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Competition and choice: Determinants of access to university places via the Victorian school system

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Competition and choice: Determinants of access to university places via the Victorian school system

By

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy within the Department of Sociology, School of Political and Social Inquiry, Monash University.



Thesis accepted in satisfaction of the requirements for the degree of Doctor of Philosophy on 23 October 2007

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Sec. Research Graduate School Committee

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACER	Australian Council for Education Research
CCD	Census Collection District
CPUR	Centre for Population and Urban Research
DEST	Department of Education Science and Training (Commonwealth)
DET	Department of Education and Training (Victoria)
DIMIA	Department of Immigration Multiculturalism and Indigenous Affairs
ENTER	Equivalent National Tertiary Entrance Rank
NCVER	National Centre for Vocational Education and Training
RMIT	Royal Melbourne Institute of Technology
SEAL	Selective Entry Academic Learning Program
SES	Socioeconomic status
SSD	Statistical Subdivision
TAFE	Technical and Further Education Institution
UK	United Kingdom
US	United States of America
VCAA	Victorian Curriculum and Assessment Authority
VCAL	Victorian Certificate of Applied Learning
VCE	Victorian Certificate of Education
VET	Vocational Education and Training
VTAC	Victorian Tertiary Admissions Centre

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SUMMARY

The provision of secondary school education in Victoria has changed substantially over the past 50 years. This thesis examines the consequences of these changes for the academic opportunities of government school students.

In the 1950s and 1960s, unprecedented numbers of students and near-universal school participation provided a challenge to governments in relation to education provision. As a result, the comprehensive ideal for organising government secondary schooling was adopted. This system became an important vehicle for providing educational opportunities for many students who previously had limited access to the post-primary years.

In the 1970s, funding for schooling in Australia received a considerable boost as a result of educational reforms introduced by the Whitlam Government. The reforms implemented at this time were designed to increase equity in the education system. However, the beneficiaries of these reforms were not just those in the government school system; funding for the non-government schools – the independent and Catholic sectors – was also formalised and increased.

These policies changed the dynamics of the education system. From the mid-1970s, as growth in the secondary school aged population stabilised, competition for enrolments between school sectors grew. Competition between schools in terms of academic outcomes also grew as university became an increasingly desirable post-school destination. Since the mid-1990s, this competition has amplified because there was a decline in the number of university places offered in Victoria.

This work examines the changing academic outcomes of school completers in Victoria, since the mid-1990s in the context of these dynamics. It shows that the independent sector flourished under these conditions, while the government school comprehensive system struggled. The social, cultural, organisational and financial advantages held by independent schools gave the sector a distinct advantage in the education market. However, increasing competition did not result in a uniform decline in academic achievement across the government school sector during this time. This thesis uses figures extracted from VTAC datasets to show that access to university places has diverged within the government school sector, particularly among schools in Melbourne. By the mid-2000s, this divergence was manifested in a distinct geographical segmentation amongst government schools according to the level of their success in delivering university places. In part, this divide reflects socioeconomic differences between Melbourne suburbs. However, a number of other factors are at play, notably the gradual curriculum specialisation in government schools since the mid-1990s.

As a result of the pressures that come with change, competition and choice, the government sector which in the past has facilitated universal secondary education and provided new higher education prospects for many communities in the 1950s, 1960s and 1970s, is now less able to perform this function. This research identifies the factors that have led to this outcome and explores some policy options which might deal with it. Ultimately, it is hoped that the study will help the government system regain its capacity to offer equality of opportunity to students regardless of socioeconomic status or residential location.

I declare that this thesis does not contain any material which has been accepted for the award of any other degree or diploma in any university or other institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by any other person, except when due reference is made in the text of the thesis.

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1. Introduction

Since the end of the Second World War enrolments in Australian secondary schools have grown dramatically and participation in the senior year levels has become almost universal. This growth has occurred throughout the developed world and has stemmed from a widespread belief that higher levels of education lead to healthier, happier and more affluent societies. The role of providing secondary school education has been accepted primarily by governments. However, in addition to the role of educational provision, governments have been faced with issues relating to equality of opportunity within the education system.

In Australia, federal and state Labor governments have been most active in attempting to create a system of education that promotes social justice (L. Angus & Seddon, 2000) and provides avenues for social mobility. The policies of the Whitlam Government in the early- to mid-1970s were the stimulus for huge increases in educational investment (Lingard, 2000). In the 1980s, the Hawke Government proclaimed that education was vital to the prosperity of Australia and the key to opportunity (S. Ryan, 2003). Victorian Labor governments in the 1980s and 1990s similarly attempted to increase opportunity through education.

This ideology was operationalised through the support of a standardised education system whereby every student has access to a school that provides a range of opportunities to follow their particular ambition. The vehicle for this approach has been the comprehensive school system. The comprehensive government school system was supported because Labor believed that it would increase the chances of students from working class families to gain access to a variety of educational pathways, including university. Comprehensive schools emerged in Australia in the 1950s and 1960s and received a substantial boost by the Whitlam reforms. In Victoria, the comprehensive school system was strengthened in the 1980s with the closure of alternative technical schools by the Cain Labor Government.

However, in the past few years, the government comprehensive system has frayed and state Labor governments across Australia have encouraged specialisation in these

schools. The idea of a 'one size fits all' system has been abandoned. By 2006, the Victorian Labor Education Minister conceded to parliament that 'it is probably fair to say we lost something when technical schools were closed' (Parliament of Victoria, 2006). The ideology of equality of opportunity remains, but its implementation (via the comprehensive ideal) appears to have failed.

The implementation of this ideology has been undermined by two factors: firstly, the unforeseen increases in competition for university places; and secondly, the rise and rise of the independent school sector. Ironically, the independent school sector gained impetus from the equity policies of the Whitlam Labor Government under which recurrent funding of non-government schools was formalised. Meanwhile, competition for university can be traced to a lack of funding for university places from the Howard Coalition Government, combined with parallel growth in the number of school completers (courtesy of increasing retention rates) since the mid-1990s.

This thesis examines the evolution of the secondary school system and the post-school outcomes of school students in Victoria in the context of the above observations. It explores outcomes in the secondary school system, with particular emphasis on the pattern of enrolments across the three school sectors in the past 50 years and the competition for academic pathways among year 12 completers in the past decade.

This introductory chapter briefly explains the main educational pathways available to students completing year 12 in Victoria and their relative merits, outlines the methodological approach used in this analysis and charts the structure of the thesis.

Post-school educational pathways in Victoria

The study population of this thesis is year 12 completers in Victoria who apply for a further education course at the end of year 12. The main educational options for year 12 completers in Victoria are university, Technical and Further Education (TAFE) institutes and private providers. For year 12 completers, access to a place at a university, TAFE or private provider is obtained through an application to the Victorian Tertiary Admissions Centre (VTAC). The details of this application process

are outlined at appropriate points throughout the thesis. Other pathways for school completers who do not apply for further education courses include apprenticeships, traineeships and employment. These pathways are accessed outside of the VTAC system, generally via direct contact with employers and therefore fall outside the scope of this study. This section outlines the three tertiary education options available to VTAC applicants and briefly discusses the non-tertiary education options mentioned above. It finishes with a discussion regarding the relative merits of the three tertiary educational pathways.

University

The types of courses available within universities and the vocations to which they can lead are generally well recognised. Of particular importance in this context is the fact that a university degree facilitates access to the professional workforce – an occupational category that is rapidly growing in Australia (Birrell & Rapson, 2006) and generally provides favourable remuneration and working conditions (Bouchard & Zhao, 2000; Larkins, 2001; Pallas, 1995).

Victorian universities operate in a similar way to those across Australia and the rest of Othe world. There are nine publicly-funded universities (eight specifically Victorian and the Australian Catholic University which operates Australia-wide) and numerous university campuses in Victoria. The large university campuses, especially those in Melbourne, offer a wide variety of courses, while the smaller campuses tend to specialise in specific disciplines. The locations and sizes of the main university campuses in Melbourne are displayed in Map 1.1.

There are also a number of university campuses scattered throughout regional Victoria. Nearly 4,000 places (17 per cent of all university offers in Victoria) were offered to year 12 VTAC applicants by regional university campuses in 2004. The largest non-metropolitan campuses are located in regional centres including Geelong, Bendigo, Ballarat, Warrnambool and Wodonga.

Each university campus in Victoria is unique. Campuses vary in terms of the geographic area from which students are drawn, academic entry requirements, courses

offered, the proportion of students from each school sector they enrol, and the rate of offers resulting in enrolment. A number of these factors which differentiate universities are discussed in later chapters.



Map 1.1: Location and size (by number of offers) of main university campuses in Melbourne, 2003

Source: VTAC 2002/03, unpublished NB. 'VU' is Victoria University and 'ACU' is Australian Catholic University

TAFE

It is often assumed that TAFE institutions are primarily providers of trade-based skills to apprentices and people working in the traditional trade vocations. However, this is not the case, at least not in terms of the TAFE pathways taken by year 12 completers.¹ More than one third of all TAFE offers to year 12 VTAC applicants in 2004 were for management and commerce-type courses. Generally, these courses provided

¹ For completing year 12 students, the main way to access a TAFE course is via an application through VTAC. Other avenues to TAFE are available, particularly via mid-year intakes, but the vast majority of school leavers accessing TAFE courses use the VTAC application process.

elementary- to mid-level skills in occupations such as accounting, business administration, tourism and marketing. Other courses offered by TAFE institutes came from the following main fields of education (listed in size order): society and culture, creative arts, engineering and related technologies, and information technology. These five fields of education made up 86 per cent of the TAFE places offered to year 12 applicants in 2004. None of these broad fields include courses in the traditional trade subjects.

In some circumstances, a TAFE diploma is used by students to gain further credit towards entry to a university. At some universities, a two-year TAFE diploma in a related field can be used as credit for one third of a three-year degree (VTAC 2005, p. 3). Young (2005) notes that eight per cent of students commencing university in 2003 had articulated from TAFE. VTAC data indicate that these numbers have grown rapidly since the mid-1990s. In Victoria, the highest articulation rates in 2003 were at Swinburne University (where 22 per cent of students accepted to courses were TAFE applicants) and at Victoria University (with an articulation rate of 14 per cent). Both universities are dual sector institutions (meaning that they provide both TAFE and university courses) and many students articulate from TAFE to university within the same institution. Therefore, these high numbers are likely to be a result of internal movement within these institutions. At the other end of the spectrum, the rate of articulation from TAFE to the University of Melbourne was less than one per cent in 2003 (Young, 2005).

TAFE campuses are spread extensively throughout Melbourne and at least one TAFE campus is located in most major population centres in regional Victoria. Of all TAFE offers in 2004 made through the VTAC application process, 10 per cent (1,094 places) were in regional Victoria.

Private providers

Private providers offer only a small number of places (2.5 per cent in 2005) via the VTAC application process, relative to universities and TAFE institutions. Nearly one quarter of all offers by private providers to year 12 students via VTAC in 2004 were in the health field, particularly in massage or alternative medicine. Courses run by

private providers in other disciplines offered similar mid-to-low level skills to those offered by TAFE institutions. The majority of courses (93 per cent in 2004) offered by private providers are located in the Melbourne metropolitan area.

Apprenticeships, traineeships and employment

The data used in subsequent chapters of this report relates to VTAC applicants only. Therefore, these figures do not include those did not apply for a post-school tertiary education course. Those who are not included in the VTAC data, invariably ended up in apprenticeships, traineeships or in the labour force.

Nonetheless, the role of apprenticeships and traineeships in providing post-school pathways is extremely important in Victoria. In particular, the apprenticeship system is considered as vitally important for maintaining a skilled workforce and providing an effective alternative to tertiary education. This was articulated clearly in a Victorian Ministerial Review of Post-Compulsory Education and Training Pathways chaired by Peter Kirby in 2000, which noted 'apprenticeships provide a valuable route for young people, are cost effective, contribute to middle-level skilling and maintain a wide range of options' (2000, p. 87). Traineeships can provide similar benefits to apprenticeships and have grown substantially in the past decade (Department of Education Science and Training, 2005b). However, it has been argued that traineeships do not necessarily help to address the major areas of skills shortages in Australia, which are currently in the traditional trades (Tingle & Priest, 2005). This shortage of skills is best addressed via the apprenticeship program.

Australia-wide, more than 50,000 year 12 completers commenced an apprenticeship or traineeship in 2004 (T. Karmel, 2007). The *On Track* survey, which charts the post-school destinations of Victorian year 12 completers, found that nearly 10 per cent of school leaver respondents in 2005 indicated that they had taken up an apprenticeship or traineeship (Teese, Nicholas, Polesel, & Helme, 2006). While this figure may be slightly exaggerated due to sample errors related to the self-reporting method the *On Track* survey relies on, it nonetheless indicates that these options are providing opportunities for a many students.

Employment pathways offer a variety of possibilities for school leavers. However in general the less education one has, the fewer options available to them (Pallas, 1995). According to the *On Track* program, in 2005 47 per cent of school leavers that did not enter apprenticeships, traineeships or any form of tertiary education were engaged in part-time work. A further 19 per cent were either not in the workforce or looking for work (Teese et al., 2006, p. 40). In general, this pathway is not ideal for most school leavers. Those who follow such a direction 'have the greatest difficulty in establishing themselves in work' (Teese et al., 2006, p. 43).

Due to the focus here on tertiary education pathways the role of apprenticeships, traineeships and other labour force options are not discussed in the thesis in detail. This does not mean they are considered unimportant elements in the post-school pathways for students.

Comparing post-school tertiary education options

According to one Australian political commentator, 'In our society, short of winning the lottery or being gifted with some sort of elite-level sporting ability, the surest way to ascend the income and social ladder is through education' (Carney, 2005). Equally important is the fact that over the past 50 years the importance of education to social mobility has become more widely accepted and understood: 'everybody knows and everybody knows that everybody else knows that education rules in modern society' (Meyer (1977) in Kingston, Hubbard, Lapp, Schroeder, & Wilson, 2003).

This section examines the merits of the two main post-school educational pathways available to year 12 completers. Alternative to these education-specific pathways are other vocational options, including apprenticeships, traineeships and other employment. These pathways (especially apprenticeships) offer excellent opportunities for those students who do not aspire to follow the pathway that university and TAFE provide. While these options are important for many young people, they are not the focus of this thesis. Discussion here is focussed on comparing the educational post-school opportunities for year 12 completers. Evidence from Australia and the rest of the developed world suggests that university is the most effective pathway for upward social mobility. Those with university-level education have much higher incomes, better security of tenure and more stimulating employment than those who lack a higher education degree: 'one need not look very far to conclude that individuals who obtain more education are more likely to obtain jobs that convey greater social and economic rewards' (Pallas, 1995, p. 16).

In an analysis of the incomes of employed persons in Australia carried out in the late 1990s, Larkins (2001, pp. 406-407) found that the median annual base salary for a three-year bachelor graduate was \$53,000, compared with the average earnings for all persons of \$38,048. Further analysis by Larkins led him to conclude that 'the average salary mark-up for the graduate is 1.26 times the high school male salary' (2001, p. 407). A more recent analysis carried out by Access Economics found that Australian workers with a university qualification had earnings on average 40 per cent higher than those who completed year 12 and 75 per cent higher than those who had not completed secondary school (2005, p. 9). Similar results are apparent in other parts of the world (Emerson, 2006; Pallas, 1995). For example, Bouchard and Zhao compared incomes of university and vocational education graduates in Canada. They found that 'two years after graduation, university graduates' earnings are higher than those of trade or vocational and career or technical college graduates' by almost 25 per cent for bachelor degree holders and nearly 50 per cent for Masters and PhD graduates (2000, p. 30).

Other evidence suggests that those with higher education are more likely to be engaged in the workforce for longer, are more employable and enjoy lower unemployment rates (Access Economics, 2005). According to Pallas, those with more education are: 'more likely to have steady employment...and to work in positions that are more prestigious, have more opportunities for advancement and allow for more autonomy and self-direction' (1995, p. 16).

Australian academics have also emphasised the importance of university in an increasingly competitive economy. James argues, 'it is increasingly recognised that Australians with low educational levels are vulnerable and at risk of being marginalised in a knowledge-based society in which labour markets require sophisticated skills and the capacity to access and interpret knowledge'(2002, p. 2). On a similar theme, Marginson notes that those without a university qualification are likely to be 'forever cut off from the skills, knowledges and certificates...that confer entry to a wide range of occupations and social roles' (2002, p. 11).

Despite this, the role of the TAFE sector is still important. As noted above, in some cases TAFE can be used as an alternative entry point to university. In addition, there are a growing number of 'associate' professional occupations which require preliminary training for which it is important that young people have access to relevant institutions.

However, the role of TAFE institutions has become increasingly ambiguous since the mid-1990s as their courses have increasingly catered for clerical and service occupations. This has led some academics to question the effectiveness of the system in providing students with the skills and qualifications to compete for many non-trade based occupations. In particular, Marks (2005) has argued that vocational courses based at schools and TAFEs that have weak links to workplaces and that their benefits in relation to school-to-work transition need to be re-examined. The accounting profession provides a useful illustration. An accounting diploma from a TAFE institute is not enough to gain a professional accreditation as a Certified Practicing Accountant (CPA) or a Chartered Accountant (CA) in Australia. To be professionally accredited as an accountant in Australia, a university degree is required. Job market access, wages and employment conditions for those without the accreditation of one of these professional agencies is far less attractive than for those with it.

Similar conclusions have been reached in the United States (Muñoz, 2005; Pallas, 1995). Muñoz concluded that while this type of pathway 'originated under very promising circumstances, its arbitrary application and questionable efficacy...is unlikely to provide the academic skills and critical thinking abilities necessary to mitigate the barriers to educational equity and social mobility' for disadvantaged students (2005, p. 3). Pallas adds, 'these programs can be judged only modestly successful' (1995, p. 28).

While acknowledging the role of TAFE institutes in Victoria and their importance in providing relevant skills and opportunities to students who do not wish to follow the university path, this thesis adopts the argument that university is the most likely post-school pathway to offer disadvantaged students an opportunity for upward social mobility. The more this recognition grows, the more competitive entry to higher education becomes.

The role of schools in providing beneficial post-school outcomes

In this context, the role of schools in helping to launch students into tertiary education cannot be understated. Individual schools and whole school sectors need to position themselves in such a way as to offer those students with the ambition and aptitude to attend university a realistic chance of gaining a place at the end of year 12. The extent to which a school is able to provide this opportunity tends to determine its overall success in the market for school enrolments and therefore its chance of survival.

In Victoria, three school sectors exist alongside each other in the provision of year 12 through the common Victorian Certificate of Education (VCE). These sectors (government, Catholic and independent) are discussed in detail throughout the following chapters. Today, individual schools, regardless of sector, can flourish or flounder based on their academic credentials and reputation. In a market now framed around the ideology of 'choice', schools are desperate to maintain enrolments, especially those of students from middle class backgrounds who have the resources that allow them to exercise some educational choice. This thesis focuses particularly on the notion of school choice within the government school sector. It explores the school options available to students in Melbourne, the limitations of 'choice' for students depending on their residential location and socioeconomic status, and the way in which this in turn limits a students' post-school options.

Methodology

In order to assess changes in school enrolments, student achievement, the growth in competition for university and changes in post-school outcomes for Victorian school students, this thesis uses a number of methodological approaches.

The issues outlined above are explored using a range of data sources including VTAC statistics on student outcomes, data containing enrolment statistics for individual schools, school sectors and curriculum information from the federal and state education departments, Australian Bureau of Statistics (ABS) statistics on socioeconomic indicators, and Department of Immigration Multicultural and Indigenous Affairs (DIMIA) data relating to migrant settlement. These data are used to undertake comparative analyses between school sectors and geographic regions. Elements of the data are also used in case studies of individual schools.

The data on which the findings are primarily based come from the Victorian Tertiary Admissions Centre (VTAC) files from 1996/1997 to 2004/2005. These files allow analysis of a large number of variables relating to each student who applied to a Victorian tertiary education provider in each year.² Much of the detail of this data has not previously been utilised.

Throughout the thesis other data sets are matched to the VTAC data in order to strengthen the analysis. For example, enrolment data from the Victorian Department of Education and Training (DET) has been linked to the VTAC data in order to provide a measure of student transition through year 12 and into the tertiary education application stage. Socioeconomic data from the ABS relating to specific geographic areas and individual school 'neighbourhood areas' has been matched with the VTAC data to examine the links between student outcomes and family resources. Migrant Settlement data from DIMIA has been joined with VTAC data for analysis in later chapters on the changing social composition of individual areas and parallel changes in student achievement. Lastly, DET information relating to school curriculum has been merged with student outcome data in individual schools to examine the effect of specialisation on outcomes and school choice. The interlinking of these data enables a

² It must be noted that although this data provides very detailed information about the application process of individual students, no individual or school is identifiable in the analysis and discussion of this data. In cases where specific schools or small local areas are discussed, pseudonyms have been used.

unique analysis of the school system in Victoria, the outcomes of its students and the factors which influence these outcomes.

All of these data sources contain information on 'whole populations', therefore the full cohort is included in the analysis. This removes any error that may result from sample bias, and negates the need for assumptions or generalisations about the findings that could occur if based on limited samples of the school population.

The findings from the quantitative analyses are explored in light of the public policy discussions relating to school education over the past half century. The thesis provides a synthesis of government policy documents, media releases and newspaper articles in order to monitor the policy debate around issues of school choice and university accessibility.

The qualitative analyses of the issues explored in this work have been appropriated in two ways. Firstly, via analysis of contemporary issues as articulated in the print media, particularly in letters to the editor and opinion pieces from teachers, principals and parents. Secondly, via exploration of government policy documents and related literature outlining historical developments in education provision in Victoria and Australia.

A follow-up school level analysis of the issues explored in this thesis with qualitative interviews is a consideration for a post-doctoral study in the future.

Structure of thesis

The thesis begins with an historical analysis of the growth of secondary schooling in Australia and particularly Victoria. Chapter 2 charts enrolment growth from the early 1960s when secondary school attendance became almost universal. Changes in enrolments among the three school sectors are also examined and some of the reasons for these changes are explored.

Chapter 3 investigates the issues surrounding the growth of secondary schooling in Victoria, with particular emphasis on the way in which the government school system

has changed since the 1960s. Drawing on research from throughout the developed world, it charts the growth of the comprehensive ideal in government schooling and the forces that influenced this ideal to change – particularly school funding changes, competition from the non-government sectors and the increasing notion of 'choice' in schooling which led to government policies of decentralisation and specialisation.

Chapter 4 begins an analysis of how the policies outlined above influenced the postschool outcomes of students in the three school sectors in Victoria between the mid-1990s and the mid-2000s. This analysis uses VTAC data to chart the differing outcomes of the three school sectors. It shows how competition for university increased during this time and outlines how this increase affected each of the school sectors differently. These outcomes are then explored in Chapter 5 in the context of a number of factors influencing the relative advantage of the independent school sector and disadvantage in government schools. In particular, the chapter highlights the advantage of independent schools in the competition for university places.

Chapters 6 and 7 examine how the growing competition for university places has specifically affected government school students in Melbourne. In Chapter 6, the year 12 results of schools are examined, revealing a distinct differentiation in results across the government sector. In Chapter 7, factors such as socioeconomic status, curriculum specialisation and physical access to university are discussed in the context of these variable outcomes across government schools.

Chapter 8 takes the broad issues examined in the previous chapters relating to competition for students between schools and competition for university places, and investigates their influence on schooling at the local level in Melbourne. This is done via a comparative analysis of two suburbs and individual case studies of three government schools.

Finally, Chapter 9 synthesises these discussions and findings, and explores options for improving the provision of year 12 in the school system in Victoria in order to enhance academic post-school options for disadvantaged students.

2. Secondary school enrolment patterns in Victoria, 1960 to 2004.

Introduction

The Australian population experienced a boom following the Second World War, due to a rising birth rate and high migration levels. Prosperity also increased as a result of industrial development and growth in primary production (Keeves, 1990b). During this time there was also change in public perception about the role of education – it became accepted that 12 years of formal education was important, and that girls should be given the same educational attention as boys. As a consequence of these factors, there was a massive increase in enrolments in Australian schools between the end of the Second World War and the late 1970s (Keeves, 1990a).

The increase in the number of students attending school, especially during the 1950s and 1960s, meant that the profile of government education policy increased significantly in the eyes of the Australian public and the media. During this time the roles of federal and state education ministers changed dramatically: as far as the public was concerned, responsibility and accountability for the education system now rested firmly with their elected representatives rather than with departmental bureaucrats, as it had done in the past (Keeves, 1990a, p. 74).

ABS figures show that in the 23-year period between 1956 and 1978, school enrolments in Australia grew by nearly 70 per cent. Over the next 26 years school enrolments continued to grow, but at a slower rate, with an 11 per cent increase in student numbers between 1978 and 2004. In 1956 there were 1.8 million students enrolled in Australian schools, by 2004, this figure had risen to 3.3 million (Australian Bureau of Statistics, 2004b; Commonwealth Bureau of Census and Statistics, 1960). Building schools, training teachers and designing curricula to accommodate the growing number of students became a crucial task for governments. Much of this burden was absorbed by the government school sector. However, the non-government school sector also began to play an increasingly large role in education provision and school choice from the early 1970s onwards.

This chapter will chart enrolment growth in Australia and Victoria in relation to changes in the school aged population, highlighting the boom in enrolments from the mid-1950s and focussing more specifically on the significant enrolment growth in secondary schooling during this time. The discussion will also address other factors influencing school enrolment change between the mid-1950s and early 21st century, including changes in government policy and funding provision for schools in the 1960s and 1970s and reduced employment prospects during the recession of the early 1990s.

Changes in funding and education policy from the mid-1970s also facilitated the growth of the non-government school sector. Rising enrolments in this sector and their impact on government school enrolments will be discussed here. This discussion paves the way for an analysis of the key issues which have stemmed from these policy decisions and enrolment changes – in particular, issues of competition, decentralisation, specialisation and choice (see Chapter 3). The way in which these ideas and policies feed into the outcomes of secondary school students in Victoria (and in particular their pathways to university) is examined in later chapters.

The education boom and population growth

There has been significant growth in both the school aged population and the number of school enrolments in Australia since the middle of the last century. As Figure 2.1 shows, the overall increase in school enrolments closely matched the increase in population between the mid-1950s and mid-1960s. This was a time of significant growth in the number of young people in Australia – a result of the post-World War II baby boom and a strong immigration program.

However, from the mid-1960s to the early 1970s, school enrolments increased at a faster rate than did the school-aged population. Between the early 1970s and the late 1980s enrolments once again followed population change, but in the early 1990s enrolments again grew at a faster rate than the population.

Figure 2.1: School aged population and school enrolment, per cent change, 1956 to selected years, Australia



Source: Commonwealth Bureau of Census and Statistics, *Social Statistics: Australia*, various bulletins between 1960 and 1968; Commonwealth Bureau of Census and Statistics, *Schools*, catalogue 4202.0, 1969 to 1972; Australian Bureau of Statistics, *Schools*, catalogue 4202.0, 1973 to 1978; Australian Bureau of Statistics, *Schools Australia*, catalogue 4202.0, 1979 to 1980; Australian Bureau of Statistics, *National Schools Statistics Collection: Government Schools*, catalogue 4215.0, 1981 to 1983; Australian Bureau of Statistics, *Non-Government Schools*, catalogue 4215.0, 1981 to 1983; Australian Bureau of Statistics, *Non-Government Schools*, catalogue 4215.0, 1981 to 1983; Australian Bureau of Statistics, *Non-Government Schools*, catalogue 4216.0, 1982 and 1983; Australian Bureau of Statistics, *National Schools Statistics Collection: Australia*, catalogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools, Australia*, catalogue 4221.0, 1989 to 2004, Australian Bureau of Statistics, *Australian Historical Population Statistics*, Datacube 3201.0.

The most crucial influence during the periods in which enrolment growth outstripped population growth was the increased provision of secondary schools. The early surge in enrolments between the mid-1960s and early 1970s and the later surge in the 1990s are almost exclusively the result of changes in secondary school enrolments. The growth of all school enrolments from the mid-1960s is the result of an increase in the number of students enrolling in secondary school, while the increases of the 1990s can be linked to rising retention rates in secondary schools which occurred as a result of increased interest in education at the senior years of school and limited employment opportunities during the recession of the early 1990s.

Growth in secondary school enrolments from the 1960s to the 1980s

During the 1960s, the government comprehensive secondary school system was incorporated into the education system of each state in Australia and enrolments in the secondary school years began to grow. This growth in school enrolments was boosted by the election of the Whitlam-led Labor Government in 1972.

Whitlam took office after campaigning on a strong platform of reform, increased funding and a system-wide expansion of the education system (Barcan, 1993). Upon election, Whitlam

set up the Interim Committee for the Australian Schools Commission (chaired by Peter Karmel), which by May 1973 had produced a report *Schools in Australia*, commonly known as the Karmel Report. The Karmel Report was commissioned to 'examine the position of government and non-government primary and secondary schools throughout Australia and to make recommendations on the immediate financial needs of those schools, the priorities within those needs and the measures appropriate to assist in meeting them' (P. H. Karmel, 1973, p. 1).

The Karmel Report highlighted problems in the education system across Australia. Welch (1997) notes that the report revealed alarming class-based inequalities being carried over from the school system into tertiary education; 'in both professional and science faculties, the gross over-representation of students from upper social strata was parallelled by the disproportionately small proportion of working class students' (1997, pp. 208-209). The Report recommended that the Federal Government rectify 'educational inequality' and provide official recognition of the specific educational needs of 'disadvantaged' groups (Barcan, 1993, p. 187).

The findings and recommendations of the Karmel Report were used by Whitlam to foster a school system 'which placed an emphasis on more equal outcomes across social groupings' (Henry, Knight, Lingard, & Taylor, 1988, p. 167). The reforms that were implemented as a result of the Report were both a reaction to the growth experienced between the Second World War and the early 1970s, and also a catalyst for further expansion of education in Australia.

The Karmel Report's reforms led to 'massive expansion in the size of Commonwealth funding for all education' (Burke, 2001, p. 2). These increases were delivered on the basis of need, thus creating educational opportunities for those who previously had limited prospects of attending school. This included many students from socioeconomically disadvantaged areas in particular, who would previously have had an opportunity to attend secondary school only if recognised as highly gifted students (Campbell & Sherington, 2004).

