
</tr>
<tr>
<td>Clerical</td>
<td>78</td>
<td>65</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Foreman and Skilled Worker</td>
<td>261</td>
<td>231</td>
<td>24</td>
<td>6</td>
</tr>
<tr>
<td>Semi-skilled Manual Worker</td>
<td>144</td>
<td>129</td>
<td>15</td>
<td>-</td>
</tr>
<tr>
<td>Farm Owner</td>
<td>114</td>
<td>112</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1705</strong></td>
<td><strong>1481</strong></td>
<td><strong>87</strong></td>
<td><strong>137</strong></td>
</tr>
</tbody>
</table>

Table A1.9 DISTRIBUTION OF POSITIONAL SHIFTS AMONG DISCREPANT CASES

<table>
<thead>
<tr>
<th>Number of positions by which the discrepant classifications varied</th>
<th>One</th>
<th>Two</th>
<th>Three</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student higher than coder</td>
<td>61</td>
<td>30</td>
<td>46</td>
<td>137</td>
</tr>
<tr>
<td>Student lower than coder</td>
<td>48</td>
<td>9</td>
<td>30</td>
<td>87</td>
</tr>
</tbody>
</table>

The three occupational classifications which obtained the highest proportion of identical placements from the two methods were farm owner, small scale employer or manager and large scale employer or manager. The three with the lowest identical placements were lower professional, intermediate non-manual worker and clerical and related worker.

A further check on the accuracy of the self-classification of occupation by students was possible by checking results against father's level of education and income. Many previous studies have shown that occupation, education and income are highly inter-correlated. In our own study the inter-correlations between these items for the three analysis samples combined were: occupation-income .47, occupation-education .64 and education-income .42.
A STUDY OF STUDENTS ENTERING TERTIARY EDUCATION

As the abolition of tuition fees may alter the pattern of student enrolment in respect of social and demographic background, a survey is being conducted of students entering degree or diploma courses in universities and colleges of advanced education. The study is being sponsored by the Australian Vice-Chancellor's Committee.

Whatever you write in this document will be treated as confidential and will not be seen by anyone other than staff of the research centre or centres making the analysis. The information is for statistical purposes only and no individual cases will be cited in any report. Further, the information will not be used for administrative purposes by the institution in which you are enrolling.

DIRECTIONS: Please read the whole of each question carefully. Choose the most appropriate answer and fill in the adjacent oval completely, using a soft lead pencil. Please do not use a ball point or ink pen. If, for example, you are enrolling in a full-time course, you would mark the answer to question 4 as follows:

4. Type of course this year
   Full-time □□
   Part-time □□
   External □□
Answer the following questions by blackening in the appropriate ovals. Please use only a soft black pencil.