During this time, Victoria in particular experienced a boom in secondary school enrolments. With an increase of more than 110,000 secondary school enrolments in the 20 years to 1986 came the need for greater provision of secondary schools. The increased government funding flowing from the reforms of the Karmel Report ensured that the supply of facilities kept pace with demand. During this period there was an increase of 112 secondary schools in Victoria, 95 of which were government schools (Australian Bureau of Statistics, 1986; Commonwealth Bureau of Census and Statistics, 1966). In this era of mass education and growing population, government comprehensive schools 'became the basic building block for government schooling as metropolitan landscapes came to be dominated by the urban sprawl' (M. Angus, 2000, p. 25).

Charting secondary school enrolment trends in Victoria reveals the massive growth in secondary schooling which occurred in the second half of the 20th century. As Campbell and Sherington note, 'the few public high schools which had emerged in Australia prior to the Second World War catered principally to parts of the middle class...Even in the 1940s the great majority of students in public primary schools did not proceed to a state high school' (2004, pp. 5-6). The advent of the government comprehensive secondary school in the late 1950s and early 1960s changed this, making secondary schooling accessible to the majority of students.

As noted in the Victorian *Ministerial Review of Post-compulsory Schooling Report*, known commonly as the Blackburn Report (1985), the 1960s were crucial to the establishment of secondary school education in Australia. The Blackburn Report identified this period as the 'second phase' of education provision. According to the Report, the 'first phase' of education provision in Australia occurred during the late 19th and early 20th centuries when schooling at the primary level became universal in Australia. The second phase of the 1960s saw educational attendance almost universally extended into secondary school up to year 10.

Secondary school enrolment statistics indicate that enrolment change at this level of education was far larger than population change for the secondary school age cohort. Between 1966 and 1986 there was a 43 per cent increase in secondary school enrolments in Victoria, a net gain to the education system of 111,093 students. By comparison, during that time, the population of 15 to 19 year olds in Victoria rose by a more modest 25 per cent or 72,095 people.

These changes are outlined in Figure 2.2 which plots the percentage change in enrolments and secondary school age population in Victoria from the mid-1960s, when the demand for

secondary education boomed, until 2001. As the chart illustrates, enrolment growth within the secondary school system far eclipsed population growth during this time.



Figure 2.2: Population and secondary school enrolment, per cent change, 1966 to selected years, Victoria

Enrolments in the senior years, the boom of the 1980s

Increased government attention to and funding of the education system no doubt helped to fuel the enrolment increases in secondary schools from the 1960s to the 1980s. However, as shown in Figure 2.2, the rising enrolments during this time were also helped by the existence of a growing school aged population.

From the mid-1980s to the mid-1990s, there was a downturn in the Victorian secondary school aged population (Figure 2.2). This downturn prompted a reduction in school enrolment growth. However, the population decrease was greater than the decline in secondary school enrolments. Between 1986 and 2001 there was a 10 per cent decrease in the number of 15 to 19 year olds in Victoria. By comparison, the number of secondary school enrolments during this time fell by only 3 per cent.

Source: Commonwealth Bureau of Census and Statistics, *Social Statistics: Australia*, various bulletins between 1966 and 1968; Commonwealth Bureau of Census and Statistics, *Schools*, catalogue 4202.0, 1969 to 1972; Australian Bureau of Statistics, *Schools*, catalogue 4202.0, 1973 to 1978; Australian Bureau of Statistics, *Schools Australia*, catalogue 4202.0, 1979 to 1980; Australian Bureau of Statistics, *National Schools Statistics Collection: Government schools*, catalogue 4215.0, 1981 to 1983; Australian Bureau of Statistics, *National Schools*, catalogue 4216.0, 1982 and 1983; Australian Bureau of Statistics, *Schools, catalogue 4215.0*, 1981 to 1983; Australian Bureau of Statistics, *National Schools Statistics Collection: Australia*, catalogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools, Australia*, catalogue 4221.0, 1989 to 2001, Australian Bureau of Statistics, *Australian Historical Population Statistics*, Datacube 3201.0.

Enrolment numbers were maintained despite a declining secondary school aged population because during this time students were remaining at school into the senior years in much greater numbers than in the past. The proportion of 17 and 18 year olds in Australia who were enrolled in secondary school increased from 15.5 per cent in 1971 to 37.4 per cent in 2004 (Australian Bureau of Statistics, 2004a, 2004b; Commonwealth Bureau of Census and Statistics, 1971).

This enormous growth is expressed differently in Figure 2.3, which follows the change in the year 12 aged population (17- and 18-year olds) alongside the change in year 12 enrolments for Victoria between 1971 and 2004. The chart shows a dramatic rise in year 12 enrolments from the early 1980s to the early 1990s despite the year 12 aged population remaining steady. In fact the period between 1981 and 1992 saw an increase of nearly 30,000 year 12 enrolments in Victoria – a 131 per cent growth in enrolments – compared with a decrease in the number of 17- and 18-year olds in Victoria of nearly 4,000, a 3 per cent decline.





Source: Commonwealth Bureau of Census and Statistics, *Schools*, catalogue 4202.0, 1971 and 1972; Australian Bureau of Statistics, *Schools*, catalogue 4202.0, 1973 to 1978; Australian Bureau of Statistics, *Schools Australia*, catalogue 4202.0, 1979 to 1980; Australian Bureau of Statistics, *National Schools Statistics Collection: Government schools*, catalogue 4215.0, 1981 to 1983; Australian Bureau of Statistics, *Non-Government Schools*, catalogue 4221.0, 1981 to 1983; Australian Bureau of Statistics, *Non-Government Schools*, catalogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools*, *Australian Bureau* of Statistics, *Schools*, exactlogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools*, *Australian Bureau* of Statistics, *Schools*, exactlogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools*, *Australian*, exactlogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools*, *Australian*, exactlogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools*, *Australian*, exactlogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools*, *Australia*, exactlogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools*, *Australia*, exatalogue 4221.0, 1989 to 2004, Australian Bureau of Statistics, *Estimated Resident Population by single year of age*, Datacube 3201.0.

The Blackburn Report, published in 1985 argued that the 'third phase' of educational provision was the rising participation in the senior years of secondary school. It identified this period as culminating in the early 1980s. However, as Figure 2.3 shows, in terms of year 12 attendance, the early 1980s were only the start of the boom in participation in the senior, non-compulsory years of education. In some ways, this massive growth in year 12 enrolments was a result of the reforms suggested in the Blackburn Report, which will be discussed in the following chapter.

However, there are other important factors that influenced the jump in participation in the senior years from the mid-1980s to the mid-1990s. One of the most compelling was the employment prospects of young people at the time. The recession of the early 1990s had a significant effect on the participation rates of students in the senior years of education in Victoria. As youth unemployment rates rose, so too did high school retention rates. In 1992, when the unemployment rate for 15- to 19-year olds in Victoria was 27.4 per cent, retention rates to year 12 of Victorian school students reached a high of 81.1 per cent; a significant increase from 1986 just six years earlier when, retention to year 12 was a low 46.8 per cent.
At that time, the teenage unemployment rate was also low in comparison with 1992 levels (16.7 per cent).

Figure 2.4 shows a similar trend but displays actual year 12 enrolment numbers against the teenage unemployment rate. It is clear that year 12 enrolments spiked in 1992 at the same time as the highest teenage unemployment rates were recorded. Prior to this, the number of year 12 students in Victoria had been increasing steadily since the early 1980s, but the sudden rise in teenage unemployment in 1991 pushed the number of enrolments higher. As the employment situation settled in the mid-1990s, so too did the number of students enrolled in year 12 in Victoria.

From 2000, there has been a different trend, whereby enrolments have continued to rise modestly at the same time as declining youth unemployment. This has occurred at a time of a relative economic stability (meaning that employment has remained plentiful) alongside a period in which increasing the proportion of young people staying on to year 12 has been a highly publicised and well funded policy of the Victorian Government (Delahunty, 2001).





NB. Unemployment measured at June each year.

Source: Australian Bureau of Statistics, National Schools Statistics Collection: Australia, catalogue 4221.0, 1986 to 1988; Australian Bureau of Statistics, Schools, Australia, catalogue 4221.0, 1989 to 2004, Australian Bureau of Statistics, Estimated Resident Population by single year of age, Datacube 3201.0, Australian Bureau of Statistics, Labour Force Australia, Spreadsheets, catalogue 6202.0.55.001.

These figures show that while the overall trends in school enrolment growth (especially in the senior years) are closely shaped by government education policy, in times of economic downturn, other factors such as employment prospects also have a significant influence on students' participation in the senior years of schooling.

Enrolment change between the school sectors

The data presented above has highlighted changing school enrolment trends in Victoria and Australia. The growth in all school enrolments between the mid-1950s and mid-1960s closely followed the boom in the school aged population. The significant increase in secondary school enrolments from the mid-1960s to the 1980s occurred at a time when secondary schooling became much more accessible for all young people. Finally, the growth in the number of year 12 students from the early 1980s to the early 1990s far outstripped population growth and also substantially boosted the overall number of students enrolled at school.

Between the 1960s and the beginning of the 21st Century, the enrolment changes discussed above have affected each of the school sectors in different ways. In recent times, non-

government schools, particularly those in the independent school sector, have benefited most from the increases in student enrolment. However, this has not always been the case. As the figures below show, government secondary schools grew at a faster rate than the other school sectors during the 1960s and early 1970s. In addition, since the early 1960s, the government school share of all year 12 enrolments has actually grown significantly in comparison to the independent school sector.

Figure 2.5 highlights the percentage change in secondary level enrolments in each school sector in Victoria from 1963 to 2004. The graph shows substantial growth in the government school sector from the 1960s to late 1970s. During this time the government school sector was growing at a much faster rate than the other two sectors. This period coincides with the overall growth in secondary school enrolments that was discussed above. Figure 2.5 highlights the fact that the government school sector was the main beneficiary of the initial era of universal secondary school attendance in Victoria. Enrolments in this sector grew steadily in the mid-1970s, then after a small downturn, reached a peak in the early 1980s. From that time onwards, government secondary school enrolments in Victoria have been in decline.

Since the late 1970s, the major growth in Victorian secondary school enrolments has been in the non-government sectors. In the late 1970s, the Catholic sector was the fastest-growing school category. By the early 1980s, the Catholic sector was overtaken by the 'other non-government' (or independent) schools, which experienced an enrolment boom that has continued strongly since (Figure 2.5). Between 1963 and 2004, the independent school sector in Victoria experienced a 186 per cent increase in secondary school enrolments. By comparison, there was a 105 per cent increase in Catholic school secondary enrolments and a 39 per cent increase in government school enrolments over this period.



Figure 2.5: Secondary school enrolment by school category, per cent change, 1963 to selected years, Victoria

Source: Commonwealth Bureau of Census and Statistics, *Social Statistics: Australia*, various bulletins between 1963 and 1968; Commonwealth Bureau of Census and Statistics, *Schools*, catalogue 4202.0, 1969 to 1972; Australian Bureau of Statistics, *Schools*, catalogue 4202.0, 1973 to 1978; Australian Bureau of Statistics, *Schools*, catalogue 4202.0, 1979 to 1980; Australian Bureau of Statistics, *National Schools Statistics Collection: Government schools*, catalogue 4215.0, 1981 to 1983; Australian Bureau of Statistics, *Non-Government Schools*, catalogue 4216.0, 1982 and 1983; Australian Bureau of Statistics, *National Schools Statistics Collection: Australia*, catalogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, *Schools, Australia*, catalogue 4221.0, 1989 to 2004.

Enrolment growth in the non-government sectors since the 1970s is an important component of change in the secondary school system in Victoria, but it is important to note in the context of percentage change comparisons that these sectors have grown from a relatively low base in terms of enrolment numbers. Despite the significant increases in enrolments in the non-government sector since the early 1980s in Victoria, government schools continue to be the main providers of secondary school education. Victorian secondary school enrolment figures at five-year intervals from1964 to 2004 are displayed in Table 2.1. The figures show a peak enrolment in the government sector in 1984 at 250,277 students, coinciding with the peak in overall secondary school enrolments in Victoria. From the mid-1980s until 2004 a steady decrease in enrolment numbers is evident in the government sector. From the 1960s to 2000s the number of Catholic and independent school enrolments steadily rose.

The right half of Table 2.1 shows the change in the distribution of enrolments across the three school sectors in Victoria from the 1960s to 2004. Over the forty year period shown, the government school share of secondary school enrolments has declined from 72.2 per cent in

1964 to 60 per cent in 2004. Both non-government school sectors have experienced increases in their share of secondary enrolments during this time, with the Catholic sector experiencing a 4.5 percentage point rise (from 17.6 to 22.1) and the independent school sector increasing 7.7 percentage points (10.2 to 17.9 per cent).

The government school sector share (60 per cent) of enrolments in 2004 still makes it the majority supplier of secondary level education to Victorian school students. However, as this share slowly decreases, the likelihood that the majority of secondary school students will soon be educated outside the government sector becomes a realistic prospect.

Year	I	Number of st	udents enrolled		Share of enrolments across sectors (%)			
	Government	Catholic	Other non- government	Total enrolments	Government	Catholic	Other non- government	Total enrolments
1964	169,454	41,306	23,825	234,585	72.2	17.6	10.2	100
1969	211,243	48,606	27,020	286,869	73.6	16.9	9.4	100
1974	232,990	55,446	31,141	319,577	72.9	17.3	9.7	100
1979	232,695	61,715	34,505	328,915	70.7	18.8	10.5	100
1984	250,277	73,014	44,885	368,176	68.0	19.8	12.2	100
1989	228,021	76,396	51,305	355,722	64.1	21.5	14.4	100
1994	217,431	73,550	50,087	341,068	63.8	21.6	14.7	100
1999	214,631	76,902	56,016	347,549	61.8	22.1	16.1	100
2004	220,073	80,974	65,831	366,878	60.0	22.1	17.9	100
Change 1964 to 2004	50,619	39,668	42,006	132,293	-12 (percentage point change)	4	8	0

Table 2.1: Secondary school enrolments and enrolment share by category, Victoria 1964 to 2004

Source: Commonwealth Bureau of Census and Statistics, Social Statistics: Australia, various bulletins between 1964 and 1968; Commonwealth Bureau of Census and Statistics, Schools, catalogue 4202.0, 1969 to 1972; Australian Bureau of Statistics, Schools, catalogue 4202.0, 1973 to 1978; Australian Bureau of Statistics, Schools Australia, catalogue 4202.0, 1979 to 1980; Australian Bureau of Statistics, National Schools Statistics Collection: Australia, catalogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, Schools, Australian Bureau of Statistics, Schools Australian Bureau of Statistics, Schools, Australian Bureau of Statistics, National Schools Statistics Collection: Australia, catalogue 4221.0, 1984 to 1988; Australian Bureau of Statistics, Schools, Australian Bureau

In the senior years of schooling in Victoria, the share of enrolments commanded by the nongovernment sectors comes closer to surpassing the government sector. In 2004, 43 per cent of year 12 enrolments in Victoria were in non-government schools, with Catholic schools making up 22 per cent and independent schools 21 per cent. The non-government school share of enrolments is significant, and has grown steadily over the past two decades.

However, in 1963, 29 per cent of year 12 enrolments were in independent schools. Therefore, over the four decades examined here, the independent school sector has actually experienced

a decrease in its market share of year 12 enrolments in Victoria. This is primarily due to the fact that the non-government school sector in Victoria existed as the main provider of senior education well before the government system was able to offer the opportunity for all to attend secondary school. In the late 1940s in Melbourne there were only three government schools which provided year 12. By contrast, there were many private schools, especially in the inner eastern suburbs of the city which provided education in the senior years (Teese, 1984). It was not until the booming demand for school provision during the 1960s that the majority of government secondary schools began to offer a year 12 curriculum. Teese (1984) notes that by 1967 there were 227 government schools in Melbourne offering year 12.

Over the four decades from the 1960s, year 12 enrolment patterns among the school sectors have followed a familiar pattern. At times of large enrolment growth, the government school sector has increased its share of enrolments, and during times of enrolment stagnation, a drift towards the non-government school sectors has occurred. The overall enrolment growth that occurred during the 1960s resulted in a rise in the market share of year 12 students in government schools; from 1962 to 1970 the government school share of year 12 enrolments in Victoria rose from 49 per cent to 61 per cent. Another growth spurt in year 12 enrolments which occurred during the 1980s led to a jump in government sector's year 12 share from 54 per cent in 1982 to 62 per cent in 1992.

In the times between these periods of overall enrolment growth, the non-government sectors increased their share of enrolments. During the 1970s when year 12 enrolments grew at a slower rate, non-government schools share in these enrolments increased from 39 per cent of all year 12 enrolments in 1970 to 46 per cent in 1982. From 1992 to 2004, when the number of year 12 enrolments actually declined, the non-government sector's share grew from 38 per cent to 43 per cent.

The influence of government funding for non-government schools on enrolment trends

As discussed above, the Karmel Report and the changes to funding and education provision implemented by the Whitlam Government in the early 1970s contributed significantly to the growth in school enrolments in Australia. Funding in the early 1970s not only helped to build government schools and increase patronage of the government sector, it also flowed to both

Catholic and independent schools in Australia, helping such schools to spend more on their students while still allowing them to charge tuition fees. As discussed below, funding for the non-government sector had begun earlier, but the increased funding which resulted from the Karmel Report was particularly important in setting a precedent for the government funding of non-government schools. This precedent was followed in the last major re-design of the funding arrangements for non-government schools – the SES funding formula – implemented under the Howard Government in 2001.

Commonwealth funding for non-government schools commenced in the form of capital works grants in 1963 under the Menzies Government (Partington, 2004). Before Federation the non-government sector had also received state-aid, but by the end of the nineteenth century the colonies had abandoned the funding of non-government schools. In 1967 state governments re-introduced per capita recurrent funding for non-government schools. The Commonwealth Government followed suit and introduced recurrent funding for the non-government sector in 1970. By 1972 non-government schools were receiving Commonwealth funding of up to 20 per cent of the allocation given to government schools (Burke, 2001). In sum, funding of the non-government sector had begun before Whitlam became Prime Minister, but the Whitlam education reforms greatly increased the allocation to all schools. As a consequence, both the government and non-government sectors benefited.

In order to benefit as much as possible from the increased pool of funding for schools, the previously non-centralised and loosely connected Catholic parish schools joined together. Other non-government schools also began to form associations in order to increase their voice on issues of funding. Teese (1984) argues that under the new framework formulated by the Whitlam Government, the position of the non-government sector within Australian education was not only consolidated, but 'it would also make it politically very much more difficult in the future to question the role of private schools and to make educational demands upon them in return for the social benefits they derived' (1984, p. 167).

Table 2.2 highlights the significant growth in government recurrent grants to non-government secondary schools in Victoria from 1967, when such grants were first allocated by the state, up until 2001 when funding arrangements were changed by the Howard Government. Both state and federal contributions grew significantly during this time. In 1967, the Victorian Government contributed \$10 to the schooling of each secondary school student in a non-

government school. By 1973, under Whitlam, Federal Government recurrent funding had overtaken the contributions from the state. The significance of the increase to funding during the Whitlam years was immense. From 1967 to 1976, the maximum total recurrent funding for secondary school students in the non-government sector in Victoria had risen from \$10 to \$569, most resulting from the Karmel Report's recommendations and reforms introduced by the Whitlam Government.

Following the sharp increases in funding during the 1970s, there was a steady and continuing rise in the resource allocation to non-government secondary students in Victoria over the following decade (Table 2.2). This culminated in another significant boost between 1999 and 2001, following the introduction of the Howard Government's new SES school funding formula.

 Table 2.2: Commonwealth and Victorian Government recurrent grants to non-government secondary schools per student, 1967 to 2001 (actual \$)

Year	Commo Govern	onwealth ment (\$)	Victorian C (-	Government \$)	Total recurrent funding (\$)	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
1967	0	0	10	10	10	10
1973	104	104	72	72	176	176
1976	113	355	214	214	327	569
1983	543	1068	611	611	1154	1679
1996	740	2942	415	1024	1155	3966
1999	832	3560	447	1102	1279	4662
2001	908	4636	460	1135	1368	5771

Source: Burke, G. (2001) 'Funding Schools', in National Summit on School Education, Melbourne, p. 4.

Funding for schools is primarily allocated on a per capita basis, therefore, as enrolments in the non-government sector grow, so too do the government subsidies for the sector. Despite the fact that the per-student rate for government school funding has never been reduced (Burke, 2001), the reality is that as the government sector loses enrolments, its total funding allocation diminishes in relative and absolute terms.

According to Marginson, the policies stemming from the Karmel Report legitimised 'private schooling as an alternative' and paved the way for the large increases in non-government school funding in the early years of the 21st century (2002, p. 8). A report compiled for the Catholic Education Commission of Victoria argues that 'Victorian schools have become

more unequal in the past thirty years since the Karmel Report' (Sheehan, 2004, p. 4). Arguably, the key contributing factor has been the existence of government funding for nongovernment schools. This public funding for institutions which had previously relied primarily on private funds meant that the non-government school sector was better placed to expand.

As the enrolment figures outlined earlier show, at times over the past 40 years when enrolment growth has been slow or in decline, the non-government sector continued to expand at the expense of government school enrolments. Since 1963, the government school's share of enrolments has only increased during periods of mass entry to the education system, when the government system was equipped to absorb large numbers of enrolments.

However, it must be noted that even before the flow of public funding to independent schools began, this school sector in Victoria (and particularly in Melbourne) was in a position of advantage. As discussed earlier, the independent sector in Victoria actually enrolled more year 12 students than the government school sector in the early 1960s. McCalman argues that, historically, Victoria 'has had the most class-divided and socially inequitable secondary education system in the country' (1998, p. 3). A policy introduced in the early 1920s in Melbourne ensured that government-run high schools were only built in areas which did not have an independent school. As a result of this policy, there was not a single public secondary school in the whole of the eastern and southern suburbs of Melbourne until 1954 when Box Hill Boys' High School was built (McCalman, 1993, 1998). Additionally, few non-selective government high schools in Melbourne with a Year 12 class (Teese, 1984).

Hunt (1975), who undertook a study of Melbourne's secondary schools in the 1960s, highlighted the advantageous position of the independent school sector by comparing the qualifications and experience of the teachers employed in these schools, with those who taught in the government and Catholic sectors. He found that the resources held by elite independent schools, even before the introduction of government funding, allowed them to offer higher wages in order to attract the most qualified and experienced teachers.

Despite also being a non-government school sector, these advantages were not so evident within the Catholic school sector at this time. The first Catholic secondary schools, established in the 19th century, 'were built from the pockets of the poor and middling in income...achieved without any real support from the public purse' (Sheehan, 2004, pp. 6-7). This situation continued until the second half of the 20th century. The public funding that began to flow into these schools as a result of the Karmel Report was, in many cases, much needed (Blackburn, 1986).

Despite the pre-existing advantages held by the independent school sector, the introduction of government funding was beneficial. In particular, the increase in government financial support for independent schools initiated via the reforms of the Karmel Report enhanced the ability of this sector to attract more students. As the data outlined in this chapter show, the introduction of significant funding for independent schools has parallelled the growth in enrolments in this sector. This funding has allowed the most elite of these schools to increase their potential to upgrade and expand their facilities, boost their marketing budgets and attract more students. The introduction of and subsequent increases in government funding have also helped a number of small independent schools to open and have extended the accessibility of this sector to families with modest incomes. In particular, the expansion of smaller Christian schools in the outer urban areas has put the independent sector within reach of most Melbourne families.

On the other hand, the decreasing share of enrolments in the government sector since the late 1960s has potentially dire consequences for the future of public schooling in Australia. In 1985 a Commonwealth School's Commission planning document argued that 'a continuing significant decline in the government school sector's share of overall enrolment is likely to change substantially the social composition of the student population in government schools, with potentially significant negative consequences for the general comprehensiveness of public school systems' (Anderson, 1990, pp. 108-109). As this chapter has shown, since the School's Commission document was published, the drift away from the government school sector has escalated further.

Academic outcomes and enrolment patterns across the school sectors

While funding increases play a large part in the recent enrolment increases in independent schools, this thesis contends that an equally significant factor in the rise of the independent sector is public dissatisfaction with government schools' inability to provide educational outcomes which are enable their students compete for scarce tertiary education places. As the competition for university places escalates and the importance of a higher education qualification for gaining secure and stable employment increases, schools which provide greater likelihood of academic success become highly valued. Media attention on 'league tables' and on performance measures relating to school VCE outcomes often highlights the relative failures of the government system when compared to the independent school sector. Regardless of the accuracy of the data used, or the merit in publishing such stories, this information affects public perception of the school sectors, and has a detrimental effect on government school enrolments.

A key hypothesis of this thesis is that in the race for university places, the role of the school is seen by parents as increasingly important. Therefore, schools and school sectors which position themselves to compete academically are able to attract healthy enrolments and, with these enrolments, additional funding.

The flow of enrolments to non-government schools (particularly to independent schools and most notably in the senior secondary years) is unrelenting and seems unlikely to be stemmed. As Campbell and Sherington note, 'the ordinary comprehensive government high school is in considerable difficulty' (2004, p. 1). The Victorian Department of Education and Training is aware of this: when asked at the Victorian Association of State Secondary Principals 2003 Conference whether the flow of students to private schools would lead to the residualisation of the public education system, a senior education bureaucrat noted that the government and department took the issue seriously and that 'the next 12 months will be critical' (Kane, 2003). Analysis of enrolments and student outcomes in the year following this statement revealed that any reversal in this trend will take considerably longer than 12 months.

Issues relating to competition between schools for funding, enrolment decline and a growing achievement gap have been confronting the government school system in Victoria for many years. Despite the efforts of consecutive governments to redress the imbalance in the

education system, little ground has been made against the elite schools of the nongovernment sector. The public is well aware of this fact, and the recent introduction of published outcomes data has strengthened this awareness. As the enrolment trends show, those who can afford it are voting with their feet and enrolling in independent schools. This only helps to weaken the already vulnerable public school sector while at the same time strengthens the position of the independent schools.

The public/private differentiation is clearly apparent in the school enrolment data presented in this chapter and in outcomes analyses later in the thesis. Subsequent chapters also show that there is considerable differentiation between outcomes and patronage of government schools in Melbourne. This differentiation is closely related to the curriculum specialisation of the school, which in turn appears to be dependent on the school's geographic location and the socioeconomic profile of its neighbourhood.

The following chapter will examine how some of these issues relate to the Victorian education system and what has been done in recent times by Victorian and Commonwealth governments to both exacerbate and ease problems within the government school sector. This discussion will examine the educational and sociological literature relating to the changing structure of the school systems in Australia and across the world, detailing the movement away from the government comprehensive school ideal in the context of changing enrolment patterns, increased competition and the strong rhetoric of 'choice' in education.

3. Comprehensives, competition, choice and change

The previous chapter examined the changing enrolment patterns, population trends and the patronage of the three school sectors in Victorian secondary schools since the 1960s. It showed that the boom in school enrolments in the 1960s and 1970s in Australia was fuelled by both a growing school-aged population and a significant funding boost initiated by the Whitlam Government and its review of schools in Australia, the Karmel Report. The enrolment figures in Chapter 2 also highlighted the drift of students to non-government schools since the late 1970s, particularly to schools in the independent school sector. The increased government funding helped the non-government sector to grow over this time. However, other factors, notably academic prowess, have arguably contributed to this growth.

This chapter charts the changing structure of the secondary school system from the 1960s to the beginning of the 21st century across the world but with particular emphasis on Australia and Victoria. It focuses primarily on the way in which the government school sector has adapted to population growth and community expectations and draws on literature from both Australia and overseas to examine the history of the government comprehensive school structure. On the basis of this literature, the chapter outlines the emergence of the comprehensive ideal in the late 1950s and early 1960s, and the way in which it was abandoned in favour of policies relating to decentralisation, specialisation and choice in education, primarily as a result of increased competition for student enrolments among schools and for university places among students. It is argued that this competition has been fuelled by a change in the way school education is viewed, particularly in the government sector; from a communitarian perspective in the early days of the comprehensive ideal, to an individualist approach later in the 20th and now in the 21st centuries.

The implementation of the comprehensive system in the 1960s and the 1970s

In the middle of last century, the dominant economic model used to inform government policy was based around the ideas of John Maynard Keynes. Keynesian economics became a commonly adopted policy tool following The Depression and the stock market collapse of 1929 (Quiggin, 2005). This school of thought accepted the need significant government involvement in all facets of the social services and for government ownership of essential infrastructure. It was under Keynesian economic management in Australia that the growth in school enrolments occurred and mass provision of education through government schools began (Lingard, 2000).

Inspired by the Keynesian economic model, which informed most government policy of the day, the comprehensive ideal became an essential part of education policy across the developed world. Under this economic model and at a time when governments were dealing with growing populations and unprecedented demand for secondary school education, the comprehensive school system flourished. The ideal was adopted across Australia and in many other countries, including England, the United States, France, the former Soviet Union and parts of Scandinavia (Bellaby, 1977; W. F. Connell, 1993).

Ultimately the function of a comprehensive school system was to teach a wide ranging curriculum to a wide range of students in 'neighbourhood' schools. Comprehensive schools were quickly built and staffed in order to meet with the demands on education provision at the time (M. Angus, 2000). Campbell and Sherington encapsulate the essence of the comprehensive, noting that the schools:

Have a very broad set of social and citizenship-making responsibilities...Are deliberately committed to offering broad curriculum opportunities...Exclude virtually no one... in Australia these are the schools upon which the great majority of young people remain dependent for their secondary education (2004, p. 2).

The comprehensive government school system in Australia replaced an entrenched system of diverse schools designed to suit different needs. Until the 1960s, Australian public education systems were generally structured in a similar way to the English tripartite model which consisted of junior technical schools, middle domestic common schools and academic grammar schools (Campbell, 2003). In Australia, the movement towards a system of government secondary schools which encapsulated all of these elements into the one school was first considered in Western Australia, closely followed by New South Wales.

In Western Australia, the Box Report of 1954 encouraged the State Government to introduce a comprehensive system of schools. The New South Wales Wyndham Committee Report (published in 1957) suggested that the various forms of public schools in the state be combined to form comprehensive public high schools. The recommendations of the Wyndham Committee were adopted in 1962 and provided a template for similar reforms to be undertaken in other states of Australia (Campbell, 2003; W. F. Connell, 1993).

However, not every state government adopted the comprehensive model of schooling in the same way. In particular, the Victorian situation was somewhat different to that of many other states. During the 1960s, Victoria began to create comprehensive public high schools, but also maintained many technical high schools within the government school system. These schools remained in operation until the 1980s and during this time the structure of the Victorian education system remained slightly less centralised than was the case in most other states. The peculiarities of the Victorian system are discussed in more detail later in this chapter.

In general, however, the comprehensive school reforms in Australia occurred at around the same time as the comprehensive ideal was being adopted in other parts of the world. In England, some comprehensive schools had been established by Local Education Authorities as early as 1947 (Ball, 1984; Benn & Chitty, 1996), and there were various attempts to reform the traditional tripartite system during the mid-1950s (Bellaby, 1977). However, it was Circular 10/65, issued by the Labour Government in 1965, which formalised the adoption of the comprehensive school system. Circular 10/65 requested that Local Education Authorities 'submit plans for comprehensive reorganisation' (Ball, 1984, p. 1). The edict of the Circular was never enforced, but it did begin the process, despite the fact that individual education authorities developed comprehensive schools at their own pace (Benn & Chitty, 1996).

In the United States of America a similar situation occurred during the 1960s whereby comprehensives (known as 'general' or 'common' schools) became the main form of public secondary school (Wraga, 1999). Sweden began to phase in comprehensive schools in the early 1960s, while the ideal also developed across Western Europe (Bellaby, 1977).

From their inception in England, comprehensive schools slowly gathered momentum. In 1971, 18 per cent of English secondary school students were enrolled in a comprehensive school, but from this time 'there seemed to be a "sea-tide" in favour of the comprehensive model' (Haydn, 2004, p. 418). By 1980, 81 per cent of English secondary school students were in comprehensive schools (Shaw, 1983, p. 7).

As discussed in Chapter 2, government school enrolments during the 1960s and early 1970s in Victoria increased at a faster rate than enrolments in all other school sectors. Fuelled by the new comprehensive school system, secondary school enrolments in the government sector increased by 53 per cent, or 84,000 students, between 1963 and 1976. The building of comprehensive schools across suburbia facilitated this massive growth in enrolments. From the mid-1960s to the late 1970s, there was an increase of 101 secondary schools in Victoria, of which 90 were government schools (Australian Bureau of Statistics, 1979; Commonwealth Bureau of Census and Statistics, 1965).

Comprehensive schooling was not only designed to accommodate the influx of students into the secondary school years during the 1960s, it also reflected a strong sense of social cohesion and a focus on community at this time. The aim of the comprehensive ideal was to develop schools which offered a broad curriculum to a diverse range of students. According to England's Circular 10/65(quoted in Haydn, 2004, p. 416):

A comprehensive school aims at establishing a school community in which pupils over the whole normal ability range and with different interests and backgrounds can be encouraged to mix with each other, gaining stimulus from the contacts and learning tolerance and understanding in the process.

In terms of curricula, this meant that schools no longer specialised in academic or technical curricula, but instead taught a wide range of subjects across all disciplines. Proponents of the comprehensive school system claimed that 'choice of curriculum can be wider in the one multi-function school than between schools which specialise in one type of course or another' (Bellaby, 1977, p. 17). In principle, a comprehensive or common curriculum was taught in all schools, covering a range of core subjects and ensuring that there was a continuity of material being taught across the system.

Wraga (1999) argues that the common curriculum was a way of unifying an otherwise diverse society.

The centralised government school systems in Australia and across many of the countries in which the comprehensive ideal was adopted made it relatively easy to prescribe the curriculum delivered in each government high school. In Australia, government-run teacher's colleges, from which the majority of teaching staff in these schools came, also allowed for a common curriculum and common teaching methodologies to be instilled.

Achieving a broad mix of students was a slightly more challenging goal of the comprehensive school system. This concept involved two different problems; firstly, ensuring each school enrolled students from a range of social backgrounds that was representative of the wider community, and secondly, avoiding any process whereby students were selected (or rejected) by schools according to academic ability.

As individual neighbourhoods are often socially homogenous, enrolling a cohort of students from wide range of backgrounds in order to replicate a microcosm of the wider community was problematic for many comprehensive schools. In parts of Britain and the United States of America this particular problem was overcome by bussing students across urban centres to create a socially diverse range of students in each school (Haydn, 2004; Wraga, 1999). However, this solution was in conflict with another key role of the comprehensive school – to act as a 'community' or 'neighbourhood' school.

Eliminating forms of academic selection within the government school sector was somewhat easier to overcome. In England and Australia, where tripartite-type systems had been operating, this involved abolishing the selective government 'grammar' schools which existed at the top of the former system's hierarchy. Across many states in Australia, the abolition of selective entry government schools was concurrent with the introduction of comprehensive schools. However, England and some Australian states – particularly New South Wales and Victoria – maintained a number of such schools within the government system, therefore compromising the pure implementation of the comprehensive ideal (M. Angus, 2000; Haydn, 2004).

Despite some of the practical problems with implementing the comprehensive ideal, in general such a system was well suited to the needs of Australia at the time. Given that the task of providing secondary education to a large generation of children had not previously been encountered, the practicality of a system which could be uniformly delivered added to its appeal from a government perspective.

From a community viewpoint, the 1950s and 1960s in Australia were decades in which the cultivation of a new society was occurring. In essence, this resulted from factors triggered at the end of the Second World War. These included a robust new migration program, a baby boom and a steadily growing economy. The comprehensive school system developed around the ideas of community, inclusiveness and providing opportunity for all that were fostered during this time. The comprehensive approach to schooling encapsulated these core values of 'community and equity' (M. Angus, 2000, p. 25).

Changing values and expectations of schools in the 1980s

The comprehensive school ideal worked successfully during the 1960s and 1970s when secondary school attendance became almost universal across the developed world and there was a need to facilitate growing enrolments quickly and effectively. Particularly in the Australian case, the comprehensive ideal fit well with notions of a new society based on equality of opportunity. However, by the 1980s there was a shift developing in perceptions of how society should operate and how institutions such as the government school system should be run. As a result, the comprehensive ideal came under threat. This was due to problems with its practical implementation, to changing community expectations of the government school sector following funding increases from the early 1970s. As the cracks in the comprehensive school system appeared, education systems around the world began to scale back the ideal and to move towards a more individualist approach in the provision of government school sector.

This occurred alongside the rise of economic liberalism, which led to a shift from traditional welfarism to the promotion of the 'market driven and entrepreneurial citizen whose objective was personal fulfilment' (Marginson, 1997, p. 64). Haydn, who argues that the comprehensive school system is now a relic of the past, claims that market ideology, more than anything else, contributed to its demise:

The death of the comprehensive came about not by an Act of Parliament or party manifesto, but because prevailing social and ethical attitudes of the time were competitive, individualistic and meritocratic, rather than egalitarian and communitarian (2004, p. 429).

The impetus for the change in economic policy came from a number of failures of the Keynesian economic model. In particular, under the Keynesian model, governments in the 1970s had difficulty controlling the combination of high inflation and high unemployment (L. Angus, 1992). As a result, the Bretton Woods fixed exchange rates system collapsed, leading to a period of international financial deregulation and the catapulting of domestic economies into an international market (Quiggin, 2005). Following these problems, policies based on macroeconomic, Keynesian models were gradually abandoned in favour of a free-market approach. From the mid-1970s in Australia, economic liberalism 'was the dominant position in both microeconomic and macroeconomic policy debates' (Quiggin, 2005, p. 26).

Angus (1994) and Vinson (2002) have observed that this shift in ideology is particularly noticeable in the changing education policies during this time. Angus argues that the emergence of 'neo-conservative' and 'new right' agendas have marginalised the 'socially democratic themes which had become partially institutionalised in the practice and thinking of education workers' (1994, p. 80). Similarly, Vinson in the context of Australia and Hargreaves (1982) in England argue that since the mid-1970s there has been a transformation in the education system from a communitarian ideology, under which schools are seen as 'agencies of social cohesion and democracy', to an individualist ideology under which schools are conceptualised as 'structures and processes for the attainment of measurable, favourable academic outcomes' (Vinson, 2002, p. 2).

There is an undeniable conflict between the role of the comprehensive school in instilling values of social cohesion and cooperation, and the desire of individual

pupils and their parents for educational success (Haydn, 2004). This conflict was exacerbated as the values centred on individual gain began to overtake those related to community building.

The shift towards economic liberalism had an important effect on the way in which education was provided. Durkheim argued that 'education is only the image and reflection of society. It imitates and reproduces the latter in an abbreviated form; it does not create it' (1952, p. 115). The comprehensive school system was established to provide mass education for the benefit of all in a society with strong communitarian values. Proponents of the comprehensive ideal argued that not only did this system suit the existing values of society in the 1960s, but that it would help to maintain these values in the future. Durkheim's theory works against this argument, claiming that the education system itself cannot change society. Rather, social change shapes the education system. When charting the history of the comprehensive school system, Durkheim's argument seems sound.

In England, change away from the comprehensive school system was pushed by the conservative Thatcher Government. According to Benn and Chitty, the Thatcher reforms to public schools were 'ideologically driven by a commitment to the market and to privatisation' (1996, p. 12). Many argued that these reforms would severely deteriorate the education provided to many students within the government school system. Hargreaves (1982) in particular argued at the time that 'an education system based on the cultivation of individual pupils will forget that the system will inevitably have social functions and consequences and these cannot be ignored or handed over to others' (1982, p. 90). He believed that the education system had swallowed a 'fallacy of individualism...This belief that if only schools can successfully educate every individual pupil in self-confidence, independence and autonomy, then society can with confidence be left to take care of itself' (1982, p. 93).

These fears were not heeded by policy-makers and in this context, during the early 1980s, the comprehensive school system's one-size-fits-all approach began to seem more a liability than an advantage. Schools with a more specific aim – particularly non-government schools, many of which had a purely academic and university-focussed charter – appealed to an increasing number of families. As shown in the

previous chapter, it was during the early 1980s in Victoria that the independent school sector, with its strong academic focus, began to grow faster than both the Catholic and government school sectors.

Problems with the implementation of the comprehensive ideal became more apparent during this time, and opponents of the system were keen to have it disbanded. Denscombe (1984) notes that throughout its history, the comprehensive school system was continually under attacked. However, during the 1980s, the criticism of the comprehensive system became more intense. Denscombe argues that stories about pupils attacking teachers and escalating truancy were used by the Right of politics (which, he claims, derided the system) and were exacerbated by the media to create the impression of a 'crisis' in comprehensive schools. He argues that many of these claims were exaggerated and based on rhetoric rather than research. Campbell and Sherington also concur, observing that 'comprehensive schools appear more vulnerable than other schools when things go wrong' (2004, p. 10).

However, while the tabloid examples of a 'crisis' in the comprehensive school system may have been misguided, there were other more serious problems that plagued the implementation of the ideal and no doubt contributed to its demise. Many of these problems occurred because the pure comprehensive ideal was never fully implemented in any state or country in which it was established (Bellaby, 1977; Campbell & Sherington, 2004; Hargreaves, 1982; Haydn, 2004; Shaw, 1983; Wraga, 1999). Perhaps this was inevitable; as Shaw notes, the concept of an ideal is such that it may never be achieved: 'ideals present us with desirable goals, which from the nature of the ideal, will never be realised – or else they would cease to serve as such' (1983, p. 152). However, the fact that the ideal was never realised posed problems for both proponents and opponents of the model. At times, claims about its failure have been dismissed by supporters arguing that the problems exist only because the opponents of the system have prevented it from being properly implemented. However, this argument has also been used to suggest that the failure to achieve the aims of the ideal in full may well be because in practice it is not possible to implement (Shaw, 1983).

The key issues retarding the implementation of the comprehensive school system have been discussed in part above. They include problems in maintaining a representative social mix of students in each school and problems associated with the continued existence of selective government schools.

Supporters of the comprehensive school system believed that by removing any type of academic selection in the government school system, all students would have fair access to a full spectrum of subjects and disciplines. There was some concerted effort to close academically selective government schools during the implementation of the comprehensive school system. The dismantling of the tripartite school system – in which entry to grammar schools was gained on the basis of academic selection – occurred as a result of the instruction by government for 'comprehensive reorganisation' of the school system. However, as noted earlier, in England a number of the old grammar schools continued to exist alongside the comprehensive schools (Haydn, 2004). Similarly, in Australia, some states maintained a number of academically selective schools. Additionally, in Victoria, the old technical school system remained in operation alongside the comprehensive school system until as late as the mid-1980s. Maintaining the relics of the old system made it more difficult for the comprehensive system to function as intended.

While these factors meant that a truly comprehensive secondary school system was never fully implemented, this was only one part of the academic selection problems in many comprehensive school systems. Shaw notes that selection 'reappeared *within* the comprehensive schools. Setting, banding and streaming are the direct means by which schools sort and sift their children by ability in diverse subjects' (1983, p. 147, emphasis added). In the context of the United States, Wraga highlights the contradiction that the existence of internal selection and streaming posed to the comprehensive ideal:

One of the most serious shortcomings of the US public school system...has been that while Americans open the schoolhouse doors to all and, for the most part, educate all youth under the same roof, once inside, they usually separate students from each other on the basis of background, ability, interests and ambitions...thus militating against the unifying function of the comprehensive high school and subverting a tenet of the common school ideal (1999, pp. 252-256).

Similarly, Haydn (2004), Bellaby (1977), Angus (2000), and Campbell and Sherington (2004) highlight this problem in the implementation of the comprehensive ideal in England and Australia. According to Bellaby in the 1970s, 'if one defined "comprehensive" by the *absence of selection by academic ability*, there would be few schools' that fit the definition (1977, p. 12, emphasis in original).

Another form of selection also had serious consequences for the comprehensiveness of the comprehensive school system, that of selection by residential location. The role of the comprehensive as a neighbourhood school was dependent on each school enrolling local students. However, this conflicted with the other charter of the comprehensives – to replicate a microcosm of society by enrolling students from a broad mix of social backgrounds. As articulated by Shaw, 'the difficulties facing politicians and administrators in creating comprehensive schools arise from the single fact that the population is not randomly divided' (1983, pp. 68-69).

To some critics of the comprehensive school system, selection by location was no better than selection by ability. Bellaby (1977) notes that 'since there is a clear probability that children of more prosperous and more educated parents will be more successful at school, comprehensives which draw from their neighbourhoods' were likely to have more success than those drawing from working class areas (1977, pp. 18-19). As such, George Taylor, the Chief Education Officer for the English city of Leeds, documented the inequity of selection by location in 1965, arguing: 'it would appear that parents selecting houses in the right areas have little to lose from comprehensive education; other parents of able children may be apprehensive' (quoted in Shaw, 1983, pp. 67-68). Given that the price of houses in 'the right' areas were often well beyond the means of working class families, the comprehensive system was often perceived as reinforcing the existing social hierarchy, rather than creating equality of opportunity across the government school system.

As these problems with the comprehensive school system began to emerge, and the general outlook of educational providers and policy makers shifted from a communitarian to an individualist perspective, the patronage of government schools began to decline and governments began to rethink their approach towards education

provision. In Australia, the relatively large non-government school sector provided an alternative approach to education that an increasing number of families began to take up. As highlighted in Chapter 2, the independent school sector in Victoria experienced a considerable increase in secondary school enrolments from the early 1980s onwards. The number of Catholic secondary school students also increased, although at a slower rate, while government school enrolments were stagnant.

The growth of the non-government school sector worked to the disadvantage of the comprehensive school ideal in two ways. One was the different approach taken by many of the non-government schools, particularly the independent schools, which emphasised an academic curriculum with strong academic outcomes. Such a focus became increasingly desirable as interest in competing as an 'entrepreneurial citizen' grew and the allure of a 'one size fits all' public school system waned. The other was that by virtue of a declining enrolment base, the funding pool for the government school sector was diminishing. Burke notes that the expansion of funding to the non-government school sector which came about in the mid-1970s 'was one of the factors reversing the [enrolment] trend to government schools' (2001, p. 4). The fact that the majority of this government funding was allocated on a per student basis favoured the rapidly growing independent school system. Conversely, funding to the government sector declined by virtue of the fact that it had fewer students.

Victoria's late-blooming comprehensive policy

Due to these pressures, governments in many Australian states and in other parts of the world saw the need to move away from the comprehensive provision of secondary schooling. Victoria during the mid-1980s was an exception, as government policy attempted to strengthen the comprehensive school system. Until this time, government-run technical secondary schools had continued to exist in Victoria, offering an alternative to the comprehensive high school. These technical schools provided vocational learning with an emphasis on practical and trade occupations. These schools coexisted with government high schools in Victoria from the end of World War II. However, as the nature of the workforce and demand for certain industries changed over the years, the role of the technical school diminished. The *Ministerial Review of Post compulsory Schooling in Victoria*, conducted by Jean Blackburn between 1984 and 1985 (known as the Blackburn Report), recommended the disbandment of the technical school system, claiming that 'the workforce structure to which technical schools originally related no longer exists' (1985, p. 51).

The Blackburn Report (1985) paved the way for substantial changes in the structure of Years 11 and 12 in the Victorian education system, pushing it further down the path of the comprehensive ideal. According to the Discussion Paper, which preceded the final Blackburn Report, Victoria needed a single secondary school system in order to provide the best educational opportunities for all students. The Discussion Paper argued that 'the technical system as a separate secondary system has largely lost its specific purpose. The continuance of an academic/technical divide has impoverished what is offered to students in each type of institution' (1984, p. 5). It was argued that in order to increase participation in education (which was the main reason for the establishment of the review), the technical school system should be disbanded. Technical schools in Victoria had already lasted much longer than in other Australian states. For example, in South Australia, the technical schools were abandoned in 1965 when the state introduced its comprehensive secondary school system (Miller, 1972).

The Blackburn Report argued that the comprehensive ideal should become entrenched in the growing senior, non-compulsory years of education. It was recommended that by 1988 government secondary schools 'become comprehensive rather than being designated, equipped or staffed as technical or high schools' (Recommendation 32 1985, p. 51); that 'all students in Years 11 and 12 have access to a comprehensive curricula range' (Recommendation 5 1985, p. 24); and that all students in Years 11 and 12 undertake a 'single certificate marking the completion of secondary schooling...named the Victorian Certificate of Education' (Recommendation 18 1985, p. 39). At a time when other school systems were beginning to recognise the problems in having a comprehensive school charter, the changes in Victoria meant that its government school system was as 'comprehensive' as it had ever been.

In essence, Victoria had refused to accept that the market forces in education could permeate its government school system. Victorian government schools were enveloped by economic liberal philosophy, but were still required to operate in a structure best suited to the Keynesian social democratic management approach.

However, the late move in Victoria towards a fully comprehensive government school system was short-lived. Teese notes that the reforms to the Victorian education system introduced after the Blackburn Report, particularly the introduction of the Victorian Certificate of Education, failed to change the pattern of dominance by private sector students in gaining access to prestigious universities and popular courses (Teese, 2000). The figures in the previous chapter show that these reforms also failed to stem the flow of enrolments out of the government sector.

As Federal Government funding priorities shifted and private schools slowly began to gain more enrolments, the structure of the education system began to evolve. By the mid-1990s, in response to growing pressure from the non-government school sector and increased competition for university places, individual government schools in Victoria had broken from the comprehensive ideal of schooling and moved towards specialisation in order to establish a place for themselves in the education market. From this time, government schools could no longer be seen as agents of 'social cohesion and democracy' – they were instead separate entities competing for survival in the education market.

The 1990s and 2000s: competition, choice, decentralisation and the return to specialisation

While in Victoria the move away from the comprehensive ideal had only just begun in the 1990s, elsewhere in Australia and in many other developed nations this shift was well underway. While still committed to the idea of universal access to education for all, reforms to the education systems were 'hostile to reciprocal community relationships' (L. Angus, 1994, p. 81) and generally contained 'no express commitment to unifying a diverse population' (Wraga, 1999, p. 537). Instead, in the face of growing competition, governments of all persuasions began to loosen their centralised control over comprehensive schools and encourage public schools to specialise in order to promote choice in secondary school education.

Competition

The increasing competition in the education market parallelled the growth of competition in the Australian job market. The boom in the number of students staying on to year 12 in Australia began to diminish the value of a year 12 certificate in the eyes of employers. Symes describes this as 'diploma inflation', suggesting that a job which had once required a Year 10 pass was soon considered appropriate only to someone with a degree qualification (1997).

In a report for the Catholic Education Commission of Victoria, Sheehan explains that the pressure on an individual to gain qualifications has increased competition between schools:

As Australia, in line with other countries, becomes a knowledge-based economy, it also requires increasing levels of education ... The level and quality of education that a young person acquires increasingly determines their prospects, both socially and economically. Hence, schools are under greater pressure to provide high quality education. There is renewed pressure both from government and parents to increase retention rates and achieve higher outcomes (2004, p. 47).

The educational outcomes of schools came under closer scrutiny as competition for tertiary places increased. In Australia these pressures of competition within the education system were felt particularly strongly in government school comprehensives located in urban areas. Campbell and Sherington (2004) observe that where government comprehensive schools are isolated from an education market, and therefore local competition, they are more likely to provide outcomes to the satisfaction of their community. Conversely, government schools in large metropolitan areas compete with independent, Catholic and other government schools for enrolments. As a result, concentrations of disadvantaged students are much more likely to develop in some urban comprehensive schools.

Victorian statistics used in later chapters explore the way in which this has occurred in Melbourne. In particular, during the 1990s and 2000s, as university places became limited and year 12 completions increased, the role of a school in promoting good academic outcomes has become increasingly important. A school's ability to display a competitive academic track record appears to be crucial in the hunt for student enrolments, especially in the context of increasing competition for university places. Public interest in the outcomes of individual schools has pressured governments into making available benchmark indicators so that parents can make measured judgements about schools when choosing where to enrol their children. Families with the resources to afford to move house to an area with a desirable school or pay for private school fees and/or the ability to interpret performance indicators and gather additional information about schools, are in the best position to choose a school which will benefit their child. As more and more parents exercise choice, the schools which do not stand out in providing students with individual goal-based outcomes are left behind: 'If parents detect a failure in the quality of schooling offered then it is obviously in the interests of their children to exercise choice if it is available' (Campbell & Sherington, 2004, pp. 11-12).

The pressure on schools to meet specified benchmarks and to be accountable for the outcome of every student they teach is, according to Symes, a product of the changes that have occurred in society since the early 1980s. 'Assessment regimes' exist in many facets of life, not just educational institutions: corporations, bureaucracies, states and even countries are constantly measured according to benchmarks or performance indicators (1997, p. 226). Symes argues that this all stems from the (misguided) argument of economic rationalists: that competition, fostered by measurements and rankings 'leads to better results and more efficient institutions' (1997, p. 227).

Regardless of whether 'assessment regimes' are accurate or desirable, the increasing prevalence of published school outcomes data certainly seems to have influenced enrolment trends in secondary schools. There is little doubt that a reputation of high academic outcomes fosters demand in individual schools and in school sectors. A study exploring the success of high-demand government schools in Australia by the Department of Education, Science and Training found that a good reputation was the key to success, and that in most cases good reputations relied 'primarily on consistently high-quality academic outcomes' (2005a, p. v).

Attracting enrolments is important for the sustainability of schools. Those that are consistently able to enrol to capacity are better placed to attract more government

funding and make long-term planning decisions, which ultimately make the school more desirable. As seen in the enrolment patterns in Victorian secondary schools from the mid-1980s, the independent school sector has been most successful at increasing enrolments, primarily at the expense of the government school sector. Driving the exodus from the government school system has been the middle class and its desire for 'measurable, favourable academic outcomes' (Vinson, 2002, p. 2).

Since the end of the Second World War, the middle class has grown (Ball, 2003) and so too has its influence on education policy.

The reasons for the vulnerability of the public comprehensive high school are complex but are clearly related to the operation of both a market in schooling as well as a market ideology...[this] is closely related to the concerns of the Australian middle class. There is no doubt that an anxiety exists among the Australian middle class in respect to the future of their children (Campbell & Sherington, 2004, p. 11).

The middle class is the key to the enrolment and policy changes in the school system primarily because it is the group most likely to exercise choice in schooling. The upper class, particularly in Victoria, have always enrolled their children in the elite private schools. The working class have always been reliant on the public school sector for the education of their children, mostly due to the prohibitive costs of most non-government schools, but also due to other factors such as proximity to such schools. Therefore, it is the educational choices made by middle class families – who have access to some discretionary financial resources and have high aspirations for their children – that shape the enrolment trends in the education system. As long as funding for the independent sector grows and academic reputations are confirmed by government-produced benchmark indicators, it seems that the middle class will continue to 'flock' to the independent school sector (Vickers, 2004).

The inability of the government comprehensive system to maintain enrolments is no surprise to some. In her 1983 book, *Comprehensive schooling: the impossible dream?* Shaw argues that the comprehensive school system was far from the best way to provide a good education for students of all abilities and to keep up with the increasing demands of the education system. She argues that the comprehensive school failed both the most and the least intellectually able students. According to Shaw, those struggling with the curriculum had trouble keeping up and eventually

became bored and disruptive, while the high-ability students were often held back from expanding their knowledge as a result of the strictly prescribed general curriculum. These constraints were also perceived as faults of the system by the burgeoning middle class. As alternative educational options increased, Australian parents who recognised the problems with the comprehensive system and had high academic expectations of schools began to move their children into the nongovernment school sector.

By the 1990s, the problems arising from the dwindling patronage of the government school sectors across the developed world were appearing. In order to stem the flow to the non-government sectors and reinvigorate public schooling, a key change in education provision was undertaken by governments of all persuasions – decentralisation. This policy conflicted with the general concept of the comprehensive school system and also led to other modifications within the system, particularly specialisation, which pushed public schools further away from their comprehensive charter.

Decentralisation

Decentralisation involved removing some of the bureaucratic restraints placed on government schools by education departments, and giving more decision making power to the schools themselves and the communities they served. The theory behind decentralisation is that if schools operate according to the needs of their local community, they may be more successful in helping students to achieve favourable outcomes.

In Australia, the idea of decentralisation was promoted long before it was implemented. In 1973 the Karmel Report encouraged state education departments to undertake a less centralised approach to school management (Keeves, 1990a; Musgrave, 1990). As mentioned above, the aim of this approach was to loosen the control of government on the operation of individual schools and increase the autonomy (and consequently, accountability) of each school. The Karmel Report indicated that these developments were strongly encouraged during the consultation process by 'various parent organisations' (1973, p. 11). It is likely that such enthusiasm for a more decentralised mode of administration were fuelled by analyses of Australian education by academics such as the American Professor of Education, Freeman Butts. While not overtly attacking the existing system, Butts posed a number of questions regarding centralised bureaucracies during a six month research visit to Australia in the mid-1950s. In particular, he observed: 'The heart of the problem in a centralised system is whether channels of communication with the public are kept open and whether the decision makers are actually responsive to the people to whom they are responsible' (Butts, 1955, p. 19). The Karmel Report recommended that the Whitlam Government adopt policies that were 'committed to the devolution of decision-making and diversity among schools' (P. H. Karmel, 1973, p. 140).

However, this recommendation came from a federal government which did not control the government school systems in individual states. Therefore, the process of devolution was left to each state bureaucracy to implement at its whim. At the time of the Karmel Report enrolments in the comprehensive school system were booming, and therefore, as far as state governments were concerned, there was no reason to change the seemingly successful comprehensive model.

Resistance to decentralisation was strong in many parts of the country, but eventually, as criticism of centralised systems grew and problems within the comprehensive system emerged (as discussed in earlier), states began to move towards this approach. Victoria, with its concentrated population base and small geographic area (relative to other Australian states) became one of the most progressive states when it came to decentralisation of the school system (Keeves, 1990a). Initially decentralisation went only as far as the establishment of regional offices and the placing of greater emphasis on the role of school councils in decision making within schools. However, these small changes were important steps in the evolution of the government school system, fostering greater community involvement in education (Keeves, 1990a; Musgrave, 1990) and importantly, paving the way for the reforms and devolution of the system which occurred in the mid-1990s.

The decentralisation or devolution of government school systems across the western world in the 1990s arose from the need for these schools to remain viable and attractive to students because: 'school systems, bureaucratically structured to

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emphasise productivity and efficiency, [were] failing to meet the needs of our youth' (Woholstetter, Albers Mohrman, & Robertson, 1997, p. 201). In the United States, one of the major approaches linked to decentralisation was 'school-based management'. This idea was adopted differently in different states, but the common aim was to remove as many of the ties of central bureaucracy as possible and put decision making power in the hands of the school leadership team, teachers and parents. In some states, this meant that school principals and school councils were able to make their own decisions about minor things, such as what text books would be used, or major things such as the hiring and remuneration of teaching staff (Ravitch & Viteritti, 1997). By the mid-1990s school-based management practices were being adopted across most urban centres in the United States (Boyd & Miretzky, 2003; Woholstetter et al., 1997).

Similar practices were also adopted in Australia. During the 1990s Victoria was recognised worldwide for its innovation in the area of school self management (Caldwell & Hayward, 1998; Odden & Bush, 1998; Woholstetter et al., 1997). In 1993, the Kennett-led Coalition Government introduced an extensive decentralisation program in Victoria called 'Schools of the Future' (Caldwell & Hayward, 1998) which 'combined decentralised school management with standards-based reform' (Odden & Bush, 1998, p. 71). It was argued that the introduction of greater school-based decision making would foster an education system which did not follow the 'one-size-fits-all' approach but instead tailored educational programs to suit individual communities, thus increasing the likelihood of positive educational outcomes within government schools.

However, in many cases these reforms created a 'hostile education policy environment' (L. Angus, 2004, p. 28). They were accompanied by a significant reduction in the education budget, an extensive program of school closures and an exodus of teachers from the government school system. While these funding cuts were in some ways necessary, due to looming state debt in Victoria and an overfunded and under-utilised education system (Caldwell, 1999), they did little to encourage public faith and confidence in the government school system. The school self-management changes implemented by the Kennett Government in the 'Schools of the Future' policy were also controversial and resulted in strident opposition from the teachers union in Victoria. In a case study of a school going through the educational reforms of the early Kennett years, Angus argues that the pressures associated with these changes 'seem to have resulted in professional as well as industrial disempowerment of teachers and to have had ambiguous results' (L. Angus, 2004, p. 36). The Victorian Branch of the Australian Education Union (AEU) bitterly resisted the idea of decentralisation which ultimately entailed the breaking down of the comprehensive school system. In the view of the AEU, these changes eroded the rights of the teacher by placing the power to hire and fire in the hands of school principals and school councils rather than at the behest of the bureaucracy in the Department of Education.