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>Male ☐ Female ☐</td>
</tr>
<tr>
<td>2. Age in years as at 31st Dec., last year</td>
<td>17 ☐ 18 ☐ 19 ☐ 20-21 ☐ 22-24 ☐ 25-30 ☐ 31-40 ☐ Over 40 ☐</td>
</tr>
<tr>
<td>4. Type of course this year</td>
<td>Full-time ☐ Part-time ☐ External ☐</td>
</tr>
<tr>
<td>5. Level of course</td>
<td>First Bachelor's Degree ☐ Second Bachelor's Degree ☐ Post-Graduate Degree ☐ First Diploma ☐ Second Diploma ☐ Post-Graduate Diploma ☐ Non Degree or Diploma ☐</td>
</tr>
<tr>
<td>6. Is this the institution of your first choice?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td>7. Are you enrolling in the course of your first choice?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td>8. Do you receive a living allowance from any of the following?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td>9. When did you qualify to enter this institution?</td>
<td>At the end of last year ☐ One year ago ☐ Two years ago ☐ More than 2 years ago ☐</td>
</tr>
<tr>
<td>10. Have you worked (other than vacation or part-time) before enrolling at this institution?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td>11. If Yes, which has been your main occupation?</td>
<td>Qualifying professional worker ☐ Business person ☐ Other salaried worker ☐ Housewife ☐ Other - ☐ Please specify ☐</td>
</tr>
<tr>
<td>12. What type of course would you have taken this year if there had still been tuition fees?</td>
<td>Full-time ☐ Part-time ☐ External ☐ Would have had to defer enrollment ☐ Would have been unlikely to have enrolled at all ☐</td>
</tr>
<tr>
<td>13. If you have previously attended a tertiary institution, what type of institution was that?</td>
<td>University ☐ College of Advanced Education ☐ Technical College ☐ Teacher's College ☐ Other ☐ Not applicable ☐</td>
</tr>
<tr>
<td>14. What was the number of years between your leaving school and entering this institution? (If you returned to school as a mature student, how many years since you originally left school?)</td>
<td>None (left at the end of last year) ☐ 1 year ☐ 2 years ☐ 3-5 years ☐ 6-10 years ☐ More than 10 years ☐</td>
</tr>
<tr>
<td>15. Did you enter higher education immediately after leaving school?</td>
<td>Yes ☐ No ☐</td>
</tr>
<tr>
<td>16. If No, was this because you -</td>
<td>Wanted a break from schooling ☐ Thought some outside experience would be useful ☐ cont'd....</td>
</tr>
</tbody>
</table>
Question 16 Continued.......

Had no intention to go on to higher education
Had not qualified
Had insufficient finance
Other reasons - Please specify

17. Where did you reside before enrolling at this institution?
Australian Capital Territory
New South Wales
Northern Territory
Queensland
South Australia
Tasmania
Victoria
Western Australia
Overseas

18. Where will you be living during term time?
At home with parents/relations
College or hall of residence
Sharing house or flat with friends
Flat with spouse or alone
Boarding
Own home
Other

19. Which type of school did you attend during (a) most of your secondary education, and (b) your final year?
State high school
Independent school (non-Catholic)
Technical school
Correspondence school
Coaching college
Independent study
Overseas school
Other

20. What was the locality of the school in each case?
Capital City
Large city over 60,000
City 30,000 to 60,000
City or town 5,000 to 30,000
Town less than 5,000
Rural area (not in a-town)
Overseas

21. What was your own country of birth and that of your father and mother?
YOURS
FATHER'S
MOTHER'S
Australia
New Zealand
United Kingdom or Eire
Asian country
European country
North America
Other

22. How many years have you and your parents been resident in Australia?
Since Birth
More than 20 years
13-20 years
7-12 years
1-6 years
Less than 1 year
Never

23. How many brothers & sisters do you have?
0
1
2
3
4
5
6 or more

24. How much education did your father and mother have?
Primary
Some secondary
Completed 4 years of secondary
Completed 5-6 years of secondary
Some tertiary (non-university)
Completed tertiary (non-university)
Some tertiary (university)
Completed tertiary (university)

25. In which of the categories below do you estimate your father's (or male guardian's) and your mother's income fell last year before taxation, if still in employment?
No income
Less than $2,000
Between $2,001 and $4,000
$4,001 and $6,000
$6,001 and $8,000
$8,001 and $10,000
$10,001 and $12,000
$12,001 and $14,000
$14,001 and $16,000
More than $16,000

26. Describe the present or last main occupation of your father (or male guardian) and your mother. State both grade and nature of occupation, e.g., senior clerk in bank; head teacher in state primary school; motor mechanic employed in garage; owner/manager of jam factory employing 20 men.

PLEASE DO NOT USE general terms such as teacher, engineer, manager, without further specification.

Father

Mother
27. Which of the following general categories is closest to the present or last main occupation of your father and mother?