The other major concern of the AEU was that, under school self management practices such as those promoted in 'Schools of the Future', there was greater emphasis on school-based accountability. The AEU resistance to school based testing and accountability measures is seen by some as an attempt to hide the failures of the education system from the broader public and the education bureaucracy (Donnelly, 2004, p. 28). It was argued by the architects of 'Schools of the Future', Kennett Government Education Minister, Don Hayward and academic Brian Caldwell, that the opposition to these reforms was contradictory to the needs and desires of society in general: 'At times teacher unions appear to have done their best to thwart reforms...sowing dissent on the fundamental direction of change even beyond the time when it had become clear to the wider community that the new approaches were a more effective and efficient way to operate the school' (1998, pp. 171-172).

The election of the Bracks Labor Government in Victoria in 1999 saw continued implementation of the ideas of decentralisation and self-management of government schools and further departure from the comprehensive ideal. This decision was justified by Bracks following a substantial public consultation process counducted by Lyndsay Connors, resulting in a report titled *Public Education: The Next Generation*, which found that policies of self-management had been successful and should 'constitute the cornerstone of the next stage of development' (2000, p. 26). The report argued that this direction should be continued in the future because these policies had

created better communication and accountability systems and had 'enabled governments to move beyond the old bureaucratic approach to public service' (2000, p. 26). The Kennett Government's 'Schools of the Future' policy was re-badged by Bracks as 'enhanced self management' (Department of Education Employment and Training, 2001, p. 71) and continued to be recognised as key to helping government schools serve their communities effectively.

Specialisation

With the push towards self management and decentralisation of the government school system came the trend of school specialisation. The encouragement towards specialisation came from individual schools, governments and education departments. The development of policies promoting specialisation pushed government schools still further from their original comprehensive charter. Specialisation within the government school system was introduced as a way of raising the public profile of government schools by promoting them as interesting and progressive (M. Angus, 2000). In the context of increased competition for enrolments and, in Australia, independent schools with a distinct academic focus, differentiation was seen as a way of maintaining enrolments in the government school sector.

The specialisation of government schools occurred across the world in the late 20th and early 21st centuries. It did not necessarily involve abandoning a comprehensive and state sanctioned curriculum, but did involve putting extra resources into and promoting a specific focus on a particular area of the curriculum or program within each school. In Australia, examples of individual school curriculum-based specialisations include information technology, vocational based subjects, science, or sport. Other ways that government schools have adapted to become 'specialists' included becoming single-sex, scaling back to become 'senior colleges' which enrol only students in the final years of secondary school, and the development of separate junior and senior school campuses.

In England, the specialisation of the government school system began to emerge in the late 1980s when the government created a network of technical schools separate from the comprehensives. However, the dismantling of the comprehensive school system accelerated in 1997 with the election of the Blair Labour Government. Tony Blair's policy direction in regards to education was strongly informed by the ideas of Michael Barber (1996), who helped formulate Labour's election policy and was appointed to head the Standards and Effectiveness Unit of the Department for Education and Employment following the 1997 election. The policy focus of the Blair Government revolved around three main pillars: standards and accountability, collaboration and capacity-building, and quasi-market reform. The specialisation and diversification of schools which was implemented following the Labour election win was designed to fit into this policy framework.

Hadyn argues that this move by the Blair Government was contrary to the 'old Labour values of egalitarianism, centralised planning and unified, uniform national systems' (2004, p. 425). Nonetheless, Prime Minister Tony Blair claimed that specialisation was needed within the education system: 'In the end, it is a more diverse system that will deliver better results for our children' (quoted in Haydn, 2004, p. 423). By the early 2000s, the structure of the comprehensive was a relic of the past; specialisation within the English education system was well entrenched. Within the government school system there were dozens of different types of schools including grammar schools, technology colleges, language colleges, sports colleges, arts colleges, 'Beacon' schools, 'Training' schools, and 'Launchpad' schools (Haydn, 2004).

Most of these specialisations in English schools are facilitated through the Specialist Schools Program (SSP). Implemented by the Blair Government, the SSP invites government schools to collaborate with private sector sponsors and specialise in one of ten specialist curriculum areas 'to establish distinctive identities...and achieve their targets to raise standards' (Department for Children Schools and Families, 2007). This policy direction continued throughout Blair's terms in government and is expected to continue under new Labour Prime Minister Gordon Brown. In 2007, 84 per cent of all government secondary schools in England were specialist schools participating through the SSP (Department for Children Schools and Families, 2007).

Despite the growth and bipartisan support for the specialisation program in England, the model is not without its critics. Among British academics, there has been considerable debate as to the ability of such a devolved and diverse school system to provide increased equality of opportunity to students. Stephen Ball argues that these policies 'give particular advantages to the middle class, while not appearing to do so' (2003, p. 26). Croxford and Raffe refer to numerous studies carried out in the United Kingdom that 'have broadly supported Ball's conclusion' (2007, p. 40). In a separate publication, Croxford and Paterson (2006, p. 391) show that social class segregation within schools in England and Wales increased in the late 1990s following the Blair policies of diversification and specialisation. They compare these outcomes with results from Scotland, where the market policies were not adopted and segregation had declined.

A similar movement towards school specialisation occurred within the United States. National education policy goals designed to move the US education system into the 21st century left little doubt that the comprehensive school era had come to an end: 'given the priority placed on knowledge specialism and vocationalism in Goals 2000, the conditions for a re-emergence of general education in public discourse about school reform in the US do not appear favourable' (Wraga, 1999, p. 538).

As the decentralisation of Australian government school systems spread, so too did programs aimed towards specialisation and diversification of government schools. As in the United States and England, there seems to be little likelihood of a return to the comprehensive system in Australia in the near future. The need to reinvent government schools in order to make them more attractive to a community with an increasing distrust in public institutions has been taken seriously by state governments. In Queensland, a policy promoting 'distinctive schools' was adopted in 2000, aimed at counteracting the public perception that government schools were bland. In Western Australia a similar program has introduced senior colleges, middle schools and TAFE-connected specialist schools (M. Angus, 2000). New South Wales has expanded the number of academically-selective government schools in the system, as well as introducing programs promoting internal selection within government schools (Campbell & Sherington, 2004; Vinson, 2002).

In Victoria, policies driving specialisation have included the 'Leading Schools Fund' introduced in 2003, under which money is provided to schools that create a
framework with 'a distinctive focus or theme which will facilitate innovation and excellence and lead to improved student outcomes' (Department of Education and Training, 2003a, p. 27). The Victorian Government's 2003 *Blueprint for Government schools* clearly spelt the end of the comprehensive government school and highlighted the need for specialisation, stating that in order to provide an 'excellent education' it must be acknowledged that 'one size does not fit all' (Department of Education and Training, 2003a, p. 26).

Specialisation in vocational-based curriculum areas has been particularly popular among Victorian government schools since the mid-1990s. The Vocational Education and Training (VET) in schools program grew substantially in the decade from 1996. Additionally a new senior certificate, the Victorian Certificate of Applied Learning (VCAL) was introduced in 2002 by the state government to provide an alternative to the Victorian Certificate of Education for students in years 11 and 12. The take-up of this certificate among government schools and students has been significant. However, in later chapters, I argue that the strong emphasis on vocational specialisation in some areas of metropolitan Melbourne could be limiting the opportunities of some students to follow academic pathways.

Choice

The change in the government school system from a one-size-fits-all model to a decentralised, specialised and diversified system has occurred with the primary aim of expanding choice in education. Choice theory in schooling has its roots in the United States and England, where the non-government school sectors have traditionally been significantly smaller than in Australia. But as competition in the education market has increased, choice has become a factor in Australian education policy as well. When the comprehensive system was entrenched in Australia, parents had three basic options when it came to choosing a secondary school; they could choose a government comprehensive, a Catholic school or an independent school. As enrolments began to grow in the non-government sector, specialisation and diversification of government schools was promoted in order to provide parents with greater choice within the government school sector, and potentially stem the flow of enrolments from public schools. As discussed above, the range of specialisations

within the government system in Australia and in other countries which formerly had strong comprehensive systems is now immense.

School choice in the US and England encapsulates notions of specialisation, as well as the idea that government schools should not be confined to enrolling students in their immediate locality. Advocates argue that government schools should operate in the same way as a free market, theoretically being available to all. Specialisation within the government school sector would therefore offer multiple options to students who would choose their school according to specialisation rather than be allocated a school on the basis of residential location.

Proponents of the school choice movement believe that the implementation of school choice and therefore the stimulation of an education market is the best solution to providing sustainable, quality education to all students. Those who oppose this ideology argue that such policies 'operate to the detriment of the socioeconomically deprived' (Parsons, Chalkley, & Jones, 2000, p. 44) whose ability to exercise choice is restricted. Lack of social capital limits the ability to make informed choices, and lack of resources limits the ability to exercise choice.

However, there is evidence from the UK to suggest that the main beneficiaries of choice are those from lower socioeconomic backgrounds. In a British study, Parsons (2000) found that in a system where a genuine choice in government schools is available regardless of residential location, children living in disadvantaged neighbourhoods were more likely to benefit than those living in affluent areas. He found that families with lower socioeconomic status were more likely to exercise choice because the standards of schools in their neighbourhoods were often lower than those in other areas. Students in these less affluent areas would often bypass their local school and choose to attend a school with better outcomes. In many cases these schools were located in more affluent neighbourhoods.

However, despite these findings, Parsons acknowledges that even in systems which offer an open choice policy, ultimately residential location can be the final determinant of school allocation and enrolment. When enrolments in popular schools begin to fill to capacity, 'the spatial factor of residence within the catchment [area of a

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school] can be critical in deciding who goes where' (2000, p. 39). Ultimately, in most systems, when a public school is over-subscribed, those who live closest are given priority. More often than not, this operates to the detriment of those living in low socioeconomic areas.

Hill (1999) argues that choice in education is crucial for maintaining a healthy and effective system, but warns that the viability and success of a choice system is dependent on the way in which it operates. According to Hill, attempting to change the public school system from within is futile. Therefore the diversification or specialisation of the government school system is not considered by Hill sufficient to generate genuine choice of school options. Instead, Hill pushes for privatisation of the public school system. He believes that the entrenched ideologies within the public school system limit its ability to address internal problems, and therefore there is a need to create educational markets and offer parental choice in publicly funded schools that are not controlled centrally by public education authorities.

Hill argues that the Charter schools, which now exist in some states of the US, have the potential to increase the educational well-being of many disadvantaged students. Charter schools are generally run by private companies who are allocated government funding to operate what were previously government-run schools.

Charter schools, or the implementation of 'vouchers' which students could use to pay for private school fees rather than attend government schools, have not been adopted in policy in Australia, although such ideas do have their advocates (Buckingham, 2001).³ Alluding to the US experience, Wraga argues that adopting a voucher policy would certainly spell the end of any remaining values of the comprehensive ideal: 'the call for schools of choice and charter schools by both the Clinton and Bush administrations could mitigate any incidental unifying influence on public schooling' (1999, p. 537).

³ However, it could be argued that the current funding models for the non-government sector in Australia already operates in a manner similar to a voucher system due to the fact that funding is allocated on a per-capita basis.

In reality the Australian version of school choice is somewhat different than in the US and England due to the relatively large number of non-government schools that have always existed within the education system. Regardless of the specialisation occurring, choice of government schools in Australia is almost universally restricted by the existence of vague geographical boundaries that revolve around the idea of the neighbourhood school. But as competition in the education market grows, there is a chance that this may change. In 2005, the Victorian Government released a white paper which, among other things, proposes the removal of geographical zones which determine access to government schools, suggesting the possible expansion of choice in the Victorian education system (Department of Education and Training, 2005). However, despite this policy initiative, when educational choice in Victoria is discussed, it is generally with reference to choice between the non-government and the government school sectors.

The current Federal Government in Australia, under the leadership of John Howard, is pro-choice in its education agenda. Although the states run the individual education systems, federal government policy has an impact on state education systems, especially in the non-government sector, which receives the majority of its government funding from the Commonwealth. A press release from Prime Minister Howard in mid-2004 highlighted the Federal Government's stance regarding educational choice. Howard stated that the Australian Government 'will continue to support choice for parents in selecting the school environment that best meets their children's needs – whether that is in state schools or in Catholic and independent schools' (Howard, 2004).

However, the choice to opt out of the government system and therefore out of the control of the public education bureaucracy only exists for those with the finances to afford non-government schooling. For Victorian families who do not want or cannot afford to enrol their children in Catholic or independent schools, the remaining and rather limited choice is to which government school to send their children. In Melbourne, children can technically enrol in any government school, regardless of where they live, so long as there is a place available for them at the school. However, in reality, due to enrolment caps in schools, most government school students attend their local school. Places in government schools are offered on a residential basis,

whereby a place in the closest government school to your residence (generally measured 'as the crow flies') is guaranteed. Other provisions are available to enhance the chance of entry to schools which are not closest, such as entry if a sibling attends the school, or if there is a specific program run by the school which is required by the student. Generally, however, the rule regarding guaranteed entry to the nearest school to your residence is the main determinant for entry to a government school in Melbourne. Therefore, the key to gaining enrolment in one of the more popular government schools is to live close to it.

This reduces the options for many families because in the majority of cases, the most academically successful, desirable and popular government schools in Melbourne are located in affluent areas (the data used in later chapters highlights this point). Additionally, the reputations of a number of the government schools in Melbourne are such that properties in close proximity to the schools are sold at a premium (Calvert, 2004; Fitzgerald, O'Loughlin, Spindler, Rooney, & Read, 2004; Kift, 2004; Tomazin, 2004). As a result, the range of choice available to a family in the Victorian education system is heavily dependent on its financial resources. Notaras believes that such a system is inequitable: 'this power to choose, with respect to schooling, is achieved through financial means. If you have money, then you have a CHOICE. If you don't have money you have NO CHOICE' (2004, emphasis in original).

Conclusion

The comprehensive ideal and the push towards an individualised approach to schooling are in direct conflict with each other. This has been and will continue to be a problem when it comes to providing a balanced approach to education in the government school system: 'As the ideal of the comprehensive school fades, state systems will struggle to hold onto the foundational values of the last century while at the same time embracing choice and competition' (M. Angus, 2000, p. 29).

In the Australian context, significant differences continues to exist between the outcomes of the government and the non-government (and especially independent) school sectors (Anderson, 1990; R. W. Connell, Ashenden, Kessler, & Dowsett, 1982; Edwards, Birrell, & Smith, 2005; Teese, 2000; Teese & Polesel, 2003). School

outcomes data highlighting the academic advantages of the independent school sector will be discussed in the Chapter 4.

Additionally, increased specialisation and decentralisation within the government sector has led to a growing differentiation of outcomes among schools in recent years (Birrell, Rapson, Dobson, Edwards, & Smith, 2002; Edwards et al., 2005). Chapters 6, 7 and 8 investigate the changing outcomes of the government school sector in Victoria, with specific focus on the differentiation of results among government schools in Melbourne, highlighting how policies of specialisation and choice have contributed to a growing divide within the sector. The specialisation of government schools and the breakdown of the comprehensive system were necessary steps in the evolution of the Victorian school system. However, the implementation of decentralisation and specialisation has occurred in such an *ad hoc* fashion that opportunity within the government school system remains closely tied to residential location and socioeconomic background. The data in the following chapters show that as competition for university increased between the mid-1990s and mid-2000s, these new policies failed those in the government sector who reside in areas of low socioeconomic status and/or outer suburban areas.

4. School sectors, unequal outcomes and growing competition

The previous chapters have examined developments in the Victorian education system in the context of a changing society and increasing demand for education. In particular, issues of competition – both for enrolments and for high academic outcomes – were highlighted. The effect of competition on government school enrolments was documented and discussed. This chapter examines how the pressure of competition is reflected in the outcomes of year 12 students across the three school sectors.

The first part of the chapter analyses the outcomes of the 2004 year 12 cohort in Victorian schools. It reveals a substantial achievement gap between the three sectors which significantly affects the post-school pathways of year 12 students from each sector. Time series data are then used to examine how the outcomes of year 12 students and school sectors changed between 1996 and 2004. A similar analysis by Edwards, et al. (2005) was undertaken as part of an Australian Research Council project. However, the analysis below uses a new time series of data and is based on more recent figures. This analysis explores some similar issues but covers a wider range of factors and outcomes. It may be considered a more detailed and sophisticated update of this earlier work.

Chapter 5 then outlines a number of factors contributing to the differing year 12 outcomes between the school sectors, with particular focus on the factors that give the independent school sector an advantage in the competition for university places.

This chapter uses data primarily from the Victorian Tertiary Admissions Centre (VTAC) tertiary education applicants file. This file contains information about each student who applied for a tertiary place in Victoria at the end of Year 12. See Appendix 1 for more information regarding details of the VTAC files used here.

As discussed in the Chapter 1, access to professional occupations almost universally requires a university degree. As a result, TAFE graduates in university-like disciplines are commonly forced into lower-status clerical and service jobs to make way for more highly educated workers. It is in the context of these issues that the rest of this Chapter should be interpreted.

A Snapshot of 2004 Victorian year 12 cohort

The numbers: Enrolment in year 12 by school sector and other variables

In February 2004 there were 52,804 students enrolled in year 12 at Victorian secondary schools. At the end of the year, 40,479 of these students applied to the Victorian Tertiary Admissions Centre (VTAC) for a place in a Victorian tertiary education institution (Table 4.1). For year 12 graduates, the VTAC application process involves applying to Victorian universities, TAFEs and private training providers for a place in a specified course in the year following completion of year 12. Details of this application process are described below where necessary.

Of those enrolled in year 12 in Victoria in February 2004, 58.2 per cent were in government schools. Catholic and independent school students made up 21.6 per cent and 20.2 per cent of the market respectively. At the point of VTAC tertiary application, which occurs at the end of year 12, the market share of government school students had decreased while that of the other school sectors had increased; 51.4 per cent of VTAC applicants were from government schools, 24.2 per cent from the Catholic sector and 24.5 per cent from independent schools (Table 4.1).

School sector	Year 12 (Feb) no.	VTAC applicants no.	Year 12 (Feb) %	VTAC applicants %
Government	30,722	20,787	58.2	51.4
Catholic	11,393	9,786	21.6	24.2
Independent	10,689	9,906	20.2	24.5
Total students	52,804	40,479	100.0	100.0

Table 4.1: Year 12 students and year 12 VTAC applicants by school sector, Victoria, 2004

Source: DET (2004), Summary Statistics, Victorian Schools and VTAC 2004/05 Unpublished

Among the 2004 year 12 cohort, more than three quarters (76.1 per cent) of Victorian students applying to VTAC attended schools in the Melbourne metropolitan area (Table 4.2). Independent school students were most likely of the three groups to be in a metropolitan school (83.4 per cent). In metropolitan Melbourne, less than half (49.3 per cent) of the year 12 VTAC applicants came from government schools. However, outside the Melbourne area, government school applicants comprised a much higher percentage, making up 57.8 per cent of all school applicants. As the data and discussion later in this chapter and in Chapter 5 indicate, the higher concentration of independent schools in Melbourne presents a particular

challenge for the government school sector, particularly in relation to competing for highly sought after and increasingly limited university places based in Melbourne.

11	v		,	/
School Location	Government	Catholic	Independent	Total
Metropolitan Melbourne	15,197	7,352	8,260	30,809
% within Metro Melb	49.3	23.9	26.8	100.0
% within school sector	73.1	75.1	83.4	76.1
Rest of Victoria	5,590	2,434	1,646	9,670
% within Rest of Vic	57.8	25.2	17.0	100.0
% within school sector	26.9	24.9	16.6	23.9
Total	20,787	9,786	9,906	40,479

Table 4.2: VTAC applicant numbers by school location and sector, Victoria, 2004

Source: VTAC 2004/05, unpublished

The gender distribution of year 12 students and VTAC applicants in 2004 shows that while female students accounted for 52.8 per cent of all students in February, they made up 55.6 per cent of all applicants at year's end (Table 4.3). The independent school sector was more evenly balanced by gender, both at the beginning of the year and at the tertiary education application phase, while the figures relating to gender distribution were slightly weighted in favour of female students in both the Catholic and government school sectors.

School Sector	Year 12 (Fe	Year 12 (Feb)		VTAC applicants				
	Female	Male	Total	Female	Male	Total		
Government	16,244	14,479	30,722	11,714	9,073	20,787		
% within sector	52.9	47.1	100.0	56.4	43.6	100.0		
Catholic	6,131	5,262	11,393	5,573	4,213	9,786		
% within sector	53.8	46.2	100.0	56.9	43.1	100.0		
Independent	5,510	5,174	10,683	5,201	4,705	9,906		
% within sector	51.6	48.4	100.0	52.5	47.5	100.0		
Total	27,885	24,914	52,798	22,488	17,991	40,479		
% overall	52.8	47.2	100.0	55.6	44.4	100.0		

Table 4.3: Year 12 students and VTAC applicants by gender and school sector, Victoria, 2004

Source: DET (2004), Summary Statistics, Victorian Schools and VTAC 2004/05 Unpublished

Apparent Retention and Transition Rates

School retention to year 10 is now almost universal in Victorian schools (Department of Education and Training, 2003b), therefore retention rate figures relating to enrolment between years 10 and 12 are the most relevant for the purpose of this analysis.

The apparent retention rate is the year 12 cohort in a given year as a proportion of the year 10 cohort of two years prior. Therefore, to calculate the apparent retention rate for year 12 in 2004, the following formula applies:

Apparent retention rate year
$$12\ 2004 = \frac{Year\ 12\ Enrolment\ 2004}{Year\ 10\ Enrolments\ 2002} \times 100$$

The apparent retention rate does not track students individually between the years in question, but rather calculates the crude transition across the designated year levels by the cohort. Therefore, students repeating year levels, migration to and from interstate or overseas, and movement between school sectors, all, of which can have an effect on the apparent retention rate, are not taken into account in this calculation (Department of Education and Training, 2003b). Despite this, the apparent retention rate is the simplest method for calculating the retention of whole year level cohorts and is used widely by researchers, academics and government departments as an indicator of educational outcomes.

As shown in Table 4.4, the year 10 to 12 apparent retention rate in 2004 was 87.2 (that is, year 12 enrolment in 2004 was 87.2 per cent of size of the year 10 cohort in 2001). This

indicates that a large proportion of students in Victorian schools are continuing their schooling into the post-compulsory years and undertaking the VCE. This concurs with the large numbers of final year enrolments in Victoria, as shown in Chapter 2. However, there is a clear difference between the year 10 to 12 apparent retention rates of the three school sectors in Victoria. Government schools had an apparent retention rate of 82.9, Catholic schools recorded a retention rate of 85.8, and the independent sector had a rate of 104.8.

The rate recorded for the independent school sector indicates that there was an overall increase in this cohort of students in this sector between year 10 in 2002 and year 12 in 2004. To a certain extent this can explain the lower rates in the Catholic and government sectors – in some cases students would have left the government or Catholic sectors at the end of year 10 to pursue their VCE at an independent school. The massive growth in enrolments at secondary level in Victorian independent schools, also discussed in Chapter 2, is indicative of this.

The rates of student transition from year 11 into year 12 also show a pattern similar to the retention rate data. Transition rates are calculated in the same way as the apparent retention rate, but measure transition from one year to the next rather than retention over a number of years. Overall the figures in Table 4.4 show that large numbers of Victorian students who begin year 11 go on to study in year 12.

School Sector	Year 10-12 retention rate	Year 11-12 transition rate	Year 12 (Feb) to VTAC application rate
Government	82.9	85.6	67.7
Catholic	85.8	92.3	85.9
Independent	104.8	97.6	92.7
All schools	87.2	89.2	76.7

Table 4.4: Retention and transition rates of school students by sector, Victoria, 2004

Source: DET (2004), Summary Statistics, Victorian Schools and VTAC 2004/05 Unpublished

In the senior, post-compulsory years, 89.2 per cent of Victorian students across the three sectors made the transition from year 11 in 2003 to year 12 in 2004. However, as with the retention rates, the transition rate for government schools (85.6) was lower than for the other

two sectors. The Catholic school student transition rate from year 11 to year 12 was 92.3, while the rate for the independent sector was 97.6 in 2004 (Table 4.4).

Table 4.4 also shows the transition from year 12 enrolment in February 2004 to VTAC application at the end of that year. This figure gives an idea of the 'attrition' rate during the final year of schooling. It measures the proportion of commencing year 12 students who completed year 12 and applied for a tertiary education course (at university, TAFE or a registered private provider) at the end of the year. Once again, this figure varies substantially across the three school sectors. Overall, 85.9 per cent of Catholic students and 92.7 per cent of independent school students who were enrolled in year 12 in February 2004 applied through VTAC for a tertiary education position at the end of the year. By comparison, only 67.7 per cent of all students who were enrolled in year 12 in a government school in February made a VTAC application.

These retention, transition and attrition rates are important in the overall context of discussion about the educational pathways of students after year 12. The fact that the government school sector ranks lowest according to all three measures is of particular concern for this sector. These low rates raise questions about the role of the government school sector in Victoria and its ability to offer students opportunities for upward social mobility.

Year 12 achievement as measured by ENTER scores

The Equivalent National Tertiary Entrance Rank (ENTER) is formulated by the Victorian Tertiary Admissions Centre (VTAC) to measure student achievement in year 12 each year.

The ENTER is used as a method of selection for most tertiary courses, especially those in universities. Each subject undertaken in year 12 is given a weighting according to the academic complexity of the subject for a given year (for example, a higher weighting is given to the most demanding maths subject than is given to the basic maths subject), the weighted subject scores of each student are then aggregated (known as the ENTER aggregate) and a ranking of these scores is created by taking into account the entire population of the year 12 age group. Therefore, the ENTER ranks both those who have completed their VCE and those who have left school or failed year 12. Those who completed their VCE receive an ENTER

ranked between 0 and 99.95 at intervals of 0.05, with 99.95 being the best possible score (VTAC, 2002).

More students apply for positions than there are places available in many tertiary courses. Therefore, most university courses and many TAFE and private provider courses use the ENTER of students who applied for the course to determine offers. In general, the more popular the course, the higher the ENTER required to gain an offer. Other criteria are also used by institutions to determine course offers. These can include the completion of VCE prerequisite subjects, interviews of potential candidates and folios of work (for example, in some fine art courses). However, for 2004, in the majority of cases – and in particular within universities – the ENTER of a student determined whether a course offer was made.

As Table 4.5 shows, independent school students achieved higher ENTERs in 2004 than those from the Catholic and government sectors. The gap between the independent and government school sectors was particularly large – 21.20 ENTER points when measured by the median.⁴

As will become apparent in the following discussion, the difference between an ENTER of 82.85 (the median for independent school students) and an ENTER of 61.65 (the government school median) is substantial. In particular, those with lower scores have fewer university options in terms of both courses and campuses, and a much lower chance of gaining entry to university at all.

School Sector	Median ENTER	Applicants* no.
Government	61.65	20,744
Catholic	69.40	9,785
Independent	82.85	9,883
Total	69.15	40,412

Table 4.5: Median ENTER of Year 12 VTAC applicants by school sector, Victoria, 2004

Source: VTAC 2004/05 Unpublished

* 43 government, 1 Catholic and 23 independent school applicants did not receive an ENTER in 2004

⁴ The median is used here because calculation of the mean ENTER is susceptible to deviation caused by outlying scores and therefore less indicative of the difference between the sectors.

By breaking down ENTERs into deciles (or bands of 10 points), a better picture of the topheavy weighting of achievement in the independent school sector can be gained. Table 4.6 shows that 33.1 per cent of independent school students in Victoria gained an ENTER of 90 or more in 2004. By comparison, 14.6 per cent of Catholic and 11.9 per cent of government school students achieved an ENTER in this top bracket.

Of the total number of students gaining an ENTER of 90 or more, 45.7 per cent were from independent schools despite the fact that independent school students made up only 24.5 per cent of the total cohort of applicants. At the other end of the spectrum, government school students, who made up 51.3 per cent of all applicants, accounted for 74.1 per cent of ENTERs below 40. In total, 22.2 per cent of all government school applicants had an ENTER of below 40, while the proportion of applicants from the independent sector with a score in this bracket was only 4.5 per cent (Table 4.6).

The spread of ENTERs across the bands in Table 4.6 shows that the distribution of achievement in the Catholic school sector was fairly evenly balanced. However this was not the case for the other two sectors. The government sector was more heavily weighted to the lower end of the ENTERs due to a large proportion of students with scores below 40, and the independent sector was skewed to the upper scores with more than 55 per cent of students gaining a score of 80 or more. The result is a vastly different distribution of post-school educational outcomes across the school sectors.

School Sector	ENTER by	10 point Ba	and					Total*
	0 to 39.95	40 to 49.95	50 to 59.95	60 to 69.95	70 to 79.95	80 to 89.95	90 to 99.95	
Government	4,600	2,545	2,752	2,914	2,854	2,615	2,464	20,744
% within School Sector	22.2	12.3	13.3	14.0	13.8	12.6	11.9	100
% within ENTER Band	74.1	63.4	57.1	52.3	46.6	40.2	34.4	51.3
Catholic	1,170	975	1,295	1,541	1,703	1,676	1,425	9,785
% within School Sector	12.0	10.0	13.2	15.7	17.4	17.1	14.6	100
% within ENTER Band	18.8	24.3	26.9	27.7	27.8	25.8	19.9	24.2
Independent	440	494	776	1,118	1,562	2,217	3,276	9,883
% within School Sector	4.5	5.0	7.9	11.3	15.8	22.4	33.1	100
% within ENTER Band	7.1	12.3	16.1	20.1	25.5	34.1	45.7	24.5
All School applicants	6,210	4,014	4,823	5,573	6,119	6,508	7,165	40,412
% within School Sector	15.4	9.9	11.9	13.8	15.1	16.1	17.7	100
% within ENTER Band	100	100	100	100	100	100	100	100

Table 4.6: ENTER by Ten-point band and school sector, Victoria, 2004

Source: VTAC 2004/05, unpublished

* 43 government, 1 Catholic and 23 independent school applicants did not receive an ENTER in 2004

Tertiary application and preferences

As explained above, in most instances, tertiary education institutions use a student's ENTER to determine whether to offer them a place in a course for which they have applied. Therefore the level of achievement measured by the ENTER is an important predictor of post-school outcomes.