<table>
<thead>
<tr>
<th>Category</th>
<th>FATHER</th>
<th>MOTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper professional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Generally requires a university degree or equivalent; e.g., law, medicine, science, engineering)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower professional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Generally requires a diploma or equivalent; e.g., a journalist, librarian, nurse, accountant)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large scale employer or manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Employs, plans, or manages about 25 or more persons, e.g., a senior public servant who is not a professional, owner of a large business, local government inspector, financial manager)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small scale employer or manager</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Employs, plans or manages an operation with fewer than 25 persons, or self-employed with a middle or higher income; e.g., a shop proprietor, self-employed insurance or real estate agent, manager of a small business)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate non-manual worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Employees having some supervisory role or skill; e.g., bookkeeper, middle level public servant, postmaster, non-commissioned officer, insurance or real estate employee)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clerical and related worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Employees without special skill or supervising responsibility; e.g., clerk, postal officer, shop assistant, commercial traveller, policeman)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foreman and skilled worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Employees with specific skills; e.g., fitter and turner, plumber, other qualified technician or tradesman)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-skilled manual worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Employees with no or only a small amount of skill or training; e.g., driver, caretaker, medical attendant, labourer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm owner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time home duties</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The Construction of the Scale of Socio-economic Status

There are numerous approaches to the measurement of socio-economic status. In some cases socio-economic status is represented by occupational status but more often it is considered to be something held in common by the occupational status, educational achievement and income of an individual or family. For the purposes of this study a scale of socio-economic status has been constructed from measures of the occupational status, educational achievement and income of the fathers of students in higher education.

The first step was to construct a single file of data cases including students from each type of institution. Since one aim of the study was to compare the effect of the abolition of fees on the social composition of students in different types of institution a common s.e.s. scale was required. It seems more appropriate to base such a scale on the three groups of students combined than to construct the scale with, for example, the university students and then compare the results for the three groups.

The 5,080 university students, 3,466 metropolitan college students and 1,609 country college students in the analysis samples were combined to create a file of 10,155 students in higher education. Students for whom there was no information on any one of the items included (occupation, education and income of father) were excluded and this resulted in the scale being based on the remaining 7,806 cases (76.9% of the eligible cases). The questions with which these variables were measured were, with two exceptions, arranged so that an ordinal scale of each variable was produced (c.f. the questionnaire). The first exception was the occupation of farm owner which was not included in the occupation ordering. For the purposes of the construction of the s.e.s. scale the farmers have been included with the small scale employers and managers. The second exception was the small number of fathers engaged in full-time home duties. These cases were excluded together with the cases for which there was no information. The categories on each variable were given values according to their place on the questionnaire with the number one assigned to the first category and the last number (8 for education and occupation and 10 for income) being assigned to the last category. Table A1.10 shows the mean and standard deviation of each variable for the 7,806 cases.

A correlation matrix was then produced for the 7,806 cases and a principal component was extracted. This principal component accounted
Table A1.10 MEANS AND STANDARD DEVIATIONS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>3.58</td>
<td>2.33</td>
</tr>
<tr>
<td>Income</td>
<td>6.12</td>
<td>2.54</td>
</tr>
<tr>
<td>Occupation</td>
<td>4.19</td>
<td>2.24</td>
</tr>
</tbody>
</table>

Table A1.11 CORRELATION MATRIX AND FACTOR SCORE COEFFICIENTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>Correlation with income</th>
<th>Correlation with occupation</th>
<th>Factor score coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>.417</td>
<td>-.640</td>
<td>.417</td>
</tr>
<tr>
<td>Income</td>
<td>- .474</td>
<td>-.474</td>
<td>.368</td>
</tr>
<tr>
<td>Occupation</td>
<td>-.429</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

for 67.6% of the variance in the data and, since s.e.s. is considered to be the construct which education, income and occupation have in common, is the measure of s.e.s. being sought. Table A1.11 shows the correlation matrix and the factor score coefficients.

With this information the s.e.s. value for each student can be computed. First, a z value is constructed for each variable by subtracting the mean from the value of the variable and dividing the result by the standard deviation for the variable. Each z score is then multiplied by the appropriate factor score coefficients and the sum of these products is the measure of s.e.s. For presentation in tables the s.e.s. scale was divided into quintiles.