The application process requires students to submit a list of their preferred courses in order of preference to the Victorian Tertiary Admissions Centre (VTAC). Students make an initial application before they complete their exams and then have the opportunity to change their preferences once they have received their ENTER. These applications are then sent to the relevant tertiary institutions which review the VCE achievement of the applicants and offer places in courses accordingly. Offers are made to applicants in a process of rounds; most offers are made in the first round, but subsequent offers may be made in later rounds depending on the take-up of offers in the initial round. Over the course of the rounds of offers (there are usually at least three rounds) an applicant may receive multiple offers (VTAC, 2002), however they may only accept one. On the other hand, an applicant may receive no offers at all.

It is interesting to note the differences in the courses listed as first preference by VTAC applicants. There are many factors that influence the first choice preference of each tertiary applicant. Some argue that by looking at the first preference applications one can gain a clear indication of the aspirations of students (Kosky, 2002b; Teese, 2002). This argument assumes that if a student puts a TAFE course as first preference then that must have been what he/she aspired to do at the end of year 12. However, this view fails to take into account that students do not lodge their final preferences until after they have received their ENTER. Therefore, students who may have aspired to university but discovered that their ENTER was too low to gain an offer to their preferred course may instead choose a TAFE course so as to ensure some opportunity for post-school education. According to VTAC, almost 60 per cent of year 12 applicants change their original course preferences after they have received their ENTER result (Rout, 2005).

Table 4.7 shows that a larger proportion of independent school VTAC applicants (88.1 per cent) listed a university course as their first preference than did applicants from the Catholic (77.5 per cent) and government (70.6 per cent) school sectors in 2004. Government school students were more likely than those from other sectors to list a TAFE course as their first preference, while first preference applications to private providers were similar across the three school sectors. Despite the fact that first preference application rates to university probably under-emphasise university ambition, it is important to note that regardless of school sector, the vast majority of students who applied to VTAC put a university course as their first preference.

The high proportion of first preferences for university places in the independent sector closely reflects the high ENTER scores achieved in this sector. Therefore, rather than reflecting of aspiration, the first preference data more accurately reflects year 12 academic achievement and ENTER scores.

School Sector		Tertiary sector	r of first pre	eference	Total
		University	TAFE	Private Provider	
Government	Count	14,674	5,574	539	20,787
	% within School Sector	70.6	26.8	2.6	100.0
Catholic	Count	7,587	1,935	264	9,786
	% within School Sector	77.5	19.8	2.7	100.0
Independent	Count	8,728	963	215	9,906
	% within School Sector	88.1	9.7	2.2	100.0
All school applicants	Count	30,989	8,472	1,018	40,479
	% within School Sector	76.6	20.9	2.5	100.0

 Table 4.7: Tertiary sector of first preference by school sector of VTAC applicants, Victoria 2004

Source: VTAC 2004/05, unpublished

Tertiary offers

The data in Table 4.8 provide an analysis of offers to VCE students in 2004 regardless of the preference number or round in which they gained the offer. In the case of those students who received more than one offer, the offer that was listed as the highest preference on their application has been used.

The data indicate that a high ENTER is crucial to gaining a university place. Nearly 60 per cent of all university offers made to the 2004 year 12 cohort were to students with an ENTER of 80 or greater, and close to 80 per cent of offers to universities went to students achieving an ENTER of 70 or more. At the other end of the spectrum, only 6.7 per cent of university offers went to students with an ENTER score below 60.

The tertiary education option for most of those with ENTER scores below 70 and virtually all those scoring below 60 is most likely to be TAFE or a private provider. The vast majority (93.2 per cent) of offers to Victorian TAFE institutes were made to students with ENTERs below 70. In the lower ENTER brackets, 34.3 per cent of TAFE offers were made to students with scores between 0 and 39.95 and 78.4 per cent of all TAFE offers were made to those with a score below 60. Private providers, who make up a small portion of the tertiary education market, also catered predominantly for students with sub-70 ENTER scores (Table 4.8).

Tertiary sector	ENTER b	y 10 point	Band					Total*
	0 to	40 to	50 to	60 to	70 to	80 to	90 to	
Liniversity	39.95	49.95	59.95	69.95	79.95	89.95	99.95	
oniversity								
Count	112	223	1,246	3,223	5,378	6,252	7,084	23,518
% within Tertiary sector	0.5	0.9	5.3	13.7	22.9	26.6	30.1	100.0
TAFE								
Count	3,607	2,314	2,322	1,562	507	174	42	10,528
% within Tertiary sector	34.3	22.0	22.1	14.8	4.8	1.7	0.4	100.0
Private provider								
Count	489	356	449	357	154	55	29	1,889
% within Tertiary sector	25.9	18.8	23.8	18.9	8.2	2.9	1.5	100.0
All VTAC courses								
Count	4,208	2,893	4,017	5,142	6,039	6,481	7,155	35,935
% within Tertiary sector	11.7	8.1	11.2	14.3	16.8	18.0	19.9	100.0

Table 4.8: Tertiary offers by ENTER band and tertiary sector, year 12 VTAC applicants, Victoria, 2004

* 36 year 12 VTAC applicants who received an offer did not have an ENTER

Source: VTAC 2004/05, unpublished

Unsurprisingly, considering the analysis of scores above, independent school students were more likely to receive a university offer than those in the other school sectors. Table 4.9 shows that 76.7 per cent of independent school applicants in 2004 received a university offer. Less than half of applicants from the government school sector gained an offer for a university place, a consequence of the low overall ENTERs achieved in the sector. University offers were made to 58.8 per cent of those who studied in Catholic schools.

TAFE offers were distributed in the reverse order among the school sectors. Government schools had the highest proportion of applicants gaining a TAFE offer, 32 per cent, compared with 27 per cent of Catholic school applicants and only 13 per cent of VTAC applicants from independent schools (Table 4.9). There was relatively little variation across the school sectors in offers to courses run by private providers, which were offered to 4.7 per cent of applicants.

School Sector		University	TAFE	Private Provider	No Offer	Total
Government	Count	10,178	6,647	952	3,010	20,787
	% within School sector	49.0	32.0	4.6	14.5	100.0
Catholic	Count	5,755	2,641	497	893	9,786
	% within School sector	58.8	27.0	5.1	9.1	100.0
Independent	Count	7,598	1,257	446	605	9,906
	% within School sector	76.7	12.7	4.5	6.1	100.0
All school applicants	Count	23,531	10,545	1,895	4,508	40,479
	% within School sector	58.1	26.1	4.7	11.1	100.0

Table 4.9: VTAC offers by tertiary and school sector, Victoria, 2004

Source: VTAC 2004/05, unpublished

As shown in Table 4.9, 4,508 students did not receive an offer despite applying for a tertiary course. A much greater proportion of students from the government sector were in this category (14.5 per cent) compared to those from the independent schools (6.1 per cent) and Catholic sector (9.1 per cent). Once again this is likely to reflect the relatively low ENTER scores gained by students in the government sector.

When similar figures are presented in a different way (this time examining the market share of year 12 enrolments, VTAC applications and tertiary offers), the disproportionate share of university offers among independent school applicants is highlighted (Table 4.10). While 24.5 per cent of all applicants were from the independent sector, 32.3 per cent of all university offers went to students from this sector. The proportion of university offers to the Catholic sector mirrored its size in relation to all applicants (i.e. 24.2 per cent of all applicants were from Catholic schools and 24.5 per cent of university offers were to Catholic students). However, government school students accounted for 51.4 per cent of all applicants, yet made up 43.3 per cent of all university offers.

Government school students gained the largest share of TAFE offers (63 per cent of all TAFE offers were to government school students). Independent school students gained only 11.9 per cent of TAFE offers, while the Catholic sector once again had a share of TAFE offers proportionate to its size (Table 4.10). The government sector also had a very large share of students who failed to receive any tertiary offer through VTAC.

School sector	Total Applicants	% Share of applicants	% Share of University offers	% Share of TAFE offers	% Share of Applicants receiving no offer
Government	20,787	51.4	43.3	63.0	66.8
Catholic	9,786	24.2	24.5	25.0	19.8
Independent	9,906	24.5	32.3	11.9	13.4
Total	40,479	100.0	100.0	100.0	100.0
Number of students		40,479	23,531	10,545	4,508

Table 4.10: Share of VTAC offers between school and tertiary sectors, year 12 VTAC applicants, 2004

Source: VTAC 2004/05, unpublished

These figures highlight the disadvantaged position of many government school students in terms of accessing university. The independent school sector held a large share of the university places offered to year 12 applicants in 2004 relative to its size. However, given the gap between ENTERs achieved by students in the independent and government sectors, this difference in university access is unsurprising. In 2004, a student's chance of gaining a university offer was much lower in the government sector than in either the Catholic or independent sectors. This suggests serious impediments to upward social mobility for a large number of Victorian year 12 completers and potentially dire consequences for government schools in Melbourne in terms of maintaining enrolments and functioning as a realistic option for those with university ambitions.

University offers by institution

The ENTER required for individual tertiary courses is generally dictated by demand for them. Therefore, in most cases the more 'prestigious' the institution or course, the higher the ENTER scores required for entry. This is especially the case in the university sector.

As shown in Table 4.8, universities take the bulk of high-performing students in each year 12 cohort. However, the entrance requirements differ between individual universities. Table 4.11 shows the distribution of offers by ENTER band for the largest metropolitan universities by campus, all metropolitan campuses of Victoria University in aggregate and all metropolitan campuses of Swinburne University in aggregate⁵. The table shows that more than three quarters (75.1 per cent) of offers to the University of Melbourne's Parkville campus went to

⁵ Victoria University campuses were aggregated, as were Swinburne campuses for this purpose because both universities have a number of campuses too small for inclusion in this analysis, but which on aggregate provide an important insight into the nature of university offers and enrolments in Melbourne.

students achieving an ENTER score of 90 or more. This figure was also high for Monash University's Clayton campus (58.3 per cent). Entry scores required for an offer at other university campuses varied, with Victoria University having the lowest proportion of offers to high performers at 3.6 per cent of all offers in the 90-plus ENTER bracket.

Of those who received an offer to a metropolitan university and achieved an ENTER of 90 or more, 50.8 per cent were given an offer by the University of Melbourne (Table 4.11). Monash University's Clayton campus was the only other significant provider to this cohort, making 22.3 per cent of all offers by metropolitan universities to 90-plus achievers.

The evidence in Table 4.11 suggests that gaining an offer to either of these two campuses or to Monash University's Caulfield campus with an ENTER score less than 70 was a virtual impossibility for 2004 VTAC applicants. No offers to Monash University Caulfield were made to those with sub-70 ENTERs, while only 0.8 per cent of offers to the Clayton campus and 0.5 per cent of the University of Melbourne's offers went to those with ENTERs lower than 70.

Below this upper echelon, some of the other large campuses in Melbourne accepted students with slightly lower ENTER scores. The bulk of the La Trobe Bundoora offers were in the 70 to 89.95 range, however, 13 per cent of offers did go to students scoring between 60 and 69.95 and a handful (3.6 per cent) were offered to students with a score below 60. The RMIT City campus also catered mainly to those scoring between 70 and 89.95, but 13.8 per cent of offers went to students in the 60 to 69.95 range and 8.6 per cent were for scores below 60. Swinburne University offered nearly 25 per cent of places to those with an ENTER between 60 and 69.95 and a further 7.6 per cent to those sub-60 ENTERs (Table 4.11).

The metropolitan university most accessible to students with lower ENTER scores was Victoria University; 67.5 per cent of offers there were for scores between 60 and 79.95, and 16 per cent of offers went to those with ENTERs under 60.

Selected universities and								Total
campuses	ENTER	by 10 poir	nt Band	00.1-	70 (-	00 /-	00.4-	
	0 to 39.95	40 to 49.95	50 to 59.95	60 to 69.95	70 to 79.95	80 to 89.95	90 to 99.95	
Deakin University								
Burwood	1	0	26	304	792	745	295	2,163
% within Campus	0.0	0.0	1.2	14.1	36.6	34.4	13.6	100.0
% within ENTER band	1.0	0.0	5.3	16.0	18.1	13.2	4.4	11.1
La Trobe University								
Bundoora	0	0	73	262	637	649	393	2,014
% within Campus	0.0	0.0	3.6	13.0	31.6	32.2	19.5	100.0
% within ENTER band	0.0	0.0	14.7	13.8	14.5	11.5	5.8	10.4
Monash University								
Caulfield	0	0	0	0	142	653	184	979
% within Campus	0.0	0.0	0.0	0.0	14.5	66.7	18.8	100.0
% within ENTER band	0.0	0.0	0.0	0.0	3.2	11.6	2.7	5.0
Monash University								
Clayton	0	0	1	19	264	797	1,509	2,590
% within Campus	0.0	0.0	0.0	0.7	10.2	30.8	58.3	100.0
% within ENTER band	0.0	0.0	0.2	1.0	6.0	14.2	22.3	13.3
RMIT University								
City	46	39	96	290	612	663	359	2,105
% within Campus	2.2	1.9	4.6	13.8	29.1	31.5	17.1	100.0
% within ENTER band	45.1	26.5	19.4	15.3	14.0	11.8	5.3	10.8
Swinburne University of Te	chnology							
All Campuses	0	2	114	377	449	431	147	1,520
% within Campuses	0.0	0.1	7.5	24.8	29.5	28.4	9.7	100.0
% within ENTER band	0.0	1.4	23.0	19.9	10.2	7.7	2.2	7.8
University of Melbourne								
Parkville	0	1	1	19	202	916	3,429	4,568
% within Campus	0.0	0.0	0.0	0.4	4.4	20.1	75.1	100.0
% within ENTER band	0.0	0.7	0.2	1.0	4.6	16.3	50.8	23.5
Victoria University								
All Campuses	32	65	119	355	558	175	48	1,352
% within Campuses	2.4	4.8	8.8	26.3	41.3	12.9	3.6	100.0
% within ENTER band	31.4	44.2	24.0	18.7	12.7	3.1	0.7	7.0
All Metropolitan University	campuses	i						
	102	147	495	1,899	4,386	5,627	6,754	19,410
% Across Melbourne	0.5	0.8	2.6	9.8	22.6	29.0	34.8	100.0
% within ENTER band	100	100	100	100	100	100	100	100

Table 4.11: Metropolitan university offers by campus and ENTER band, year 12 VTAC applicants, Victoria, 2004

Source: VTAC 2004/05, unpublished

Given that more than 60 per cent of government school students had an ENTER below 70, many of these students whose ambition was to attend university had a very limited number of options in terms of university enrolment in Melbourne. On the other hand, the university options in Melbourne were more plentiful for the majority of independent school students, because 55 per cent of them achieved an ENTER of 80 or higher.

The academic dominance of the independent school sector is further verified by Table 4.12, which shows that students from the independent school sector gained a large proportion of all offers to Melbourne's most prestigious universities. Nearly 50 per cent of all offers to the University of Melbourne went to independent school students, yet independent students made up only 24.5 per cent of all applicants (Table 4.10). This figure demonstrates the dominance of the independent sector in competition for the most sought after tertiary institutions.

Table 4.12 also shows that the large suburban Monash campuses at Clayton and Caulfield made more offers to independent school students than to those from the government or Catholic sectors. Other metropolitan campuses and universities such as La Trobe University's Bundoora campus, Swinburne and Victoria University had offer distributions more reflective of the overall school sector population applying for tertiary study at the end of 2004.

Selected universities and	School Sector			Total
campuses	Government	Catholic	Independent	
Deakin University				
Burwood/Melbourne	917	569	677	2,163
% within Campus	42.4	26.3	31.3	100
La Trobe University				
Bundoora	895	627	493	2,015
% within Campus	44.4	31.1	24.5	100
Monash University				
Caulfield	338	196	445	979
% within Campus	34.5	20.0	45.5	100
Monash University				
Clayton	975	535	1,081	2,591
% within Campus	37.6	20.6	41.7	100
RMIT University				
City	907	500	700	2,107
% within Campus	43.0	23.7	33.2	100
Swinburne University of Technology	y			
All Campuses	679	404	441	1,524
% within Campuses	44.6	26.5	28.9	100
University of Melbourne				
Parkville	1,589	751	2,228	4,568
% within Campus	34.8	16.4	48.8	100
Victoria University				
All Campuses	693	417	243	1,353
% within Campuses	51.2	30.8	18.0	100
All Metropolitan University campuse	es			
Total	7,903	4,661	6,857	19,421
% Across Melbourne	40.7	24.0	35.3	100

Table 4.12: Metropolitan university offers by campus and school sector of applicant, year 12, Victoria2004

Source: VTAC 2004/05, unpublished

However, university places are not restricted to metropolitan Melbourne; there are a number of regional campuses throughout Victoria. Table 4.13 shows that Victoria's large regional university campuses are important for many students because they offer options for those with lower ENTER scores who wish to undertake a university degree. Across all regional Victorian university campuses, 21 per cent of offers were made to students with ENTERs below 60, and 53.7 per cent went to those with an ENTER under 70. More than half (55 per cent) of all offers at Deakin University's Warrnambool campus went to students scoring between 50 and 59.95 and a further 32.2 per cent went to those in the 60 to 69.95 band (Table

4.13). La Trobe's campuses at Albury-Wodonga and Bendigo also provide a significant proportion of places to those in with ENTERs of 50 to 59.95.

These campuses open make university entrance possible for a wider spectrum of students. However, the majority of places in these universities are taken by regional-based students. This means that there is little relief for the large cohort of government school students in metropolitan Melbourne, who are left with few realistic options for entry to university following year 12. The problems faced by these metropolitan government school students are analysed in detail in Chapter 6.

 Table 4.13: Regional Victorian university offers by campus and ENTER band, year 12 VTAC applicants, Victoria, 2004

Selected Universities and	ENTER	by 10 poir	nt Band					Total
campuses	0 to 39.95	40 to 49.95	50 to 59.95	60 to 69.95	70 to 79.95	80 to 89.95	90 to 99.95	
Deakin University								
Geelong & Waterfront	1	0	60	332	341	248	108	1,090
% within Campus	0.1	0.0	5.5	30.5	31.3	22.8	9.9	100.0
Deakin University								
Warrnambool	0	2	203	119	29	13	3	369
% within Campus	0.0	0.5	55.0	32.2	7.9	3.5	0.8	100.0
La Trobe University								
Albury-Wodonga	0	6	34	63	26	5	3	137
% within Campus	0.0	4.4	24.8	46.0	19.0	3.6	2.2	100.0
La Trobe University								
Bendigo		10	170	259	145	110	72	766
% within Campus	0.0	1.3	22.2	33.8	18.9	14.4	9.4	100.0
Monash University								
Gippsland	0	0	10	35	115	41	18	219
% within Campus	0.0	0.0	4.6	16.0	52.5	18.7	8.2	100.0
University of Ballarat								
All campuses	0	8	172	283	208	98	32	801
% within Campus	0.0	1.0	21.5	35.3	26.0	12.2	4.0	100.0
All Regional Victorian Campuse	s 7	72	746	1289	972	584	264	3934
% Across Regional Vic	0.2	1.8	19.0	32.8	24.7	14.8	6.7	100.0

Source: VTAC 2004/05, unpublished

The main regional university campuses in Victoria offered a larger proportion of places to government school students than did metropolitan universities (56 per cent of all regional

campus offers compared with 40.7 per cent of all metropolitan offers). This likely to result from two factors. Firstly, there is a larger proportion of students in the government school sector in regional Victoria (Table 4.2) (and regional students are more likely to apply to a regional Victorian university campus). Secondly, the lower entrance requirements of these campuses mean that they are more academically accessible to students from the government sector.

The opposite is the case in the independent school sector. Overall only 16.8 per cent of offers to regional universities are made to independent school students (Table 4.14). The reasons for this outcome are the same in reverse. Firstly, there are fewer independent school students in regional Victoria and secondly, the high academic results of independent school students mean they can confidently compete for metropolitan university places and therefore do not need to apply for the regional campuses with their lower scoring entry options.

Selected Universities and	School Sector			Total
campuses	Government	Catholic	Independent	
Deakin University				
Geelong & Waterfront	510	327	253	1,090
% within Campus	46.8	30.0	23.2	100.0
Deakin University				
Warrnambool	195	120	55	370
% within Campus	52.7	32.4	14.9	100.0
La Trobe University				
Albury-Wodonga	82	39	16	137
% within Campus	59.9	28.5	11.7	100.0
La Trobe University				
Bendigo	534	152	81	767
% within Campus	69.6	19.8	10.6	100.0
Monash University				
Gippsland	124	47	48	219
% within Campus	56.6	21.5	21.9	100.0
University of Ballarat				
All campuses	460	229	112	801
% within Campus	57.4	28.6	14.0	100.0
All Regional Victorian Campuses	2205	1070	661	3,936
% Across Regional Vic	56.0	27.2	16.8	100.0

Table 4.14: Regional Victorian university offers by campus and school sector of applicant, year 12,Victoria 2004

Source: VTAC 2004/05, unpublished

The hierarchy of academic outcomes amongst the school sectors is also reflected in the types of courses that students are offered. Table 4.15 shows the proportion of offers between the school sectors to selected university courses for a number of individual institutions. The link between the VTAC 'clearly-in' score (which is the published ENTER required for guaranteed entry to the course) and the proportion of government school students who gain an offer is apparent.

In the case of Arts courses at the largest universities, independent school students are offered a much greater proportion of places than those from the government or Catholic sectors at the two most sought-after university campuses (Melbourne Parkville and Monash Clayton), yet the proportion of government and Catholic school students offered a place in the Arts course at La Trobe's Bundoora campus are much higher than the corresponding proportion of independent school students. As the right hand column in Table 4.15 indicates, the 'clearly in' ENTER score for Arts at Bundoora was significantly lower than at Monash or Melbourne universities. A similar pattern exists in the offers for Science degrees at these three universities although, across the science courses, the rate of independent school student offers is lower than for Arts, as are the ENTER scores required for these courses.

In the finance-related courses, a much larger proportion of government school students gained an offer to the Accounting course at Victoria University, which had a 'clearly in' score of 69.95, than were offered a place in a Commerce degree at either the University of Melbourne or Monash, where the ENTER scores required were in the 90s.

Table 4.15 also shows that in the Law degrees at the University of Melbourne and Monash University (which required the highest ENTER scores of all courses), a large majority of the offers went to students from the independent school sector. At the University of Melbourne 65.1 per cent and at Monash Clayton 56.6 per cent of offers to law or combined law double degrees (eg. Arts/Law, Engineering/Law etc.) went to independent school students. By comparison, 22.6 per cent of offers to the University of Melbourne and 29.5 per cent of offers to Monash for these courses went to government school students. Offers to Medicine, which are based on an interview, but mostly offered only to those students with the very highest VCE marks, were also skewed in favour of the independent school sector.

University/Course	School Sector				VTAC
	Government	Catholic	Independent	Total	offer round 1 'clearly in' score
La Trobe University, Bundoora					
Arts	83	53	46	182	79.95
% across school sector	45.6	29.1	25.3	100.0	
Science	40	29	9	78	60.45
% across school sector	51.3	37.2	11.5	100.0	
Monash University, Clayton					
Arts	118	99	173	390	86.70
% across school sector	30.3	25.4	44.4	100.0	
Science	167	86	91	344	74.85
% across school sector	48.5	25.0	26.5	100.0	
Commerce	41	44	68	153	90.05
% across school sector	26.8	28.8	44.4	100.0	
Law or law double degree	49	23	94	166	99.00
% across school sector	29.5	13.9	56.6	100.0	
Medicine	33	14	67	114	Interview
% across school sector	28.9	12.3	58.8	100.0	
University of Melbourne					
Arts	242	144	313	699	89.50
% across school sector	34.6	20.6	44.8	100.0	
Science	205	117	189	511	80.50
% across school sector	40.1	22.9	37.0	100.0	
Commerce	109	60	140	309	93.40
% across school sector	35.3	19.4	45.3	100.0	
Law or law double degree	68	37	196	301	99.40
% across school sector	22.6	12.3	65.1	100.0	
Medicine	20	7	53	80	Interview
% across school sector	25.0	8.8	66.3	100.0	
Victoria University, Footscray Parl	ĸ				
Accounting	26	13	8	47	69.95
% across school sector	55.3	27.7	17.0	100.0	

Table 4.15: University offers by selected courses and institutions and by school sector, year 12 VTAC applicants, 2004

Source: VTAC 2004/05, unpublished

Tertiary Enrolments

Tertiary enrolment figures displayed in Table 4.16 show that regardless of school sector, the rate of enrolment by students who received a university offer was high. This is important because it indicates that despite the variation in academic achievement in year 12, the ambition to attend university does not differ between the school sectors once a student has

received an offer. Of the 58.1 per cent of applicants who gained a university offer following the completion of year 12 in 2004, 76.3 per cent were enrolled full time by April 2005, 13 per cent did not enrol or had withdrawn in the early part of the year, and 9.2 per cent deferred their offer (Table 4.16).

In relation to offers made by other tertiary sectors, government school students receiving a TAFE offer were more likely not to enrol or to withdraw their enrolment than students from the independent or Catholic sectors. The enrolment or non-enrolment rates were fairly similar across the school sectors for those receiving an offer from a private provider.

Crucially in the context of discussing the benefits of gaining a university offer, Table 4.16 shows a large difference in the rejection (withdrawal or non-enrolment) of offers between the tertiary sectors. Those gaining a university offer in 2004 were significantly more likely to accept the offer and continue further study than those gaining an offer from other tertiary providers. Thirteen per cent of students receiving a university offer did not enrol or withdrew their enrolment early in 2004. This figure for TAFE offered applicants was 36.3 per cent, and for those offered a place by a private provider, 58.3 per cent.

School/Tertiary	Enrolment Status (Count)			Total	Total Enrolment Status (%)				Total	
Sector	Full Time	Part Time	Deferred	Withdrawn or did not enrol	(Count)	Full Time	Part Time	Deferred	Withdrawn or did not enrol	(%)
Government										
University	7,700	125	888	1,465	10,178	75.7	1.2	8.7	14.4	100
TAFE	3,680	210	178	2,579	6,647	55.4	3.2	2.7	38.8	100
Private Provider	306	22	41	583	952	32.1	2.3	4.3	61.2	100
Total Offers	11,686	357	1,107	4,627	17,777	65.7	2.0	6.2	26.0	100
Catholic										
University	4,562	82	467	644	5,755	79.3	1.4	8.1	11.2	100
TAFE	1,607	82	83	869	2,641	60.8	3.1	3.1	32.9	100
Private Provider	171	12	25	289	497	34.4	2.4	5.0	58.1	100
Total Offers	6,340	176	575	1,802	8,893	71.3	2.0	6.5	20.3	100
Independent										
University	5,700	142	817	939	7,598	75.0	1.9	10.8	12.4	100
TAFE	752	36	92	377	1,257	59.8	2.9	7.3	30.0	100
Private Provider	195	3	15	233	446	43.7	0.7	3.4	52.2	100
Total Offers	6,647	181	924	1,549	9,301	71.5	1.9	9.9	16.7	100
All school sectors										
University	17,962	349	2,172	3,048	23,531	76.3	1.5	9.2	13.0	100
TAFE	6,039	328	353	3,825	10,545	57.3	3.1	3.3	36.3	100
Private Provider	672	37	81	1,105	1,895	35.5	2.0	4.3	58.3	100
Total Offers	24,673	714	2,606	7,978	35,971	68.6	2.0	7.2	22.2	100

Table 4.16: Enrolment status (by 1 Apri	l, 2005) of year 12 stud	dents receiving a VTAC	offer by school and
tertiary sector, 2004	-	_	-

Source: VTAC 2004/05, unpublished

A majority of those who rejected offers from TAFE institutes were from the government sector. Most of these students did not have the tertiary entrance score to gain an offer to university and therefore TAFE was their last real chance to secure an educational pathway immediately following year 12 completion. It appears that for many, this option was considered not good enough to take up. The lack of opportunity for these students relates back to their academic achievement in year 12 – when compared with those students in the independent school sector, very few were able to record high marks.

Conclusion – the 2004 year 12 cohort

The snapshot of 2004 comparing the achievements and outcomes of year 12 students reveals a sharp differentiation between the school sectors in Victoria. On all measures of academic achievement, the independent school sector appears to be far ahead of the other sectors. ENTER scores of graduates are well above the median for all students and independent school students are gaining access to a large number of university places, particularly in the high-status institutions and courses. In 2004, the competition for university places was dominated by the independent sector. That this dominance has a negative effect on the other school sectors – particularly government schools, which are well behind in the race for university and as the figures in Chapter 2 revealed, are losing enrolments to the independent sector.

Changing outcomes across the school sectors, 1996 to 2004

The snapshot detailing the achievement of the Victorian year 12 cohort in 2004 highlights the large gulf in outcomes across the school sectors. This section investigates the extent to which the situation changed in the nine years leading up to 2004. It uses VTAC data for every second year from 1996 to the 2004 cohort. The purpose of this analysis is to gauge whether the competition for university increased between the mid-1990s and 2004 and, if so, to record how this affected each school sector.

The data show that competition for university did increase considerably during this time. The extent to which this adversely affected the government school sector and the opportunity of its students to reach university is the main focus of the discussion.

Year 12 enrolments, VTAC applications, retention and transition

From 1996 to 2004 there was a steady increase in the number of year 12 enrolments in Victoria, from 48,246 in 1996 to 52,498 in 2004 (Table 4.17). This represented an 8.8 per cent growth in enrolments as at February in year 12. There was similar growth (8.3 per cent) in the number of VTAC applications by year 12 completers across this time series. All school sectors experienced increase in these two categories, however, as Table 4.17 shows, growth in independent school enrolments and VTAC applications far eclipsed growth in both other sectors. Independent school enrolments in year 12 grew by 28.8 per cent in the period between 1996 and 2004, compared with a modest increase of 2.9 per cent in government school enrolments.

As a result, the government school sector's share of year 12 enrolments dipped below 60 per cent (a 3.3 percentage point decrease). The independent school share of the year 12 market

grew by 3.2 percentage points, surpassing 20 per cent in 2004. The government school sector also experienced a decrease of three percentage points in its share of VTAC applicants. These figures continue the pattern set in the long term enrolment trends outlined in Chapter 2, indicating a trend within Victoria of increasing independent school enrolment. If this trend continues, the government school sector's share of year 12 VTAC enrolments will fall below 50 per cent by 2007.