For the cases where there was no information and the cases where the occupation of the father was full-time home duties the mean of the variable was used instead of the observed value. This amounts to allowing the socio-economic status of the case to be influenced by the variables on which information is available but is conservative in that for most cases the s.e.s. value is closer to the mean s.e.s. value than it would be if all information was known for the case.

This method of s.e.s. scale construction allows a meaningful comparison to be made between the s.e.s. backgrounds of different groups of students, including comparisons between institutions. It should be remembered that, as was shown in Chapter 4, the s.e.s. of students in higher education is higher than the s.e.s. of the population at large and this implies that the scale cannot be appropriately applied to the measurement of s.e.s. in the general population.
References


C. Barnard, (1976) Profile of a Student: College and University Entrants, 1975, Report No. 4, Sydney, Tertiary Education Research Centre, University of N.S.W.


C. Moran and D. Kelly, (1975) Student Opinions on the Influence of Tuition Fee Abolition upon their Choice of Course, Report No. 1, Sydney, Tertiary Education Research Centre, University of N.S.W.

Table A2.1 PERCENTAGE DISTRIBUTION OF ENTRANTS TO MELBOURNE UNIVERSITY 1962-76, ACCORDING TO SEX

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>2625</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>1963</td>
<td>2878</td>
<td>70</td>
<td>30</td>
</tr>
<tr>
<td>1964</td>
<td>2851</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>1965</td>
<td>2596</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>1966</td>
<td>2634</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>1967</td>
<td>2752</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>1968</td>
<td>2600</td>
<td>67</td>
<td>33</td>
</tr>
<tr>
<td>1969</td>
<td>2929</td>
<td>65</td>
<td>35</td>
</tr>
<tr>
<td>1970</td>
<td>2941</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>1971</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>2907</td>
<td>64</td>
<td>36</td>
</tr>
<tr>
<td>1973</td>
<td></td>
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<td>1974</td>
<td>3043</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>1975</td>
<td>2900</td>
<td>62</td>
<td>38</td>
</tr>
<tr>
<td>1976</td>
<td>3034</td>
<td>61</td>
<td>39</td>
</tr>
</tbody>
</table>

1 In this and the following tables on Melbourne University students percentages have been calculated only on those students who gave usable answers to specific questionnaire items. Those giving inadequate or no information have been excluded.
Table A2.2 PERCENTAGE DISTRIBUTION OF ENTRANTS TO MELBOURNE UNIVERSITY, 1962-76, ACCORDING TO TYPE AND LOCATION OF SCHOOL ATTENDED IN FINAL YEAR OF SECONDARY SCHOOL

<table>
<thead>
<tr>
<th>Year</th>
<th>Year</th>
<th>Type of School</th>
<th>Location of School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>State Catholic</td>
<td>Non-Catholic Independent</td>
</tr>
<tr>
<td>1962</td>
<td>1962</td>
<td>43</td>
<td>14</td>
</tr>
<tr>
<td>1963</td>
<td>1963</td>
<td>45</td>
<td>13</td>
</tr>
<tr>
<td>1964</td>
<td>1964</td>
<td>46</td>
<td>14</td>
</tr>
<tr>
<td>1965</td>
<td>1965</td>
<td>47</td>
<td>14</td>
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<tr>
<td>1966</td>
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<td>1967</td>
<td>46</td>
<td>17</td>
</tr>
<tr>
<td>1968</td>
<td>1968</td>
<td>44</td>
<td>21</td>
</tr>
<tr>
<td>1969</td>
<td>1969</td>
<td>41*</td>
<td>20*</td>
</tr>
<tr>
<td>1970</td>
<td>1970</td>
<td>38*</td>
<td>20*</td>
</tr>
<tr>
<td>1971</td>
<td>1971</td>
<td>38</td>
<td>21</td>
</tr>
<tr>
<td>1972</td>
<td>1972</td>
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<td>1974</td>
<td>1974</td>
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</tr>
<tr>
<td>1975</td>
<td>1975</td>
<td>41</td>
<td>19</td>
</tr>
</tbody>
</table>