	Year 12 (Fe	bruary Cens	sus)			
School sector	Count					
	1996	1998	2000	2002	2004	Growth 96 to 04 (%)
Government	29,451	29,169	29,039	30,717	30,312	2.9
Catholic	10,443	10,497	10,848	11,447	11,443	9.6
Independent	8,352	8,617	9,176	9,916	10,744	28.6
Total students	48,246	48,283	49,063	52,080	52,498	8.8
	Market shar 1996	re (%) 1998	2000	2002	2004	Percentage point change 96 to 04
Government	61.0	60.4	59.2	59.0	57.7	-3.3
Catholic	21.6	21.7	22.1	22.0	21.8	0.2
Independent	17.3	17.8	18.7	19.0	20.5	3.2
Total students	100.0	100.0	100.0	100.0	100.0	0.0
	VTAC appli	cants				
	Count					
	1996	1998	2000	2002	2004	Growth 96 to 04 (%)
Government	20,345	18,674	19 806	21 001	20 787	2.2
Catholic			10,000	21,001	20,707	2.2
	9,185	8,548	9,476	10,098	9,786	2.2 6.5
Independent	9,185 7,841	8,548 7,916	9,476 8,311	10,098 9,324	9,786 9,906	6.5 26.3
Independent Total students	9,185 7,841 37,371	8,548 7,916 35,138	9,476 8,311 37,593	10,098 9,324 41,223	9,786 9,906 40,479	6.5 26.3 8.3
Independent Total students	9,185 7,841 37,371 Market shar 1996	8,548 7,916 35,138 æ (%) 1998	9,476 8,311 37,593 2000	10,098 9,324 41,223 2002	9,786 9,906 40,479 2004	2.2 6.5 26.3 8.3 Percentage point change 96 to 04
Independent Total students Government	9,185 7,841 37,371 Market shar 1996 54.4	8,548 7,916 35,138 e (%) 1998 53.1	9,476 8,311 37,593 2000 52.7	21,801 10,098 9,324 41,223 2002 52.9	9,786 9,906 40,479 2004 51.4	2.2 6.5 26.3 8.3 Percentage point change 96 to 04 -3.1
Independent Total students Government Catholic	9,185 7,841 37,371 <i>Market shar</i> 1996 54.4 24.6	8,548 7,916 35,138 e (%) 1998 53.1 24.3	9,476 8,311 37,593 2000 52.7 25.2	21,801 10,098 9,324 41,223 2002 52.9 24.5	9,786 9,906 40,479 2004 51.4 24.2	2.2 6.5 26.3 8.3 Percentage point change 96 to 04 -3.1 -0.4
Independent Total students Government Catholic Independent	9,185 7,841 37,371 <i>Market shar</i> <i>1996</i> 54.4 24.6 21.0	8,548 7,916 35,138 e (%) 1998 53.1 24.3 22.5	9,476 8,311 37,593 2000 52.7 25.2 22.1	21,801 10,098 9,324 41,223 2002 52.9 24.5 22.6	9,786 9,906 40,479 2004 51.4 24.2 24.5	2.2 6.5 26.3 8.3 Percentage point change 96 to 04 -3.1 -0.4 3.5

Table 4.17: Year 12 enrolments and VTAC applications by school sector. Actual numbers and market share, 1996 to 2004, Victoria

Source: VTAC unpublished 1996 to 2004, DET Summary Statistics, 1996 to 2004

Retention rates across the three school sectors increased between 1996 and 2004, with all sectors recording significant gains. During this time, retention from year 10 to year 12 in Victoria increased from 82.4 per cent to 87.2 per cent. With such a significant number of young people remaining at school to the final year, it becomes increasingly important to provide post year 12 pathways that acknowledge the additional time spent in school and reward those who complete their final year.

With these increases in retention rates and subsequent increases in year 12 enrolments, the pool of VTAC applicants rose sharply, from 37,371 in 1996 to 40,497 by 2004. This is indicative of a well-educated society. But without similar increases in the number of tertiary places available during this time, competition has become more intense.

Year 12 academic achievement – indexed median ENTERs

As outlined earlier in this chapter, the figures for 2004 revealed a large gap in achievement between the school sectors. In order to chart the changes in ENTERs of students over time, an index has been created for the years 1996 to 2004. An index is necessary because the tertiary entrance scoring methodology has undergone numerous changes in its history. The first ranking method (then know as the Tertiary Entrance Rank or TER) was introduced in 1995. This method is tinkered with each year depending on the size of the student cohort and the overall study scores achieved in each VCE subject. The following simple formula has been used to calculate the index:

Index for median tertiary entrance $score = \frac{Median \ ENTER \ for \ school \ type}{Median \ ENTER \ for \ all \ Victorian \ Year 12 \ students}$

In accord with this index, a score of 1 is equal to the median score for all Year 12 students in the given year. Scores above 1 indicate that the median score was above the Victorian median, and scores below 1 represent an outcome below the state median.

The indexed median ENTERs for each school sector have been calculated for the years in the time series and are shown in Table 4.18. As the table shows, academic achievement (as measured by the ENTER) has been relatively consistent across the years of the data. Between 1996 and 2004, the Government sector has had scores of .89 or .90 (indicating that the median score for this sector was 10 to 11 per cent below the state median for each year in the time series). The Catholic sector remained at or slightly below the state median over the period, while the independent school sector dropped slightly between 1996 and 1998, but remained at least 20 per cent above the Victorian median throughout the period.

School sector	1996	1998	2000	2002	2004
Government	0.90	0.90	0.91	0.89	0.89
Catholic	1.00	0.99	1.00	1.00	1.00
Independent	1.23	1.20	1.21	1.21	1.20
Total	1.00	1.00	1.00	1.00	1.00

Table 4.18: Indexed median ENTERs by school sector, 1996 to 2004, Victoria

Source: VTAC unpublished 1996 to 2004

The academic strength of the independent school sector is apparent from the indexed scores presented in Table 4.18. The earlier snapshot of the 2004 outcomes, which highlighted the ENTER differentiation between the sectors, have been maintained (despite the increased share of enrolments). There is a consistent gap in the academic achievement levels across the sectors throughout the time series.

However, contrary to what may be expected, this data indicates minimal change in the achievement gap between the independent and government school sectors between 1996 and 2004. Table 4.18 illustrates a remarkable stability of performance by each sector over the period. It shows that the independent school sector's monopoly on high scores is not necessarily growing and that ENTER outcomes for government school students are not in serious decline.

Nevertheless, this does not necessarily mean that each sector's position in the competition for university places remained consistent over the time series. Of equal importance to the actual achievement levels of the school sectors is the level at which university admission criteria are set. If university entrance requirements are being set at a higher level, then failure to improve ENTER scores is likely to have a negative effect on the ability of students to access university.

The bottom row of figures in Table 4.19 shows that the median scores for entry to university in Victoria did increase between 1996 and 2004 (from 0.17 above the median to 0.20 above), making access to university more difficult. In the context of the median scores of the school sectors, outlined in Table 4.18, these increases have pushed the median government school ENTER further away from a university offer. Yet the increased requirements for university
entrance did not eclipse the median ENTER of independent school applicants, so access to university for independent school students remained attainable.

This increased competition for university (and the increased entrance scores) is an issue of supply and demand. As Table 4.19 shows, between 1996 and 2004 there was a considerable increase in the number of year 12 students in Victoria (8.8 per cent) and an equally large growth in the number of year 12 VTAC applicants (8.3 per cent). However, while the number of students steadily increased, the number of university places offered to year 12 applicants declined by 3.1 per cent. As demand out-paced supply, universities had to tighten their admissions criteria in order to select the 'best' students from the cohort of applicants. This resulted in increased academic competition for university places.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,					
	1996	1998	2000	2002	2004	Percentage change (index change)
Year 12 enrolments (Feb)	48,246	48,283	49,063	52,080	52,498	8.8
VTAC applicants	37,371	35,138	37,593	41,223	40,479	8.3
University offers	24,284	23,061	24,227	23,106	23,531	-3.1
Indexed median ENTER for uni offer	1.17	1.16	1.16	1.21	1.20	(0.03)

 Table 4.19: Enrolments, applicants and university offers and indexed median ENTER for university offers, year 12 students, 1996 to 2004, Victoria

Source: VTAC unpublished 1996 to 2004

The independent school sector's academic strength put it in a good position to absorb the increases in university entrance requirements. In fact, the data below show that as competition for university increased in the period between 1996 and 2004, the higher academic entrance scores of the independent school sector enabled it to secure a larger share of the university offers in Victoria.

Offers to Victorian universities

As Figure 4.1 shows, increasing competition affected each of the school sectors between 1996 and 2004, with all experiencing a decline in the proportion of university offers being made to VTAC applicants. In percentage point terms, this decline was relatively similar across the school sectors (a 7.5 percentage point decrease in each). However, this change was the most detrimental for students in the government school sector, where the proportion of

students gaining a university offer was already low in 1996. By 2004, less than half of all government school VTAC applicants gained a university offer.

The impact of increasing competition was also felt by students in the independent school sector. However, despite a decline from 84 per cent to 75 per cent in the proportion of applicants receiving a university offer, the difference in outcomes between the government and independent sectors remained substantial in 2004. In fact, during this time, the independent sector increased its market share of all university offers in Victoria (Table 4.20).





Source: VTAC unpublished 1996 to 2004

The result of the changes outlined above – the increasing competition for university, the shrinking proportion of government school students receiving a university offer and the increasing numbers of students enrolling in the independent school sector – was a steady reduction in the presence of government school students at Victorian universities. In the mid-1990s, the government school sector held a 47.5 per cent market share of university offers, compared to the independent school sector's 27.2 per cent share (Table 4.20). However, from the mid-1990s to 2004, the independent school sector share of university offers increased to 32.3 per cent, while the government sector experienced a steady decline to 43.3 per cent.

Table 4.20 shows that some of this differentiation in the share of university places between the school sectors can be attributed to the changing enrolment patterns across these sectors between 1996 and 2004 (the share of VTAC applicants from government schools declined from 54.4 per cent to 51.4 per cent during this time, while the independent sector grew from 21.0 per cent to 24.5 per cent). However, the share of government school students gaining a university offer declined at a faster rate than the share of applicants from this sector overall (-4.3 percentage point change in university offers compared with -3.1 percentage point change in share of applicants).

On the other side of the equation, the share of university offers gained by the independent school sector grew at a faster rate than the sector's share of all applicants (5.1 percentage point gain in university offer share, compared with 3.5 percentage point gain of all applicants) (Table 4.20).

Year	Share of VTAC applicants (%)			Total	
	Government	Catholic	Independent	Total	Count
1996	54.4	24.6	21.0	100	37,371
1998	53.1	24.3	22.5	100	35,138
2000	52.7	25.2	22.1	100	37,593
2002	52.9	24.5	22.6	100	41,223
2004	51.4	24.2	24.5	100	40,479
Change 1996 to 2004	-3.1	-0.4	3.5	0.0	3,108
	Sha	are of Univer	sity offers (%)		
1996	47.5	25.3	27.2	100	24,284
1998	47.5	25.0	27.5	100	23,061
2000	46.8	25.4	27.7	100	24,227
2002	44.6	24.9	30.4	100	23,106
2004	43.3	24.5	32.3	100	23,531
Change 1996 to 2004	-4.3	-0.9	5.1	0.0	-753

 Table 4.20: Shift share of VTAC applicants and university offers by school sector, Victorian year 12 applicants, 1996 to 2004

Source: VTAC unpublished 1996 to 2004

This analysis shows that while there was no widening of the achievement gap between the government and independent school sector in terms of the median ENTER, there was a growing disparity in the chances of a university place being offered to students from either sector. This was due to an increasing pool of VTAC applicants competing for a decreasing

number of university places, which pushed university entrance levels higher. This heightened competition favoured the high academically-performing independent school sector and was detrimental to the university aspirations of those in the lower-achieving government sector.

In only nine years, the government school sector's share of Victorian university places plummeted as the strength of the independent sector steadily grew. The consequences of these outcomes for the two sectors could not be more different. In the independent school sector they reaffirmed academic prowess, which continued to attract more middle class families and academically adept students. In the government sector, its reputation as a poor academic performer increased, despite the fact that its year 12 scores were not declining. As shown above, the government school sector's decreasing share of university places was the result of market forces rather than any decline in academic merit.

TAFE offers

While the number of university places available to Victorian year 12 completers declined, there was an increase in the number of TAFE places being offered to year 12 VTAC applicants. Between 1996 and 2004 TAFE offers increased from 8,892 to 10,545 – an 18.6 per cent growth. It could be argued that this increase in some ways helped to offset the effects of the decrease in university offers. Yet, as outlined in Chapter 1, the benefits of a university offer outweigh those of a TAFE offer, and therefore the increase in TAFE places does little to ease the increasingly competitive university entrance situation faced by year 12 completers in Victoria.

Nevertheless, the TAFE sector has become a more important option for government school students since the mid-1990s. Unsurprisingly, given the increase in TAFE offers over the period, Figure 4.2 shows growth in the proportion of applicants who received a TAFE offer across all school sectors between 1996 and 2004. The figure also illustrates the large difference between the government and the independent school sectors when it comes to gaining a TAFE offer. While only a small (albeit slowly growing) proportion of independent school students gained a TAFE offer in the years of the time series, almost one third of all government school applicants received an offer in this sector.



Figure 4.2: Proportion of year 12 VTAC applicants receiving a TAFE offer by school sector, 1996 to 2004

Source: VTAC unpublished 1996 to 2004

The number of TAFE places offered in Victoria grew faster than the number of VTAC applicants between 1996 and 2004. This increase complemented the decrease in university places during this time and provided government school students who missed out on a university place with the opportunity to pursue tertiary studies. However, despite the increase in TAFE offers, competition for university places continued to grow, confirming that it is by far the most sought-after pathway of year 12 completers in Victoria and that the TAFE sector was not considered an adequate alternative by many students.

Entry to Victorian universities

As shown in Table 4.19, university entrance scores across Victoria increased between 1996 and 2004, so that accessing a place became more difficult. However, between universities there are considerable differences in entry scores, subjects offered and geographical location of campuses in Melbourne. When the entrance requirements for individual campuses are examined, the impact of increasing competition on the university options for VTAC applicants becomes even more apparent. Table 4.21 displays an index of the median entrance score gained by year 12 applicants receiving an offer to the main universities and campuses in Melbourne, as well as the median scores for all metropolitan and regional universities.

In regional Victorian universities the median ENTER required for an offer increased from a score below the state median in 1996 (0.96), to be equal to the median in 2004 (1.00). These campuses remained academically accessible to a majority of VTAC applicants. However, accessibility even to these campuses slowly declined as the scores required crept towards the median achieved by all year 12 applicants. The median entrance scores required for metropolitan campuses remained much higher than regional campuses during this period, with a slight increase from 1.21 to 1.23 (Table 4.21).

However, among universities and campuses in Melbourne there were different patterns of change in entrance scores between 1996 and 2004. Some universities, such as Swinburne, RMIT city campus and Deakin Burwood campus experienced declines in the median ENTER gained by those receiving an offer, indicating that they became slightly more academically accessible during this time. The two universities with the highest entrance requirements, University of Melbourne and Monash University Clayton campus had no change to their entry requirements. Others such as Monash Caulfield campus, La Trobe university Bundoora and Victoria University all had increases in the entrance scores of those gaining an offer between 1996 and 2004.

Of all the figures in Table 4.21, those relating to La Trobe Bundoora campus and Victoria University are particularly significant in relation to charting the increasing competition for university places in Melbourne. Among the metropolitan universities, these universities were the most academically accessible to year 12 completers in 1996. In 1996, applicants gaining an offer to La Trobe Bundoora had a median ENTER of 1.06, slightly above the state median for all year 12 applicants. The median score of those gaining an offer to Victoria University was well below the state median (0.90). In terms of university access in Melbourne, these entry requirements gave many low-scoring students an opportunity to gain access to higher education. In the following years, the scores of students gaining an offer to these universities steadily increased. By 2004 students gaining an offer to Victoria University had a median score (1.03) above the state median and the scores of those receiving La Trobe offers increased to 1.16 by 2004 – 16 per cent above the state median.

The result of these increases was that university became less accessible to lower scoring students in Melbourne. Government school students were most affected by this change in entrance scores. The case of Victoria University clearly highlights this point. In 1996 the median government school ENTER (0.90) (Table 4.18) would have been enough to gain access to an average course at Victoria University. But by 2004, the median government school ENTER (0.89) (Table 4.18) was well below the average entry point for Victoria University (1.03) (Table 4.21).

University and Campus	1996	1998	2000	2002	2004	Change 96 to 04
Deakin University						
Burwood/Melb	1.16	1.18	1.14	1.20	1.15	-0.01
La Trobe University						
Bundoora	1.06	1.09	1.11	1.17	1.16	0.10
Monash University						
Caulfield	1.19	1.18	1.19	1.24	1.23	0.04
Monash University						
Clayton	1.32	1.30	1.29	1.34	1.32	0.00
RMIT University						
City	1.25	1.20	1.18	1.23	1.15	-0.10
Swinburne University						
All Campuses	1.15	1.13	1.15	1.14	1.11	-0.04
University of Melbourne						
Parkville	1.37	1.36	1.35	1.39	1.37	0.00
Victoria University						
All Campuses	0.90	0.91	0.94	1.03	1.03	0.13
All Metropolitan Campuses						
	1.21	1.20	1.20	1.25	1.23	0.02
All Regional Victorian Camp	uses					
	0.96	0.97	0.98	1.02	1.00	0.04
All VTAC Universities						
	1.17	1.16	1.16	1.21	1.20	0.03
Total number of VTAC appli	cants gaining	g a university	y offer			
	24,284	23,061	24,227	23,106	23,531	-753

Table 4.21: Indexed median ENTER of year 12 VTAC applicants gaining an offer to selected Victorian universities, 1996 to 2004

Source: VTAC unpublished 1996 to 2004

The growing challenge of gaining entry to university for students in the government school sector is further highlighted in Figure 4.3. The figure outlines the market share of offers to a number of university campuses in Melbourne among the government and independent school sectors between 1996 and 2004. It shows that the increasing competition for university places pushed government school applicants out of the most academically accessible universities and kept their presence at the most prestigious institutions relatively small.

At Victoria University and La Trobe Bundoora (the universities which not only had the lowest entrance scores in 1996, but also the largest proportion of offers to government school students), there was a steady decline in the government sector's market share over this period.

At the same time, the share of independent school students gaining an offer to either of these institutions rose proportionately to the government sector's decline.

Also of significance in Figure 4.3 is the difference in market share of the elite universities (in particular University of Melbourne and Monash University Clayton) between the two school sectors. The independent school sector's substantial dominance in entry to these two universities slightly increased over the period of analysis.

Figure 4.3 also puts these changes in share of offers to individual universities in the context of overall school enrolment patterns between the sectors. It shows that the decline in the government sector's share of all VTAC applicants did not fully explain the considerable decreases in market share of offers to some of the more academically accessible university campuses in Melbourne among government school applicants.





Source: VTAC unpublished 1996 to 2004

The substantial changes outlined in Figure 4.3 are further explained by the increase in the tertiary entrance scores required by applicants to gain an offer to many of these campuses between 1996 and 2004. As shown in Table 4.21, Victoria University and La Trobe (Bundoora) were the most academically accessible in terms of median entrance score achieved by students gaining an offer in 1996, but in the following years they also experienced the largest increases in entrance score requirements among Melbourne universities. As explained earlier, these changes effectively raised the bar for accessing university places above the academic achievement levels of a large proportion of government school students. Therefore, between 1996 and 2004, the share of government school students gaining an offer to Victoria University declined from 56 per cent to 51 per cent, and at La Trobe, Bundoora, from 53 per cent to 44 per cent.

Enrolments

The value of gaining a university offer, and the consequences for the further education of those who miss out were highlighted earlier in the 2004 snapshot which showed that those who gained an offer to university were much more likely to be enrolled in their course in the

year following the completion of secondary school than were those gaining an offer to TAFE or a private provider. Figure 4.4 shows that while patterns of take-up of university and TAFE offers changed slightly between 1996 and 2004, the greater likelihood of a university offer resulting in enrolment remained the same.

The difference between the rejection rates (those who withdraw their enrolment or do not enrol despite being offered a place) of those with an offer to university and those with an offer to TAFE remained substantial throughout the time series. Government school students were also slightly more likely to reject offers from either TAFE or universities than their peers in other school sectors throughout the period between 1996 and 2004.

Figure 4.4 also shows that between 2000 and 2004 there was a substantial decrease in the rejection of both university and TAFE offers across all school sectors. The proportion of university offers that were rejected by students, especially government school students, decreased substantially between 2000 and 2004. It appears that the increasing competition for university has discouraged those students fortunate enough to gain an offer from letting the opportunity pass them by. Rejection rates for TAFE offers also declined in all school sectors from 2000 onwards. Although this must be interpreted in the continuing context of high rates of rejection of TAFE offers, the trend of decreasing rejection in the TAFE sector may also indicate school applicants' increasing desire to accept any form of tertiary education in an atmosphere of intense competition.

In the case of government school students gaining a university offer, the decreasing rejection rate meant that less than 15 per cent of university offers were turned down in 2004, in comparison to nearly 40 per cent of TAFE offers. This decrease in rejection parallels the growing competition for university places outlined earlier in this chapter. It seems that this competition has also led to a growing understanding of the value of a university degree – once offers are received, students appear increasingly unwilling to squander the opportunity.



Figure 4.4: Proportion of offers resulting in withdrawal or non enrolment, year 12 VTAC applicants gaining offers to university or TAFE, 1996 to 2004, Victoria

Source: VTAC unpublished 1996 to 2004

Conclusion

This analysis of VTAC applications and outcomes of year 12 students in Victoria has highlighted the achievement gulf that exists between the school sectors, the consequences for university access. The snapshot of the 2004 year 12 cohort presented a detailed analysis of the situation in a selected year, while the time series analysis of the nine years leading to 2004 showed that there was little positive improvement in the academic outcomes of government school students in the decade leading to 2004. The VTAC data analysis also revealed that the main reason for the growing inequity between the school sectors has been an increase in competition for university in which the government school sector continues to fall behind.

These differences do not simply reflect the relative intelligence of the students that attend each school sector. While Marks et al. (2001) may be correct when they argue that merit is the most significant factor influencing year 12 achievement, the relatively small advantage of only five or ten ENTER points that may be attributable to other factors such as the environment of a school or the socioeconomic background of an individual student can still make a big difference as far as those with the ambition and ability to attend university are concerned. As the analysis has shown, the difference between an ENTER of 70 and one of 80 in 2004 was immense in terms of the university options realistically available to students at the end of year 12. The time series data showed that the advantage of a few points became increasingly crucial between 1996 and 2004, especially for those who achieved an ENTER close to the median score for all students. Dobson and Skuja (2005) have shown that, at least in the case of Monash University, those government school students who do gain a university offer achieve higher grades at university than their classmates who came from independent schools and scored 10 ENTER points higher than them in year 12. Similar findings have been reported in relation to the University of Western Australia by researchers in Perth (Birch & Miller, 2006; Win & Miller, 2005).

Yet in Victoria, it is the government school students who are increasingly unlikely to gain a university offer. If there are many capable students in the government sector, then why are they missing out on university offers? The next chapter outlines the hurdles faced by the government schools in competing with the independent sector to provide students with the opportunity to gain entrance to university.

5. Factors affecting outcomes across the school sectors

The analysis of Victorian year 12 tertiary education applicant outcomes between 1996 and 2004 revealed that in academic terms, students in the independent school sector generally performed better in their VCE than those in the government and Catholic sectors. Numerous other studies on Victorian schools recently reached this conclusion (including Birrell et al., 2002; Edwards et al., 2005; Marks, 2004; Marks et al., 2001; Teese, 2000; Teese & Polesel, 2003). However, Chapter 3 also showed that as entrance scores increased between 1996 and 2004, the academic advantages of the independent school sector grew and the prospects of students in the government sector diminished. As the data show, this was not the result of any notable change in the academic scores of school students from either sector; rather, it occurred primarily because the supply of university places did not keep up with demand.

The high ENTERs achieved by its students meant that the independent sector was able to thrive in these conditions of increasing competition. As shown, the achievement gap (as measured by median ENTER) between the government and independent school sectors is particularly large. The increased competition for university raised the bar on entry requirements to a level well above the government school median score, but still within reach of the median ENTERs of independent school students.

This chapter explores a number of factors that help to explain this differentiation in academic achievement. Different factors have varying levels of influence on the achievement scores of students (Marks et al., 2001). However, each factor can be important in the overall allocation of tertiary education places – the difference of just a few ENTER points can be crucial in determining the post-school pathways of students.

Via a comparative analysis focussed primarily on the government and independent school sectors, this chapter explores a number of these factors in order to highlight the competitive advantage held by the independent school sector and to provide some explanation for the much higher academic outcomes recorded in this sector. These factors cover a range of issues primarily related to government (state and federal) and school policies. Six key factors are explored in detail in this discussion: enrolment selection, student background, curriculum, government funding, school resources and autonomy. Table 5.1 outlines these six key differences between the independent and government sectors. It is important to note that these are generalised differences; there are of course examples within each sector that do not fit these generalisations. The remainder of the chapter examines these issues more thoroughly.

As university places become more difficult to obtain, every advantage that a school can gain is essential in increasing the chance of providing a university pathway for its students. In Victoria, the competition for university places is played out primarily within secondary schools and, as shown in the previous chapter, there are clear winners and losers among the school sectors when it comes to this pursuit. Essentially, the chapter shows that the 'inequalities in educational opportunity are "manufactured" in the day-to-day, taken-for-granted practices in schools' (Henry et al., 1988, p. 177). The discussion highlights the disadvantages experience in the government sector and shows that in many ways it is little wonder that the sector has fallen behind in the race for university places since the mid-1990s.

Factor	Independent Schools	Government Schools
Student Selection	Admission at the discretion of the school leads to: - Financial selection - Academic selection - Cultural selection	In the vast majority of schools, all eligible students (i.e. those to whom the school is nearest), must be accepted.
Socioeconomic status of student body (Census 2001)	 Occupation of parents: 59.1% managerial/professional, 10% unemployed or not in the labour force (NILF). Education of mother: 31.8% degree or higher, 26.5% no Year 12. Family income: 26.7% \$2,000 or more per week,19.9% less than \$800 per week. 	 Occupation of parents: 30.9% managerial/professional, 21% unemployed or NILF. Education of mother: 11.6% degree or higher, 55.5% no Year 12. Family income: 6.3% \$2,000 or more per week, 43.6% less than \$800 per week.
Curriculum focus	 Narrow focus on university entrance Traditional link to academic curriculum, gives power to influence the content of the curriculum prescribed by state governments 	 Focus of the comprehensive system is to provide a broad curriculum to all students However, as this changes, there has been an increasing focus on vocational subjects, meaning less emphasis on the academic curriculum
Government funding/Policy	 Significant funding increases stemming from new SES system introduced in 2001 and updated in following years. School fees are also charged for each student. Federal Government policy rhetoric is that more funding increases accessibility to these schools for all families'choice' 	 Recurrent funding has continued to increase, but at a much slower rate than the non-government sector. Federal Government policy promoting school choice paints the government sector as second-best
School resources	 Expenditure per student (2002): \$11,528 This money comes through government funding (37%), school fees (57%), and donations (6%) 	 Expenditure per student (2002): \$8,189 Government funding (97%), donations and fundraising (3%)
Autonomy	 Answerable to government on some benchmarks linked to funding allocation In comparison to other OECD countries, have a high level of government funding and a low level of regulation 	 Schools ultimately controlled by the state Department of Education and Training and also answerable on some benchmarks to the Federal Department of Education, Science and Training. All funding, student enrolment, teacher recruitment and capital works projects are controlled through the state department

Table 5.1: Key differences between Victorian independent and government secondary schools

Student selection

The term 'student selection' relates to the ability of a school to control its enrolment intake – in other words, whether a school is able to pick and choose its students and therefore control the characteristics of its student body.

There are three fully selective government schools in Victoria. Melbourne High School and Mac.Robertson Girls High School are both academically selective schools and the Victorian College of the Arts Secondary School selects students on the basis of talent in the performing arts. There are also a number of secondary schools in Victoria which offer academically selective places through the Selective Accelerated Learning Program (27 in 2006). Apart from these exceptions, which cater for a minority of students, Victorian government schools are obliged to provide a place for any student who wishes to enrol.

Of course, this open door policy has its limits – all schools have restrictions on the number of students they can enrol. Therefore, the general rule for entry to a government school in Victoria is that every student has automatic access to the nearest government school to their home. In some cases this rule never needs to be applied, but in cases where a school is oversubscribed, those students for whom the school is the closest are assured enrolment. There are grounds on which students can apply to be admitted to an oversubscribed school that is not their nearest, such as specific requests for a special program (eg. a program for children with a hearing impairment) or the concurrent enrolment of a sibling in the school, but overall, the geographical location of a student's home is the key factor in allocating enrolment in Victorian government schools.

The criteria used to determine enrolment in an independent school in Victoria are entirely different. The key criterion for entry into the independent sector is the ability to pay the school fees of a chosen school. However, other factors such as family background and academic achievement can also be significant. In addition, schools have no obligation to accept particular students, even if they meet the selection requirements. 'Private schools aren't obliged to take kids they don't have room for...they can decline to take the handicapped and they can expel kids with serious behaviour problems' (Gittins, 2004). This power to select or reject is a crucial factor influencing the differentiation of achievement across school sectors in Victoria.

Through their selective screening practices, independent schools are able to create a homogenous learning environment. They are able to control the intake of students, and therefore cater to the needs and values of a single 'organic community'. According to Musgrave (1990), schools which cater for a homogenous community and understand the aspirations of this community have a much greater chance of providing an avenue for their students to achieve successful educational outcomes.

The screening processes employed by many independent schools ensure that the 'organic community' they cater for is representative of the middle and upper classes. This guarantees that significant financial and cultural resources are concentrated in these schools. Financially, independent schools tap into the resources of their students by charging school fees of up to \$18,000 per year (in 2006). Further financial assistance is gained by many schools through designated 'building funds' and similar projects which attract tax deductions for contributors and therefore become a benefit not only to the schools but also to their benefactors, who include families of existing students, and former successful students (Teese, 1984). Culturally, an atmosphere of academic ambition and competition is fostered relatively easily in many independent schools because, as a result of the screening process, a large proportion of the students come from highly educated families who have high ambitions for their children. Research by James (2002) found that students with well educated parents are much more likely to be high achievers because they benefit from their parents' knowledge of the education system.