1 For 1962-67 Catholic figures exclude the 'major public schools' which are included under 'non-Catholic independent'.

2 Includes interstate and overseas students.

* These 1969 and 1970 figures are taken from Kwong Lee Dow et al, 'The Social Composition of Students Entering the University of Melbourne in 1969 and 1970', Melbourne Studies in Education 1972, pp.77-95. These percentages were calculated in Victorian students only and thus exclude the 'Other' category.
Table A2.3 PERCENTAGE DISTRIBUTION OF ENTRANTS TO MELBOURNE UNIVERSITY 1962-76, ACCORDING TO FATHER'S OCCUPATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Professional</th>
<th>Administrative</th>
<th>Clerical, Sales</th>
<th>Farmer and related</th>
<th>Mines, transport &amp; communication, sport, services, armed forces</th>
<th>Craftsmen, production &amp; process workers, labourers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>27</td>
<td>31</td>
<td>16</td>
<td>6</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>1963</td>
<td>28</td>
<td>28</td>
<td>18</td>
<td>7</td>
<td>5</td>
<td>14</td>
</tr>
<tr>
<td>1964</td>
<td>25</td>
<td>28</td>
<td>18</td>
<td>8</td>
<td>6</td>
<td>15</td>
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<td>1965</td>
<td>23</td>
<td>32</td>
<td>18</td>
<td>7</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>1966</td>
<td>25</td>
<td>27</td>
<td>16</td>
<td>7</td>
<td>7</td>
<td>18</td>
</tr>
<tr>
<td>1967</td>
<td>29</td>
<td>28</td>
<td>14</td>
<td>8</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>1968</td>
<td>26</td>
<td>27</td>
<td>15</td>
<td>9</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>1969</td>
<td>25</td>
<td>30</td>
<td>13</td>
<td>8</td>
<td>7</td>
<td>17</td>
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<td>8</td>
<td>6</td>
<td>17</td>
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<td>1971</td>
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<tr>
<td>1972</td>
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<td>1973</td>
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<td>1976</td>
<td>29</td>
<td>29</td>
<td>12</td>
<td>7</td>
<td>6</td>
<td>17</td>
</tr>
</tbody>
</table>
Table A2.4 PERCENTAGE DISTRIBUTION OF ENTRANTS TO MELBOURNE UNIVERSITY, 1962-76, ACCORDING TO PARENTS’ EDUCATION

<table>
<thead>
<tr>
<th>Year</th>
<th>University qualification</th>
<th>Other post-sec. qualification</th>
<th>No formal qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
<td>Mother</td>
</tr>
<tr>
<td>1962</td>
<td>10</td>
<td>25</td>
<td>8</td>
</tr>
<tr>
<td>1963</td>
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<td>23</td>
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<td>1964</td>
<td>10</td>
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<td>26</td>
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<td>1966</td>
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<td>25</td>
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<td>1969</td>
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<td>1971</td>
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<td>21</td>
</tr>
<tr>
<td>1973</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td>11</td>
<td>25</td>
<td>22</td>
</tr>
<tr>
<td>1975</td>
<td>10</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>1976</td>
<td>10</td>
<td>21</td>
<td>25</td>
</tr>
</tbody>
</table>

1. Includes those who have completed only part of a university course, except in 1972, when they were included in the ‘other post-secondary qualification’ figure.