Independent schools use selection methods to ensure that their student body is academically adept. This is done in two ways; firstly, through the use of scholarships, and secondly, by shedding low academic achievers. While the majority of independent schools are not strictly academically selective, through targeted scholarships, they are able to attract a number of academically gifted students who would otherwise not have had the resources to enrol in such schools. Government and Catholic schools in Victoria have complained about the often aggressive recruitment tactics of some independent schools which ultimately starve their schools of their most talented students by offering lucrative scholarships (Green & Tomazin, 2004).

Extreme examples of student poaching in Melbourne were documented in mid-2006 in relation to the recruitment drive of Haileybury College, a large independent boy's school which was in the process of establishing a new senior girls' school. In this case, 200 scholarships were offered in one year to the best and brightest students, luring dozens of students from a single government school nearby (Bachelard, 2006). *The Age* newspaper articulated the problem faced by the government school sector: 'The difficulty of sustaining an esteemed public education system is exacerbated when well-endowed colleges offer talented children scholarships to leave schools where they are already doing well, on the ill-defined promise of a better future' (Editorial, 2006). The head of the Australian Secondary Principals Association highlighted the frustration felt by government high schools in relation to this issue: 'They (private schools) just want to buy a ready-made product and then claim the credit. It's abhorrent and it hurts' (Haywood, 2006).

'Dumping' students who do not meet a certain academic level is also practiced (but not so often admitted) by schools in the private sector. In a newspaper article in 2004, a principal at a high academically achieving independent school in Sydney offered no apologies for his schools' practice of refusing to let poor-performing year 10 students continue to year 11 (Doherty, 2004b). Those students who are rejected by these schools are inevitable picked up by a government or Catholic school. In a separate case, an incensed former government school admissions officer expressed her irritation in a letter to *The Age*, claiming that 'private schools sent us their halt and lame, but not their academically able. In years 9 and 10 we were often sent students who, it was euphemistically said, "needed a new start"; students who were challenging authority or struggling academically' (Carolan, 2004).

These practices enhance the academic dominance of the independent sector and adversely affect other schools, especially those in the government sector where the admissions policies are almost the opposite. According to an aggravated government school teacher, 'directives are in place to prevent schools expelling students who misbehave by assaulting others or supplying drugs'; government schools are seen now as a 'one-stop shop...which is a holding pool for those needing assistance from any and all other welfare agencies. Classrooms are often swamped by student needs, which draw attention away from the core curriculum' (Digby, 2002). As Teese observes: the ability of independent schools to 'weaken other schools through predatory recruitment and selective dumping practices...[and] their success in abolishing failure...[ensures that] almost all of their students receive an offer of a place in university' at the end of year 12 (2000, p. 211).

This success then becomes an attraction for the parents of students with academic talent and ambition. Creating an academic environment through the practice of selection helps independent schools ensure that their students are able to compete successfully for university places. The other sectors are left to teach the remaining students and compete for the remaining university places.

Socioeconomic background

Through their selection practices, independent schools have access to a greater proportion of students who come from high socioeconomic backgrounds. The benefits of high socioeconomic status to overall educational outcomes in Australia have been documented by many (including Birrell et al., 2002; R. W. Connell et al., 1982; Edwards et al., 2005; Germov, 2001; Hunt, 1975; James, 2002; Lamb, Rumberger, Jesson, & Teese, 2004; Marginson, 2002; Musgrave, 1990; Pargetter et al., 1998; Rothman & McMillan, 2003; Sheehan, 2004; Teese & Polesel, 2003; Welch, 1997). Therefore the superior academic achievement of the independent sector is hardly surprising. But how large are the socioeconomic differences between the two sectors in Victoria?

Data from the 2001 Australian Census of Population and Housing show that among families with secondary school students in Victoria, those whose children went to independent schools were better off than government school families according to three key measures of socioeconomic status: occupation, education qualifications and income.

Table 5.2 displays the proportion of Victorian secondary school students from each school sector by the main occupation group of their father (or mother if father not present). In the top two occupation groups (managers and administrators, and professionals and associate professionals), the proportion of independent school students is high in comparison with the state average and the other two sectors. Nearly 60 per cent of all independent secondary school students had fathers (or mothers) in one of these top occupation groupings, almost twice the proportion of students in the government school sector.

On the other hand, students from the government and Catholic school sectors were much more likely than those from independent schools to have parents in trades, clerical and low-skilled occupations. In addition, more than 20 per cent of government school students came from families where the father (or mother if no father was present) was not in an occupation category at all, meaning they were either unemployed or not in the labour force (NILF). This proportion was more than twice that of students enrolled in the independent sector.

Occupation	Government (%)	Catholic (%)	Independent (%)	Total (%)	Count
Manager and Administrator	10.1	14.3	19.7	12.7	36,753
Profess. and Assoc. Professional	20.8	28.1	39.4	25.7	74,276
Tradesperson	13.9	14.3	7.0	12.8	36,944
Adv. Intermed. and Element. Clerical, Sales Serv	12.9	13.0	8.8	12.2	35,317
Intermed. Prod. & Transp, Labor. & Related Wrkrs	17.6	13.8	5.5	14.7	42,521
Inadequately desc. and Not Stated	1.4	1.5	1.3	1.4	4,108
Occupation not applicable (unemployed, NILF etc)	21.0	12.2	10.0	17.1	49,563
No parent present/no information available	2.3	2.8	8.3	3.5	10,032
Total percentage	100	100	100	100	289,514
Total Count	175,468	64,240	49,806	289,514	

 Table 5.2: Occupation of father (or mother if no father present) of Victorian secondary school students, by school sector, 2001

Source: Australian Census of Population and Housing 2001, customised matrix

Evaluation of the educational qualifications of the mother of Victorian secondary school students also shows the socioeconomic advantage of the independent school sector (Table 5.3). Independent school students were almost three times more likely than government school students to have a mother with a degree qualification or higher. At the same time, more than half of the government school student population

in Victoria had a mother who had not completed Year 12. As highlighted by James (2002), familiarity with the tertiary education system is very important in providing students with the ambition and motivation to attend university. Those with no family history of university attendance face a much larger challenge than those for whom university enrolment is considered a normal part of life.

Highest Educational qualification of female parent	Government (%)	Catholic (%)	Independent (%)	Total (%)	Count
Degree or higher	11.6	16.6	31.8	16.2	46,822
Other Cert/Diploma, or yr 12	26.7	32.0	30.9	28.6	82,707
Not completed yr 12	55.5	46.0	26.5	48.4	140,042
Not applicable/no information	6.3	5.5	10.8	6.9	19,943
Total	100	100	100	100	289,514
Count	175,468	64,240	49,806	289,514	

Table 5.3: Highest educational qualification of mother of Victorian secondary school students, by school sector, 2001

Source: Australian Census of Population and Housing 2001, customised matrix

Parental weekly income figures from the 2001 Census show that students enrolled at schools in the independent sector were also wealthier than their peers in the other education sectors (Table 5.4). More than a quarter (26.7 per cent) of independent secondary school students came from families with a weekly income in excess of \$2,000. The corresponding proportion for the government sector was 6.3 per cent. Government school students were most likely to come from families earning less than \$800 per week (43.6 per cent of families) than any other income band, while less than one fifth of independent school students fell into this category.

Table 5.4: Parental income	of Victorian secondary	school students,	by school sector,	2001
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Parental income	Government (%)	Catholic (%)	Independent (%)	Total (%)	Count
<\$800	43.6	30.6	19.9	36.7	106,119
\$800-\$1,499	32.6	34.8	22.9	31.4	90,881
\$1,500-\$1,999	10.8	16.6	18.6	13.4	38,809
\$2,000+	6.3	12.0	26.7	11.1	32,123
Incomes not stated	2.6	2.4	2.0	2.5	7,142
Not applicable/no info	4.1	3.7	9.9	5.0	14,440
Total	100	100	100	100	289,514
Count	175,468	64,240	49,806	289,514	

Source: Australian Census of Population and Housing 2001, customised matrix

Despite claims by the Federal Government and the Association of Independent Schools Victoria (AISV) that independent schools are made up of a relatively representative sample of Australian families (D. Ryan, 2007; Tomazin, 2003), the Census findings from 2001 paint a vastly different picture. On these three key measures there are considerable differences in the socioeconomic backgrounds of student in the three school sectors, with independent schools in Victoria enrolling a much higher proportion of students from families with high income, high status occupations and high educational qualifications.

The fact that government schools cater to students from families with low socioeconomic status inevitably means that they are often required to act as welfare brokers and serve a number of other support functions before their primary task – education – can begin (Digby, 2002). For example, an increasing number of schools now provide a breakfast program because so many of their pupils are coming to school without a nourishing morning meal. In order for these programs to operate, teachers are required to be at school very early in the day to act as welfare providers and school budgets are stretched to accommodate the costs of food (Murfett, 2005; Rindfleisch, 2001).

In the current situation, where independent school students dominate enrolments in universities, the role of the university in facilitating upward social mobility seems mythical. Instead, the current situation helps perpetuate social stratification rather than providing opportunities for social advancement to those from low socioeconomic backgrounds. The advantages of high income, high status, well educated families whose children are concentrated in independent schools provide a head start in the competition for university and in doing so also help maintain social hierarchies.

Curriculum focus

As is reflected in their results, most independent schools have a deliberate focus on helping their students achieve high academic outcomes. By contrast, despite the recent spate of specialisations occurring in the government sector, public schools are still required to provide opportunities to students with a variety of interests and a wide range of abilities. This limits their capacity to compete academically with the independent school sector.

The success of the academically aligned curriculum within the majority of independent schools is enhanced through the selection procedures operating within the sector. Students are much more likely to be selected by independent schools for scholarships or bursaries according to academic merit than for their skills in most non-academic pursuits (although in some schools desperate for sporting prestige, resources are spent on sports scholarships (Bachelard, 2006)).

In the government system, schools are expected to cover a wide range of disciplines. In the long run, this disadvantages the capable academic students. As seen in Chapter 4, university entrance is becoming highly competitive. As a result, students will struggle to gain the relevant entry scores for university unless they have a strong academic focus and solid results across all subjects in Year 12.

However, as explored in Chapter 3, in the 1990s the government school sector began to move away from a one-size-fits-all, comprehensive curriculum, towards specialisation. This specialisation in government schools has in most cases been geared towards a vocational rather than academic emphasis. The Victorian Certificate of Applied Learning (VCAL) and the Vocational Education and Training (VET) in Schools programs – both aimed at developing non-academic pathways – have been implemented across the government school sector.

The number of students enrolled in Vocational Education and Training (VET) in Schools, a program which allows senior students to study part of a TAFE certificate while undertaking their VCE, increased from 4,500 in 1997 to 28,700 in 2005 (Kosky, 2002a, p. 10; NCVER, 2006). The take-up of this program in the government school sector has been significant. In 2003, nearly 30 per cent of all government school students in year 11 and 12 were participating in VET in Schools. By comparison, only 17 per cent of independent school students were enrolled in the program (NCVER, 2003). The VCAL, introduced in 2002 as an alternative to the VCE, also has an emphasis on providing greater vocational options for students. The VCAL is taken up by students in year 11 and 12 who want to finish high school, but do not want to complete the VCE. The stated aim of the VCAL is to increase the TAFE, training and apprenticeship opportunities of students who complete this new certificate. The number of students undertaking the certificate has risen from 526 across 22 different providers (VCAL is offered in schools, TAFEs, and Adult and Community Education centres) in 2002, to 10,600 students in 380 schools or training providers in 2005 (Kosky, 2006). Government schools make up more than 70 per cent of all VCAL providers. By comparison, only 3 per cent of VCAL providers were independent schools in 2006 (Department of Education and Training, 2006b).

While government schools are still required to provide a broad curriculum, specialisation in a vocational stream can often draw resources and emphasis away from academic aspects of the curriculum, to the detriment of those students with university aspirations. The particular effects of this on schools in the government sector are discussed in more detail in Chapter 7.

Specialisation in an academic curriculum in government schools has been more limited than in vocational fields. The Selective Entry Accelerated Learning (SEAL) program was developed under another guise (the Bright Futures initiative) in the mid-1990s (Guy, 2005b). Under the program, a class of Year 7 students, who are selected on the basis of academic merit, undertake an accelerated program within the existing public school structure. The program gathered momentum in the early 2000s until funding and expansion of the program stalled in 2003, when 25 government secondary schools were offering the program. The delays in expanding this program to other government schools showing interest in the idea at the time were typical of the Victorian Government's attitude to the issue of encouraging government schools to promote academic merit. Despite an independent report commissioned by the Minister which recommended that 'the Government should dramatically expand special programs for bright students in state schools...or risk losing them in increasing numbers to private schools', the Department blocked 20 schools from joining the program for a number of years (Guy, 2005a). The government changed its line on the SEAL schools policy in 2006 (Rood, 2006), but the program had already

suffered in the few years it was neglected. The new direction taken by the government led to an increase of only three schools operating the program between 2003 and 2006, when there were 27 SEAL schools (Kosky, 2005b).

The 2006 Victorian election saw a further shift in policy from the Labor Government with an election promise to build two more academically selective schools. Education Minister at the time, Lynne Kosky, claimed that the situation had changed so much in a few years that the notion of selective schools which she had previously rejected as 'elitist' was now relevant: 'now is the time to look at and establish two more selective schools. I don't think three or four years ago, as a system, we were ready to do that' (Ker & Rood, 2006). Whether this policy will have any real effect in boosting the academic focus across the whole government sector is yet to be seen.

Another curriculum-related advantage held by the independent sector stems directly from the history of educational provision in Victoria. Victorian independent schools have an advantage in teaching an academic curriculum because it has always been their charter to do so. The senior school curriculum has been taught in this sector for longer than it has in any other. As noted in earlier chapters, in the middle of the 20th Century, there were very few government high schools in Melbourne which offered a year 12 syllabus. The majority of students in their final year of secondary school at this time were enrolled in independent schools. When the government school system expanded in the 1960s and 1970s, and there was a sharp increase in the number of government schools offering year 12, the general curriculum adopted was that which had been operating in the independent school system for years. Connell et al. (1982) argue that the academic curriculum set up in the comprehensive government schools in the middle of the last century directly alienated the working class and as a result the private school sector was able to maintain its academic dominance.

According to Teese (2000), while power over the content of the academic curriculum is held primarily by the elite universities, these universities rely on the top academic schools to reinforce their own prestige. Therefore, it is in the interests of the elite universities to push for an elite academic curriculum that favours those in the prestigious private schools. He argues that such an arrangement helps to maintain the

high concentration of privilege in the elite universities and continues to alienate the majority of government school students and teachers.

The nature of the different charters of these two school sectors – one with university entry as the key focus and the other mandated to provide a wide-ranging and balanced curriculum – means that academic outcomes will never be evenly distributed. However, the trend of ever-less emphasis on academic outcomes makes the task of providing the university pathway in the government school sector increasingly difficult.

Government funding and policy

Essentially it is the individual state governments in Australia that are responsible for the funding and operation of government schools. However, the Federal Government also contributes to school funding. As a condition of the funding arrangements, the Federal Government also has some power in imposing certain requirements upon school systems. An example of this is the agreement by all the states, at the insistence of the Federal Government, that all schools undertake annual testing of student competence in literacy and numeracy in years three, five and seven (MCEETYA, 1999). Another more controversial example of the Federal Government's power to influence school policy was the announcement in 2004 of a requirement for all schools to raise the Australian flag daily in order to be eligible for federally sponsored funding (Maiden & Colman, 2004; Murphy, 2005).

The main role of the Federal Government in school funding is effectively to provide a large proportion of the overall funding allocation for the non-government school sector. As discussed in chapters 2 and 3, this funding began under the Menzies Government in the 1960s, was expanded significantly in the 1970s under Whitlam and has continued to grow ever since. The education funding debate has intensified under the Howard Government with the introduction of new funding arrangements in 2001, which many believe allocate an inequitable proportion of funds to schools which already have significant resources (many have expressed these views in opinion pieces in major newspapers, including Gittins, 2005; Healy, 2004; Moloney, 2004; Notaras, 2004; O'Halloran, 2004; Preston, 2004; Teese, 2004).

The debate over school funding is dominated by groups defending their own interests and attacking those of their opposition. The largest contributors to debate have been the Federal Government on one side and the Australian Education Union on the other. Both have run expensive campaigns to saturate all forms of media with statistics loaded to push their case. Very rarely is an objective view of education funding, which takes into account both state and federal government recurrent spending on the school sectors, presented in the public sphere.

Figures on total public sector recurrent funding on Victorian and Australian schools show that while government schools do receive a larger portion of the overall funding, a substantial sum of taxpayer dollars is injected into non-government schools each year – and the majority of this funding comes from the Federal Government. Table 5.5 uses data from government budget papers. It shows that in 2004, Victorian nongovernment schools received \$1.29 billion in government funding, of which 77 per cent came from the Federal Government. Victorian government schools received \$4.79 billion, with 91 per cent of funding coming from the Victorian government.

School sector	Victoria		Australia	
Funding body	\$ million	%	\$ million	%
Government schools				
Commonwealth funding	419	8.8	1,863	8.6
State funding	4,367	91.2	19,910	91.4
Total government funding	4,786	100.0	21,773	100.0
Non-government schools				
Commonwealth funding	994	77.3	3,759	71.5
State funding	292	22.7	1,499	28.5
Total government funding	1,286	100.0	5,257	100.0
All schools				
Commonwealth funding	1,413	23.3	5,622	20.8
State funding	4,659	76.7	21,408	79.2
Total government funding	6,072	100.0	27,030	100.0

Table 5.5: Total recurrent government expenditure on school education, 2002-2003

Source: Steering Committee for the Review of Government Service Provision (SCRGSP) (2005), Report on Government Services 2005, Productivity Commission, Canberra p. 3.4

Figures outlining per-student funding from state and federal governments show that funding for independent schools is steadily rising (an extended time series of funding changes was also given and discussed in Chapter 2). Here, Table 5.6 shows that on average in 2002 Australian independent schools received government funding of \$4,049 per student, a 64 per cent increase on the funding levels of a decade earlier. By comparison, government schools received an average of \$7,847 per student, a 30 per cent increase in a decade. Catholic schools received on average \$5,239, a 57 per cent increase.

Table 5.6 also shows that while state governments increased funding fairly evenly across the three school sectors between 1992 and 2002, the increases in funding implemented by the Federal government over this time favour non-government schools. The independent school sector experienced an 88.3 per cent rise in Federal funding per student, compared with a more modest 24.3 per cent rise in the government school sector.

Funding type School sector	1992	1997	2002	% increase, 1992 - 2002
Commonwealth funding				
Government schools	676	749	840	24.3
Catholic schools	2,267	2,904	3,833	69.1
Independent schools	1,495	1,913	2,815	88.3
State funding				
Government schools	5,366	6,031	7,007	30.6
Catholic schools	1,071	1,244	1,406	31.3
Independent schools	977	1,070	1,234	26.3
All Government funding				
Government schools	6,042	6,780	7,847	29.9
Catholic schools	3,338	4,148	5,239	57
Independent schools	2,472	2,983	4,049	63.8

Table 5.6: School funding per student from government sources 1992, 1997 and 2002, Australia

N.B. Data are for the financial years 1991-92, 1996-97 and 2001-02 in 2002 prices and exclude depreciation, user cost of capital and payroll tax

Source: Burke, G and White, P, (2004), *School Education Funding*, a draft report for the Victorian Department of Premier and Cabinet, Appendix 3, in Fitzgerald, V., et al. (2004) 'Governments working together', Melbourne: Allen Consulting Group, p.75

It is not only funding from government that shapes educational conditions in Australia. The attitudes of governments towards education and school sectors, communicated through education policy, are also important in building or diminishing public trust in schools. It has been widely argued, particularly through the print media, that the Howard Government's generosity towards the independent school sector in terms of funding has been detrimental to public confidence in the government school system and has encouraged increased patronage of private schools (Bone, 2004; Doherty, 2004a; Green, 2004; Moloney, 2004; Nancarrow, 2004; Notaras, 2004; O'Halloran, 2004; Preston, 2004; Rood & Ketchell, 2004).

The Victorian Government's approach towards government schools has been almost the opposite, but no more successful. Victorian Education Ministers and Premier Bracks hardly miss an opportunity to praise the government schools in Victoria and millions of dollars have been spent promoting them. For example, \$4 million was spent in five months on a campaign praising the virtues of government education in early 2006 (Auditor General, 2006, p. 136). However, the marketing has distracted from the general neglect on behalf of the government to deal with the inherent problems in the sector, by creating the illusion of success. The promotion of government schools has failed to help them compete with the independent sector on academic outcomes.

The Howard Government claims that the promotion of school choice is the key motivation for its policy decisions regarding funding and other support for the nongovernment school sector. However, as mentioned earlier, the level of choice available to individuals in the Victorian education system is closely linked to levels of financial and social capital. Besides, an emphasis on promoting choice, alongside increased government funding for the non-government sector, could be interpreted as a vote of no confidence in the government school sector by the Federal Government.

Judging from the VCE performance of the Victorian government school system highlighted in previous chapters, this lack of confidence could be justified to a certain extent. However, given the variation between the systems in student selection policies and socioeconomic backgrounds, and the fact that the independent sector still attracts significant government funding, it would seem more appropriate to address this issue through reinvigoration of the government sector rather than through the provision of incentives for families to avoid a government school education. The Bracks Government claims to be doing just this in Victoria. However, its reticence to address problems in the differentiation of academic achievement for fear of being labelled 'elitist' reduces the impact of its pro-government school policies on the university prospects of government school students.

In sum, the ambivalent attitude of the Federal Government and the rhetoric of the Victorian Government in regards to the public school sector, alongside a funding structure which benefits already well-resourced independent schools, helps contribute to the vastly different year 12 outcomes between the school sectors.

School resources

All schools receive some government funding, regardless of their wealth or resources. But government funding is only one mode of resource accumulation used by schools. They also rely on parents to help supplement the government funding they receive, to an extent which varies across schools and school sectors. A significant proportion of the per-capita spending on students in independent and Catholic schools comes from school fees paid by parents, whereas government schools are much more reliant on public funding and (quite rightly) are not permitted to charge compulsory school fees to parents. The ability of a school to attract parental or private revenue is crucial; those schools with the most wealth are able to build state-of-the-art technology and science facilities, to attract the best teachers by offering attractive remuneration packages and to promote their achievements utilising large marketing budgets.

Table 5.7 shows that despite being described as 'non-government', 37 per cent of the total income of independent schools in 2000 came from government funding (25 per cent from the Commonwealth and 12 per cent from the state governments). A further 57 per cent of independent school income came from school fees, and 6 per cent from donations and other income. The ability to generate substantial income privately, yet still receive government funding gives the independent school sector a clear financial advantage over the government sector. Government schools were almost solely reliant on government funding for their income.

	School Sector					
Income source	Government (%)	Catholic (%)	Independent (%)	All schools (%)		
Commonwealth government	13	52	25	22		
State government	84	20	12	60		
Tuition Fees	2*	21	57	10		
Donations and other private income	3	7	6	10		
Total	100	100	100	100		

Table 5.7: Proportion of school income by source and school sector, Australian schools, 2000

*Rough estimate for government schools combines fees and donations.

Source: Burke, G. 2003. 'Australia's educational expenditures', Melbourne: Centre for the Economics of Education and Training. Pp 23-24

It is estimated that only three per cent of government school revenue in 2000 came from private sources (Burke, 2003). Government schools can generate private income in two main ways; firstly via a voluntary school levy – an annual tuition fee charged to students and paid at the discretion of their parents; and secondly, though schoolbased fundraisers and donations. The payment of the voluntary school fees is largely reliant on each family's ability and willingness to pay. Similarly, the ability of a school community to raise funds is related to the socioeconomic profile of its student body. A study carried out in the US by Holme (2002) found that schools catering to middle-class clientele found fundraising and parent involvement through 'workingbees' much easier than did schools in working-class areas. Data relating to the private income of government schools in Victoria, used in Chapter 7, also show that schools in middle class areas of Melbourne are generating much larger private income pools than schools in areas of the city with lower socioeconomic status.

Given that the Census data examined earlier shows that large proportions of government school students do not come from affluent families, it seems that on the whole government schools are not in a position to rely on significant amounts of money generated through voluntary levies or fundraising. Conversely, the independent system, which is patronised by a significant proportion of upper and middle class families, is able to generate 6 per cent of its comparatively large income through donations and fundraisers. The ability to tap into a variety of different funding resources gives the independent school sector an advantage when it comes to per capita spending each year. Taking into account all income sources for secondary schools in Victoria, the independent sector has the highest recurrent expenditure per student, followed by the government sector and Catholic schools. In 2002, spending per student in independent secondary schools was \$11,528 – considerably higher than in government schools (\$8,189), or in the Catholic sector (\$7,726) (Table 5.8).

Table 5.8: Recurrent expenditure by school sector for secondary school students in Victoria, 2002

Sector	Spending per student (all sources)		
Government	\$8,189		
Catholic	\$7,726		
Independent	\$11,528		

Source: Sheehan, P. 2004. "The Contribution of Catholic Schools to the Victorian Economy and Community", Melbourne: Catholic Education Commission of Victoria. P 37.

Interestingly, the Catholic school sector has less money to spend per student than the government sector, yet as shown earlier, on average, Catholic school students perform better on academic measures than those from government schools. This outcome certainly strengthens the argument that simply increasing school funding is not the only answer to achieving better academic results (Sheehan, 2004).

The additional resources held by many independent schools allow them to expand their competitive advantage in a number of ways, most of which are geared towards attracting greater numbers of students and therefore further increasing their resources. Considerable amounts of money are spent each year by independent schools in Melbourne on marketing. Glossy billboards, letterbox drops, and advertisements in newspapers and magazines are just some of the ways in which independent schools spend their often large marketing budgets. According to Green and Leung (2005), most of the top independent schools in Melbourne spend between \$150,000 and \$200,000 per year promoting themselves in order to attract students. By comparison, the marketing budgets of government schools (those which actually have one) are considerably less, with \$15,000 being the highest reported per annum spending (Green & Leung, 2005). The advantage of having a large pool of resources also means that private schools have more discretionary funding that can be used to attract the best quality teachers to their schools. An extreme case documented in 2006 saw one government school in a poor neighbourhood lose five teachers (including the principal) to an independent school, lured with incentives such as 'free or heavily discounted tuition for their children [worth up to \$18,000 per year], higher salaries and other perks' (Milburn, 2006).

Extra resources also allow schools to develop state of the art educational facilities for their well-remunerated teachers and their students. As *The Age* editorialised: 'How is it possible...for a small state school with dated buildings and a confined site to compete for enrolments with institutions that boast architect-designed special purpose wings – from gymnasiums to concert halls – the latest technology and extensive playing fields? The short answer is that it isn't' (Editorial, 2006).

Autonomy

The fact that the independent school sector receives a substantial amount of public funding yet is not strictly accountable to government is one of the greatest paradoxes of the Australian school system. Government schools are required to report to the department in relation to a myriad of benchmarks covering every aspect of education and administration. Every dollar in a Victorian school's global budget has to be accounted for and reported to the department by the principal and school council. On the other hand, the independent sector is relatively uninhibited in how it spends the government funding it receives.

A report by Allen Consulting commissioned by the Victorian Government in 2004 found that across most of the OECD, high public subsidisation of non-government schools was coupled with strict government regulation of the sector. Australia and New Zealand were the exception to this pattern, both having high levels of public funding but low levels of regulation and accountability (Fitzgerald et al., 2004). This situation works to the detriment of tax payers and the benefit of the independent schools. Less regulation and minimal government intervention mean the independent sector has more freedom to self-manage and saves time and resources that would otherwise have been spent reporting to education departments about how their funds were being allocated. By reducing the regulation of this sector, a situation arises whereby it is receiving funding from all taxpayers, yet is only accountable to the families of the students it teaches. Teese (1984) claims that the Whitlam reforms to education in the early- to mid-1970s paved the way for this situation to occur by increasing nongovernment school funding but not linking this with greater educational and social accountability. As a result, it is now almost impossible, politically, for a government to take funding away from the independent sector and nearly as impossible for it to introduce new accountability requirements within the sector without also offering increased funding. The Labor Party's 2004 federal election policy to relinquish funding to the most elite Australia private schools and the subsequent withdrawal of the policy following a devastating election loss is a good example of these politics in practice.

By attracting government funding, but not having to conform to bureaucratic procedure, the independent school system has a great advantage over the government sector. The time saved on paperwork can be spent teaching and developing curriculum. One example of the difference between the freedom from regulation and disadvantage due to regulation can be seen in the teacher employment process in the two sectors. Government schools must advertise for teachers through the education department's fortnightly publication, *The Education Times*. All salaries and conditions for these positions are tightly enmeshed within the framework of the most recent teacher enterprise bargaining agreement. In contrast, Independent schools 'have tighter control over the hiring and firing of teachers' (Campbell & Sherington, 2004, p. 12). They can advertise vacant teaching positions in any manner they choose, and as discussed in the example earlier, have the flexibility and resources to offer financial incentives to exceptional teachers in order to lure experience and expertise to their schools.

Another example of the difference between the government and private school sectors in regard to government accountability was articulated in an opinion piece by a frustrated government school teacher in 2002: All teachers in all subjects have been asked to embed in their curriculum and practice priorities: equal opportunity, valuing diversity, turning the tide (against drugs), student welfare and mandatory reporting, learning technology...I hear that driver education is in the pipeline and I'm sure there are more where that came from.

After the directive, the bureaucracy steps in to ensure accountability by mandatory surveys and curriculum audits. Schools are left with the dubious freedom to balance all these issues (Digby, 2002).

Under these circumstances, the combination of greater financial security and less regulation places the independent schools in an advantageous position within the education market. On the other hand, 'government schools are suffering from being handed too many responsibilities with too little power. The government does not want to take back the responsibility or give away the power' (Digby, 2002).

Conclusion

The cross-sector comparison of year 12 outcomes for Victorian school students shows that the independent school sector is winning the race for university places. The data show that the median ENTER score of independent school students in 2004 was more than 20 points higher than that of government sector students, and that this situation had not changed in almost a decade. This higher achievement resulted in a much larger proportion of university offers, and in particular, university offers to Victoria's most prestigious universities and in the most sought after courses. As competition for university increased between 1996 and 2004, the independent school sector's position became stronger. In a system where every student is measured on the assumption that they are playing on a level field, the success of the independent school sector is overwhelming.