2. Includes those who have matriculated since leaving school.
Table A2.5 PERCENTAGE DISTRIBUTION OF ENTRANTS TO MONASH UNIVERSITY, 1970-76, ACCORDING TO SEX

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>2022</td>
<td>62</td>
<td>38</td>
</tr>
<tr>
<td>1971</td>
<td>2293</td>
<td>63</td>
<td>37</td>
</tr>
<tr>
<td>1972</td>
<td>2263</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>1973</td>
<td>2401</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>1974</td>
<td>2885</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>1975</td>
<td>2609</td>
<td>56</td>
<td>44</td>
</tr>
<tr>
<td>1976</td>
<td>2574</td>
<td>57</td>
<td>43</td>
</tr>
</tbody>
</table>

1 Includes only newly enrolling students who completed the questionnaire, with a response rate varying between 71% in 1970 and 89% in 1974. In this and the following tables percentages are calculated only on those students who gave usable answers.

Table A2.6 PERCENTAGE DISTRIBUTION OF ENTRANTS TO MONASH UNIVERSITY, 1970-76, ACCORDING TO TYPE OF SCHOOL ATTENDED IN FINAL YEAR OF SECONDARY SCHOOL

<table>
<thead>
<tr>
<th>Year</th>
<th>State</th>
<th>Catholic</th>
<th>Non-Catholic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Independent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>50</td>
<td>16</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>1971</td>
<td>49</td>
<td>15</td>
<td>27</td>
<td>9</td>
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<tr>
<td>1972</td>
<td>52</td>
<td>13</td>
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<td>8</td>
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<tr>
<td>1973</td>
<td>48</td>
<td>16</td>
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<td>8</td>
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<td>1974</td>
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<td>8</td>
</tr>
<tr>
<td>1975</td>
<td>52</td>
<td>21</td>
<td>26</td>
<td>1</td>
</tr>
<tr>
<td>1976</td>
<td>50</td>
<td>22</td>
<td>26</td>
<td>2</td>
</tr>
</tbody>
</table>

1 Includes interstate and overseas students.
Table A2.7  PERCENTAGE DISTRIBUTION OF ENTRANTS TO MONASH UNIVERSITY, 1970-76, ACCORDING TO FATHER'S OCCUPATION

<table>
<thead>
<tr>
<th>Year</th>
<th>Professional</th>
<th>Administrative</th>
<th>Clerical</th>
<th>Farmer &amp; communication, sales</th>
<th>Mines, transport &amp; communication, sport, services, workers, armed forces</th>
<th>Craftsmen, production workers, labourers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>27</td>
<td>41</td>
<td>8</td>
<td>8</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>1971</td>
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<td>44</td>
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<td>6</td>
<td>18</td>
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<tr>
<td>1972</td>
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<td>19</td>
<td>6</td>
<td>6</td>
<td>18</td>
</tr>
<tr>
<td>1973</td>
<td>25</td>
<td>23</td>
<td>21</td>
<td>6</td>
<td>6</td>
<td>19</td>
</tr>
<tr>
<td>1974</td>
<td>31</td>
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<td>18</td>
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<tr>
<td>1975</td>
<td>27</td>
<td>24</td>
<td>15</td>
<td>7</td>
<td>8</td>
<td>18</td>
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<td>1976</td>
<td>26</td>
<td>32</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>19</td>
</tr>
</tbody>
</table>

1 1972 figures are for occupation of 'head of household'.
2 Includes 44 housewives.

Table A2.8  PERCENTAGE DISTRIBUTION OF ENTRANTS TO MONASH UNIVERSITY, 1970-76, ACCORDING TO PARENTS' EDUCATION

<table>
<thead>
<tr>
<th>Year</th>
<th>University qualification</th>
<th>No formal qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>1970</td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>1971</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>1972</td>
<td>10</td>
<td>24</td>
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<td>1973</td>
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<td>23</td>
</tr>
<tr>
<td>1976</td>
<td>9</td>
<td>23</td>
</tr>
</tbody>
</table>

1 Includes those who have completed only part of a university course.
2 Includes those who have matriculated since leaving school.
A2.2 INTERACTION OF PARENTAL VARIABLES FOR EACH OF THE SAMPLES IN THE THREE TYPES OF INSTITUTION - 1976 STUDY (see Chapter 3)

Table A2.9 DISTRIBUTION OF FATHER'S HIGHEST LEVEL OF EDUCATION BY FATHER'S INCOME: UNIVERSITIES SAMPLE

<table>
<thead>
<tr>
<th>Father's Income</th>
<th>$</th>
<th>Not Stated</th>
<th>Primary</th>
<th>Secondary Some</th>
<th>Secondary 4 Years</th>
<th>Secondary 5-6 Years</th>
<th>Some Tertiary Non-Univ.</th>
<th>Tertiary Non-Univ.</th>
<th>Tertiary Some Univ.</th>
<th>Tertiary University</th>
<th>Total Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Stated</td>
<td></td>
<td>34.9</td>
<td>16.2</td>
<td>14.9</td>
<td>12.0</td>
<td>16.1</td>
<td>16.1</td>
<td>14.8</td>
<td>11.8</td>
<td>12.3</td>
<td>773</td>
</tr>
<tr>
<td>No Income</td>
<td>1.9</td>
<td>9.5</td>
<td>6.9</td>
<td>4.1</td>
<td>3.6</td>
<td>5.9</td>
<td>5.1</td>
<td>4.5</td>
<td>4.5</td>
<td>2.8</td>
<td>278</td>
</tr>
<tr>
<td>Less than 2000</td>
<td>1.4</td>
<td>4.8</td>
<td>3.5</td>
<td>2.2</td>
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<td>2.4</td>
<td>1.6</td>
<td>2.8</td>
<td>1.6</td>
<td>1.6</td>
<td>136</td>
</tr>
<tr>
<td>2 - 4000</td>
<td>2.4</td>
<td>6.1</td>
<td>4.2</td>
<td>4.7</td>
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<td>3.5</td>
<td>2.8</td>
<td>3.4</td>
<td>1.6</td>
<td>2.0</td>
<td>195</td>
</tr>
<tr>
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<td>16.6</td>
<td>9.5</td>
<td>9.3</td>
<td>4.2</td>
<td>7.5</td>
<td>3.5</td>
<td>4.5</td>
<td>2.0</td>
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<td>18.9</td>
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<td>15.6</td>
<td>9.2</td>
<td>9.0</td>
<td>7.2</td>
<td>9.6</td>
<td>2.9</td>
<td>2.9</td>
<td>671</td>
</tr>
<tr>
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Table A2.10 DISTRIBUTION OF FATHER'S HIGHEST LEVEL OF EDUCATION BY FATHER'S OCCUPATION: UNIVERSITIES SAMPLE

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Table A2.12 DISTRIBUTION OF FATHER'S HIGHEST LEVEL OF EDUCATION BY FATHER'S INCOME: METROPOLITAN COLLEGES SAMPLE

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Table A2.13 DISTRIBUTION OF FATHER'S HIGHEST LEVEL OF EDUCATION BY FATHER'S OCCUPATION: METROPOLITAN COLLEGES SAMPLE

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Table A2.15 DISTRIBUTION OF FATHER'S HIGHEST LEVEL OF EDUCATION BY FATHER'S INCOME: COUNTRY COLLEGES SAMPLE

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<th>Secondary 5-6 Years</th>
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**QUESTION**

**Sex**

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When did you qualify to enter this institution?

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When did you qualify to enter this institution?
### 1976 Universities including Melb. and Monash 1977

### 1976 Colleges Metropolitan Country Total

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### Country of birth

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### Number of brothers and sisters

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### Father's education

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- Completed tertiary 2,088 7.8 1,033 7.2 140 6.2 1,173 7.1
- Some tertiary (university) 892 3.3 323 2.3 43 1.9 366 2.2
- Completed tertiary 4,454 16.7 1,252 8.8 172 7.6 1,424 8.6
- No information 1,181 4.4 600 4.2 96 4.3 696 4.2
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