However, when this success is put in context, and the factors which shape the dominance of the independent school sector are taken into account, it is little wonder these schools achieve far more successful academic outcomes than those from the government and Catholic school systems. The selection processes undertaken in the independent sector ensure that the families with the greatest financial resources and cultural capital are concentrated within their schools. These schools are able to create a homogenous learning environment by the time the student body reaches year 12 by
attracting bright students with the lure of lucrative scholarships and discouraging the continuation of less academic students. The increasing flow of government funding helps to supplement the already significant income and resources of many of these schools, and the fact that minimal regulation is required on behalf of independent schools to account for the public funding received, means they have a great deal of autonomy in comparison to the tightly controlled government sector. Quite simply, this is not the level playing field that is assumed through the assessment methodology carried out in the scoring of VCE outcomes and the allocation of most university places.

As competition for university grew between 1996 and 2004, the differentiation between the school sectors became more apparent. A depleting proportion of university places were gained by students from government schools but in the independent sector the burden of increased competition did little to dent academic progress.

As mentioned in Chapter 4, recent comparisons of year 12 tertiary entrance scores and first year university marks in Australia have shown that in general, government school students perform better at university than independent school students (Birch & Miller, 2006; Dobson & Skuja, 2005; Win & Miller, 2005). This led Win and Miller (2005) to argue that students in independent schools have 'artificially inflated' year 12 tertiary entrance scores as a result of the educational advantages possessed by their schools.

Such findings raise questions about the policies of universities and their admission practices. If capable students in the government school sector are missing out on university places due to the artificially inflated scores of independent school students, is the admissions system fair and equitable? Or perhaps more importantly from a university perspective, are universities actually enrolling the best students? If the answer to these questions is 'no', then how should the process be altered to ensure that the most deserving gain an offer?

One simple solution would be to give bonus points to government school university applicants. This may help increase the market share of government school students in

Victorian universities, but such policies are fraught with problems. One such problem is outlined in the following chapter. The differentiation that is occurring within the government school sector suggests that treating the sector as a single entity may yet fail to produce equitable outcomes.

6. The government school sector in Victoria, academic outcomes and stratification between 1996 and 2004

As explored in the previous chapters, students in the government school sector are faced with an uphill battle in their pursuit of university places because of lower tertiary entrance scores, stemming from their educational disadvantage and the competitive advantages held by the independent school sector. However, among year 12 VTAC applicants, government school students still attracted more than 40 per cent of university offers (10,178 offers) to Victorian campuses in 2004. This indicates that many government school students still aim for and achieve a university place. This chapter focuses on the outcomes of government school year 12 VTAC applicants, with particular emphasis on the university pathway. The data reveal that among government schools in Victoria there is a clear differentiation in outcomes. Generalisations about the whole of the government school sector conceal the extent of diversity in year 12 outcomes among government schools.

This analysis initially investigates the differences between the outcomes of government schools in regional Victoria and those in metropolitan Melbourne. The focus then narrows to Melbourne-based government school students, beginning with a snapshot of the 2004 year 12 cohort and then with an analysis of change in outcomes between 1996 and 2004. The results reveal a sharp geographical division of outcomes among Melbourne government school students.

This analysis differentiates between schools only in relation to their geographical location. Therefore, for the purpose of this analysis, it is assumed there is a 'level playing field' across the government school sector. However, it is clear from the analysis that the situation within the government school system is anything but equitable. Issues that help to explain the differentiation of outcomes among government schools and dispel any idea of a level playing field are explored in detail in the following chapter.

These findings are important because they highlight the stratification of outcomes across Melbourne government schools and show that this is closely linked to the geographical location of schools. In the competition for university places this leaves government school students living in some areas of the city in a hopeless situation, while others are in government schools with outcomes that match those of the independent school sector.

Differences between regional and metropolitan government schools, 2004

As mentioned in Chapter 4, the government school sector has a larger presence in regional Victoria than it does in Melbourne⁶. Perhaps of more relevance, given the evidence highlighted in the previous chapters, the independent school sector has a relatively small presence in regional Victoria. There are two main reasons for this: firstly, the government system has historically been the primary education provider for regional students; and secondly, the school student market in regional Victoria is not as lucrative as in Melbourne. Regional Victoria is relatively sparsely populated. Therefore, there is a need for more schools, catering to smaller numbers of students – a less attractive business proposition to the independent school sector. As a result, the government school sector caters for the vast majority of students in regional Victoria. The smaller presence of non-government schools and the sparsely distributed population help to reduce the competition for school enrolments among schools in regional Victoria.

Enrolments, retention and VTAC applications

Table 6.1 shows that in 2004, slightly less than one third of government school year 12 students were enrolled in a school outside the Melbourne metropolitan area. Despite the smaller number of students in regional Victoria, there are a considerable number of schools. The average number of year 12 students in regional schools (76 year 12s per school) is much lower than in the metropolitan area (127 per school). This can be an advantage, in that smaller classes can allow for a more personal approach to teaching. However, the disadvantages of a smaller critical mass can also mean that fewer resources are available to students and may also reduce the range of subject options available to year 12 students.

⁶ i.e. a higher proportion of regional Victorian students attend a government school than metropolitan students.

The year 10 to year 12 retention rates recorded in Table 6.1 were lower in regional Victoria in 2004, as were the application rates to VTAC among those students who began year 12. The low overall retention rate in country areas of Australia has been an issue for a number of years. Some commentators suggest that the lower proportion of students articulating to year 12 in regional Australia relates to the lack of post year 12 educational options available to these students (James, Wyn et al., 1999; Stevenson, Evans, Maclachlan, Karmel, & Blakers, 2000). Without the option of university or TAFE nearby, the Victorian Certificate of Education is of less value to regional students.

Isolation from university campuses, the costs of moving in order to attend university and negative perceptions of the value of university education within some regional communities deter many students from even attempting to compete for a university place (James, Baldwin, & McInnis, 1999; James, Wyn et al., 1999; Pargetter et al., 1998; Stevenson et al., 2000; Teese, 2001). The *On Track* survey, which charts the pathways of school leavers in Victoria, found that students from regional Victoria were much more likely to indicate that the main barrier to continuing their education was that they would have to leave home in order to attend a tertiary institution (Teese et al., 2006, pp. 56-57). The survey has also found that early school leavers are 'drawn disproportionately from non-metropolitan locations' (Teese et al., 2006, p. 61). The figures relating to retention from year 10 to year 12 and application rates for further education highlighted in Table 6.1 are consistent with these findings.

 Table 6.1: Government school year 12 students and VTAC applicants by school location, retention rates and share of student population, Victoria, 2004

School location	Number Year 12 provider schools	Number Year 12 (Feb Census)*	Share of year 12 cohort (%)	Year 10 to 12 retention rate	Number VTAC Applicants	Share of applicants (%)	Year 12 (Feb) to VTAC application rate
Metropolitan Melbourne	164	20,817	68.7	86.4	15,197	73.1	73.0
Rest of Victoria	125	9,506	31.3	76.0	5,590	26.9	58.8
Total	289	30,323	100.0	82.9	20,787	100.0	68.6

Source: VTAC unpublished 2004/05, Summary Statistics Victorian schools, DET, 2002 and 2004

*Does not include Distance Education, therefore totals slightly different to those in Chapter 4

Academic achievement in the VCE

Among government school students from regional Victoria who do complete year 12 and apply for a tertiary education course, the outcomes appear to be relatively good in comparison with their metropolitan counterparts. Table 6.2 shows that the median ENTER score achieved by regional government school students was slightly higher than for those enrolled at a metropolitan school in 2004.

Within the different ENTER bands there was some differentiation between students from the two regions. A higher proportion of metropolitan students achieved an ENTER in the top band (90.00 to 99.95). However, students from the metropolitan area were also more prominent at the opposite end of the achievement spectrum, with 23.5 per cent receiving an ENTER below 39.95 compared with 18.5 per cent from regional Victorian government schools. The scores of students from regional schools were more concentrated in the middle range of academic achievement (between 60 and 79.95). Interestingly, this range of achievement is closely aligned with the ENTER range of students who received offers to universities located in regional Victoria, as highlighted earlier in Table 4.13. As shown in the data that follows, the close association between the achievement range of regional students and the entry requirements of regional university campuses has benefited students from regional government schools.

School Location	ENTER &	by 10 poi	int Band	(%)					Total applicants*	Median ENTER
	0 to	40 to	50 to	60 to	70 to	80 to	90 to	Total		
	39.95	49.95	59.95	69.95	79.95	89.95	99.95			
Metropolitan Melbourne	23.5	11.9	12.7	13.1	12.8	12.6	13.4	100.0	15,156	61.45
Rest of Victoria	18.5	13.4	14.9	16.5	16.4	12.5	7.9	100.0	5,588	62.00
Total	22.2	12.3	13.3	14.0	13.8	12.6	11.9	100.0	20,744	61.65

Table 6.2: ENTER of government school year 12 VTAC applicants by 10 point band, median and school location, Victoria, 2004

Source: VTAC unpublished 2004/05

* 41 metro and two regional government school applicants did not have an ENTER allocated

Tertiary offers

Government school applicants from regional Victoria were much more likely to gain a university offer than were applicants from metropolitan government schools, while metropolitan students were more likely to gain an offer to TAFE (Table 6.3). This may appear to tip the scale of 'academic achievement' in favour of regional students, but Table 6.3 also shows that regional students had a greater likelihood of receiving no offer at all.

School location	Tertiary see	ctor (coui	nt)			Tertiary sector (%)				
	University	TAFE	Private Provider	No Offer	Total	University	TAFE	Private Provider	No Offer	Total
				1,96						
Metropolitan Melbourn	e 7,105	5,426	704	2	15,197	46.8	35.7	4.6	12.9	100
				1,04						
Rest of Victoria	3,073	1,221	248	8	5,590	55.0	21.8	4.4	18.7	100
				3,01						
Total	10,178	6,647	952	0	20,787	49.0	32.0	4.6	14.5	100

Table 6.3: Offers by tertiary institutions to government school year 12 VTAC applicants by
school location and tertiary sector, Victoria, 2004

Source: VTAC unpublished 2004/05

Rather than reflecting poor performance, the large proportion of 'no offers' to students from regional areas may instead be due to the limited choices available. Only 11.6 per cent of all TAFE offers in 2004 were for campuses based in regional Victoria. By comparison, 17.5 per cent of all university places offered were at a regional-based campus. As a result, lower-scoring VTAC applicants in regional Victoria have fewer choices than those in metropolitan Melbourne and are therefore more likely to apply for university regardless of their ENTER.

Evidence of this is found in the first preference data for government school VTAC applicants, which show that 79.2 per cent of regional applicants nominated a university course as their first preference, compared with 67.4 per cent of metropolitan students. These preference figures help to explain the higher university offer rate and the higher 'no offer' rate among regional students. As regional students aim higher in their applications, the likelihood of university offers improves, but their chances of failing to gain an offer also increase.

Success among regional Victorian government school students in gaining offers to university can also be attributed to the fact that these students are the main patrons of the regional Victorian university campuses, which, as shown in Table 4.13, require lower entrance scores than campuses based in the metropolitan area.

In Table 6.4 the number and percentages of offers to metropolitan and regional university campuses is cross-tabulated with the school location of government students who gained an offer. These figures show that more than three quarters (78.7 per cent) of offers by regional university campuses were made to students who studied in a regional school even though these students only made up 26.9 per cent of all government school VTAC applicants. Additionally, among those offered a university place, the majority (56.5 per cent) of offers to regional government school students were from a regional university campus.

The lower entry requirements for regional university campuses help to boost the chances of gaining a university offer. As shown in Table 4.13, more than three quarters (76.5 per cent) of offers to regional Victorian universities in 2004 went to applicants with an ENTER between 50.00 and 79.95. On the other hand, among offers from the metropolitan universities, only 35 per cent were to students with an ENTER in this bracket. As displayed earlier in Table 6.2, there was a large cohort of regional government school VTAC applicants with an ENTER between 50.00 and 79.95 (47.8 per cent). Coupled with the fact that a majority of regional students who apply for university nominated a regional campus as their first preference, this evidence suggests that a large proportion of government school applicants from regional Victorian university campus in 2004.

The scenario for metropolitan government school students was far different. Table 6.4 shows that the vast majority of offers to these students were from metropolitan campuses. Preference data of applicants also reveal that a very high proportion of these students nominated a metropolitan university campus as their first preference. Given that the entry requirements for Melbourne university campuses are on average much higher than the median government school ENTER, the lower university offer rate for this cohort is understandable.

School Location	Campus loca	ation Metro I	Melb	
	Metro Melb Campus	Rest of Vic Campus	Interstate or OS Campus thru VTAC	Total
Metropolitan Melbourne	6,604	469	32	7,105
% within Metro Melb	92.9	6.6	0.5	100.0
% within Uni location	83.6	21.3	45.7	69.8
Rest of Victoria	1,299	1,736	38	3,073
% within Rest of Vic	42.3	56.5	1.2	100.0
% within Uni location	16.4	78.7	54.3	30.2
Total	7,903	2,205	70	10,178

Table 6.4: University offers to government school year 12 VTAC applicants by location of university campus and location of school, Victoria, 2004

Source: VTAC unpublished 2004/05

Enrolment in tertiary courses

The enrolment figures of those who gained a university offer are displayed in Table 6.5. These figures show that advantage of regional students in terms of university offer statistics does not necessarily result in better outcomes for these students overall. Regional Victorian government school students who gained a university offer in 2004 were much less likely to be enrolled at university in 2005 than those from a metropolitan government school (61.8 per cent compared with 81.7 per cent). Almost twice the proportion of students in regional Victoria with a university offer withdrew or did not enrol compared with metropolitan students. In addition, the deferment rate of 15.8 per cent among regional students was considerably higher than metropolitan students (5.7 per cent). These figures suggest that there were many barriers to university enrolment for regional based school students. Isolation, accessibility problems and lower socioeconomic status are among many of the possible factors affecting these enrolment outcomes.

Tertiary sector and school location University	Enrolment Statu: Full Part Time Time	s (count) Deferred	Withdrawn or did not enrol	Total	Enrolme Full Time	ent Statu Part Time	s (%) Deferred	Withdrawn	Total
and school location University	Full Part Time Time	Deferred	Withdrawn or did not enrol	Total	Full Time	Part Time	Deferred	Withdrawn	Total
University Metropoliton								or did not enrol	
Melbourne	5,802 97	404	802	7,105	81.7	1.4	5.7	11.3	100
Rest of Victoria	1,898 28	484	663	3,073	61.8	0.9	15.8	21.6	100
Total	7,700 125	888	1,465	10,178	75.7	1.2	8.7	14.4	100
<i>TAFE</i> Metropolitan Melbourne Rest of Victoria	3,077 197 603 13	119 59	2,033 546	5,426 1,221	56.7 49.4	3.6 1.1	2.2 4.8	37.5 44.7	100 100
Total	3,680 210	178	2,579	6,647	55.4	3.2	2.7	38.8	100
Private Provider Metropolitan Melbourne	246 18 60 4	20 21	420 163	704 248	34.9 24.2	2.6 1.6	2.8 8.5	59.7 65.7	100 100
Rest of Victoria			500	052	32.1	2.2	10	04.0	100
Rest of Victoria Total <i>Private Provider</i> Metropolitan Melbourne	603 13 3,680 210 246 18 60 4	59 178 20 21	546 2,579 420 163	1,221 6,647 704 248	49.4 55.4 34.9 24.2	1.1 3.2 2.6 1.6	4.8 2.7 2.8 8.5	44.7 38.8 59.7 65.7	

Table 6.5: Enrolment status in 2005 of government school year 12 VTAC applicants by tertiarysector and school location, Victoria, 2004

Source: VTAC unpublished 2004/05

Factors affecting post-school outcomes of regional and metropolitan students

It appears that the barriers preventing regional school students from enrolling in university are less about competition for places among students and between schools and are more about physical and economic accessibility. These issues are of crucial importance in ensuring equitable outcomes in the tertiary entrance process, but are not of direct relevance to this thesis which has as its focus the competition for university places.

Competition in the metropolitan area is twofold. It occurs between schools for student enrolments and between students for university places. In regional Victoria, government schools face less pressure for enrolments from competitor schools and therefore, in many cases, avoid the issues associated with the 'school market'. In addition, there is less competition for places and therefore lower entry requirements at the regional universities chosen by many regional students. Though significant disadvantages are experienced in many regional areas, it has been argued that in many parts of regional Australia 'the local comprehensive high schools appear to be fulfilling their original mission...of providing a good range of secondary options to local children' (Campbell & Sherington, 2004, p. 8).

As a result, subsequent discussion will focus on the dynamics of the education market in metropolitan Melbourne and particularly on government school students in Melbourne.

Government school year 12 outcomes of VTAC applicants, 2004/05

For this analysis, the school location of government students has been used in order to analyse different patterns of achievement and outcomes across the Melbourne metropolitan area. The spatial unit of the Statistical Sub Division (SSD) has been applied to break the metropolitan area into 16 separate geographical areas. Map 6.1 shows the boundaries of each of these SSDs as well as the location of all government schools in Melbourne that had a VTAC applicant in 2004.

In the tables that follow, these SSDs have been loosely grouped into three regions according to geographic location, these being the Inner, Northern and Western (with an inner/middle and outer sub-group) and Eastern and Southern regions (also with an inner/middle and outer sub-group). In general, the inner and middle areas of Melbourne form the majority of established suburbia in the metropolitan area. The outer areas in the north, west and south east, all areas of new settlement, experienced significant population growth in the 15 to 20 years preceding 2005 and continue to grow. The outer area to the east – Yarra Ranges Shire – is located in the hills on the edge of Melbourne and, unlike most other parts of outer Melbourne, is not an area of large population growth.



Map 6.1: Melbourne SSDs and location of government school year 12 providers with VTAC applicants in 2004

One point to note in the data below referring to Inner Melbourne is that the only selective schools in Victoria are located in this SSD. Half of all Government school year 12 VTAC applicants from schools in this SSD were enrolled in one of the two selective academic schools in Melbourne. Unlike other government schools, these selective schools attract students from all over Melbourne. Therefore, the results from this area are not necessarily attributable to the students who live in the area. The very high academic outcomes apparent for students from this area can be attributed to the fact that half of the applicants attended the two prestigious academic selective government schools.

Throughout Melbourne there are considerable differences in the social, cultural and economic circumstances of families. The extent to which these differences match the patterns of achievement evident in the data below will be discussed in the Chapter 7. This thesis investigates the way that schools reflect and magnify the disadvantages

and advantages of the students they enrol. The discussion in this chapter analyses data relating to the outcomes of schools by locality only.

Enrolment, retention and VTAC applications

Table 6.6 contains the enrolment and retention details of year 12 government school students in Melbourne according to the location of the school they attended in 2004. The most populous SSDs naturally have the greatest numbers of schools and students. Western Melbourne and Eastern Middle Melbourne, both well-established areas of middle suburbia, have the highest numbers of students undertaking year 12 and the largest number of year 12 provider schools. The concentration of schools in these two areas is apparent in Map 6.1. At the other end of the spectrum are the SSDs of Moreland, which is a very geographic small area and had the smallest number of year 12 students in 2004, and Mornington Peninsula, which despite being very large geographically, has a small, ageing and partially rural population base and therefore has relatively few students.

As Table 6.6 shows, year 10 to year 12 retention rates across the regions of Melbourne differ. The retention rates for the schools in Inner Melbourne and Boroondara were above 100, indicating a net increase of government school enrolments in these areas between the year 10 cohort in 2002 and the year 12 group in 2004. This high rate is a reflection of the popularity of the government schools in these areas, especially in the senior years. As is shown later in this chapter, the academic achievement of many schools in these areas is on par with the independent sector. In the case of Inner Melbourne, this has much to do with the selective schools, but in Boroondara there are other factors involved. It is argued here and in later chapters that high academic achievement is helping to revitalise the government schools in these areas.

In other areas, retention from year 10 to year 12 was much lower. Government schools in the Mornington Peninsula had the lowest retention rate in 2004 at 62.3. The reasons for the large differences in retention across the regions of Melbourne are discussed further in Chapter 6, but include issues relating to local employment options, curriculum specialisation within schools, propensity of students to move to

the independent sector to undertake year 12 and socioeconomic background of students.

The VTAC application rates also differ between the regions of Melbourne. Eastern Middle Melbourne recorded the highest rate, at 82.2 in 2004, while the lowest was in Melton-Wyndham, a rate of 57.3.

School location	Number Year 12 provider schools	Number Year 12 (Feb Census)*	Year 10 to 12 retention rate	Number VTAC Applicants	Year 12 (Feb) to VTAC application rate
Inner region					
Inner Melbourne	10	1,447	113.7	1,177	81.3
Northern and Western regions					
Inner/Middle Western Melbourne	21	2,844	87.0	2,122	74.6
Moreland City	6	403	67.3	316	78.4
Northern Middle Melbourne	16	1,501	92.1	1,111	74.0
<i>Outer</i> Melton-Wyndham	7	781	67.8	448	57.3
Hume City	8	757	70.6	505	66.7
Northern Outer Melbourne	9	1,110	82.4	760	68.5
Eastern and Southern regions					
Inner/Middle Boroondara City	6	1,278	152.5	957	74.9
Eastern Middle Melbourne	20	3,068	97.9	2,521	82.2
Southern Melbourne	10	1,392	93.7	1,075	77.2
Greater Dandenong City	9	954	88.2	730	76.5
Eastern Outer Melbourne	13	1,467	77.8	1,033	70.4
<i>Outer</i> Yarra Ranges Shire Part A	9	960	69.0	619	64.5
South Eastern Outer Melbourne	9	1,435	68.3	899	62.6
Frankston City	6	839	66.0	543	64.7
Mornington Peninsula Shire	5	581	62.3	381	65.6
Total Metropolitan Melbourne	164	20,817	86.4	15,197	73.0

Table 6.6: Enrolment and VTAC application numbers, retention and transition rates	s of
Melbourne year 12 government school students, by SSD of school, 2004	

Source: VTAC unpublished 2004/05, Summary Statistics Victorian schools, DET, 2002 and 2004

For a more accurate assessment of the different patterns of attrition in the senior years among government school students, it is worth examining the year 10 to year 12 retention rate and the year 12 to VTAC transition rates together. The case of Moreland City provides a good example of this analysis in practice. The government school cohort in Moreland recorded a low retention rate between year 10 and year 12 (67.3 per cent). This rate suggests a serious problem with students dropping out of school altogether or leaving the government school sector in this area before reaching year 12. However, among those students who did reach year 12, the likelihood of making an application for a place in a further education institution at the end of year 12 was relatively high (78.4 per cent) in relation to the rest of Melbourne, suggesting that within this group there is a strong desire to pursue further education.

Among the other SSDs in the north and west, there was a mixture of outcomes, with some areas such as Northern Middle Melbourne and Northern Outer Melbourne recording relatively high rates of retention and transition, while other areas such as Melton-Wyndham and Hume had very low figures. In the Eastern and Southern region there was a clear difference between the inner/middle SSDs and the outer SSDs. Figures in the outer SSDs were consistently lower across both measures. In fact the rates in the outer eastern and southern SSDs were generally the lowest in the metropolitan area. The low rates in these suburbs may be related, among other things, to the proximity of these areas to further education institutions – especially university campuses. The lack of physically accessible university options for students in these areas may mean that there is little incentive to stay at school beyond the compulsory years, or in the case of those who do complete year 12, to bother applying for a distant university course. Once again, these issues are discussed more thoroughly in the following chapter.

Academic achievement

Table 6.7 contains details of the 2004 tertiary entrance scores of government school year 12 applicants in Melbourne according to the geographic location of school attended. The median ENTER results, recorded in the right hand column, show a wide spectrum of scores across the different SSDs. Even if the very high median of students from Inner Melbourne government schools (comprising the academic selectives) is ignored, the difference between the next highest median (77.90 in

Boroondara) and the lowest (46.00 in Hume) is enormous and highlights the high degree of differentiation within the government school system.

When the ENTER requirements for a university offer are revisited, the enormity of this difference becomes clear. Table 4.11 earlier showed that only 1.3 per cent of offers to Melbourne-based university campuses went to year 12 applicants with an ENTER below 50.00 in 2004. The chances of gaining a metropolitan university offer increased only marginally to 3.9 per cent for applicants with an ENTER below 60.

With the benefit of this information, it is evident that the median scores outlined in Table 6.7 exclude at least half the students enrolled in government schools in northern, western and outer southern and eastern Melbourne from the possibility of entry to university. The only areas in Melbourne for which the median scores suggest that a large proportion of students had a good chance of a university offer were Inner Melbourne, Boroondara, Eastern Middle Melbourne and Southern Melbourne.

The distribution of ENTERs by 10 point bands, shown in Table 6.7, also highlights the wide achievement gap across the suburbs of Melbourne. In most outer suburban SSDs, fewer than 14 per cent of applicants recorded an ENTER above 80.00, an achievement level that offered a wide range of university options and a very good chance of gaining a university offer in Melbourne (64 per cent of university offers in Melbourne in 2004 were to students with an ENTER of 80 or more). By comparison, in Eastern Middle Melbourne SSD, 36 per cent of students recorded an ENTER of 80 or greater, and in Boroondara, the figure was 46 per cent.

School location		by 10 pc	int Pond	(9/)					Total	Median
	0 to	40 to	50 to	(%) 60 to	70 to	80 to	90 to	Total	appli-	ENTER
	39.95	49.95	59.95	69.95	79.95	89.95	99.95		Carits	
Inner region										
Inner Melbourne	5.6	4.0	4.5	8.1	10.3	19.0	48.5	100	1,171	89.60
Northern and Western	regions									
Inner/Middle										
Western Melbourne	37.4	12.4	12.0	12.3	9.7	9.1	7.0	100	2,117	50.15
Moreland City	38.3	11.4	11.4	9.5	11.7	10.1	7.6	100	316	50.50
Northern Middle Melb	26.0	11.8	14.6	13.7	14.4	9.6	9.8	100	1,099	58.80
Outer										
Melton-Wyndham	37.3	18.8	13.4	11.6	8.5	6.7	3.8	100	448	47.45
Hume City	39.4	16.0	12.9	11.5	7.3	8.1	4.8	100	505	46.00
Northern Outer Melb	33.0	14.2	13.4	13.4	12.4	7.0	6.6	100	760	52.90
Eastern and Southern r	regions									
Inner/Middle										
Boroondara City	8.5	6.5	9.6	11.7	17.6	19.0	27.1	100	945	77.90
Eastern Middle Melb	13.0	9.9	11.9	14.5	15.0	18.2	17.5	100	2,517	70.70
Southern Melb	16.3	11.9	13.3	15.3	15.5	14.5	13.1	100	1,074	65.60
Gr. Dandenong City	35.0	14.0	12.8	12.9	10.3	9.3	5.8	100	729	51.10
Eastern Outer Melb	19.6	13.9	15.7	16.7	15.3	10.7	8.1	100	1,033	60.25
Outer										
Yarra Ranges Shire A	23.6	15.8	17.6	13.2	13.7	11.1	4.8	100	619	55.40
South Eastern Outer Melb	30.8	14.8	16.7	13.6	11.8	9.3	3.0	100	899	53.20
Frankston City	25.0	14.4	14.4	13.6	12.2	12.5	7.9	100	543	57.85
Mornington Pen. Shire	23.6	14.4	16.5	15.2	12.9	11.8	5.5	100	381	57.10
Total Metropolitan Melb	23.5	11.9	12.7	13.1	12.8	12.6	13.4	100	15,156	61.45

Table 6.7: ENTER by band and median for Melbourne government school year 12 VTACapplicants, by SSD of school, 2004

*41 government school VTAC applicants did not have an ENTER allocated Source: VTAC unpublished 2004/05

In the areas where low proportions of students achieved a very high ENTER, large numbers received very low ENTERs. This was unlike the pattern in regional Victoria where there were fewer high scorers but a large concentration of students bunched in the middle ranges. The spread of scores in metropolitan Melbourne seems to be characterised by concentrations of 'winners' and 'losers', with little room in the middle.

Offers to tertiary institutions

This pattern is also evident in Table 6.8 which shows the distribution of tertiary offers to government school applicants by the geographical location of schools. In terms of access to university, the differentiation among the government school applicants is stark. In only a few SSDs did more than half the school VTAC applicants gain a university offer. These figures are particularly low when it is considered that nearly 60 per cent of all offers to VTAC applicants were for university places. Chapter 4 showed that a large majority of these places go to students from the independent school sector, while Table 6.8 shows that among the students in the government sector, those in the inner eastern and southern suburbs attract a far higher proportion of offers than those in the north, west and outer east and south.

School location	Tertiary sec	ctor (%)				Total
	University	TAFE	Private Provider	No Offer	Total	Applicants
Inner region						
Inner Melbourne	81.3	10.2	1.4	7.1	100	1,177
Northern and Western regions						
Inner/Middle Western Melhourne	34.0	15.0	15	15.6	100	2 122
Maraland City	24.0	- 0.0	J 2 0	10.0	100	2,122
	34.2	50.9	3.0		100	310
Northern Middle Melbourne	43.5	40.7	4.1	11.7	100	1,111
Outer Melton-Wyndham	32.8	45.8	4.7	16.7	100	448
Hume City	37.0	43.4	4.6	15.0	100	505
Northern Outer Melbourne	39.3	42.8	5.3	12.6	100	760
Eastern and Southern regions						
Inner/Middle						
Boroondara City	68.4	19.7	4.1	7.7	100	957
Eastern Middle Melbourne	58.0	27.8	4.2	10.0	100	2,521
Southern Melbourne	48.6	30.6	5.2	15.6	100	1,075
Greater Dandenong City	35.1	48.8	4.5	11.6	100	730
Eastern Outer Melbourne	43.7	41.9	3.7	10.7	100	1,033
Outer						
Yarra Ranges Shire Part A	35.9	35.1	7.6	21.5	100	619
South Eastern Outer Melbourne	31.8	43.0	6.3	18.8	100	899
Frankston City	39.0	41.6	6.4	12.9	100	543
Mornington Peninsula Shire	36.0	34.9	10.0	19.2	100	381
Total Metropolitan Melbourne	46.8	35.7	4.6	12.9	100	15,197

 Table 6.8: Tertiary education offers to Melbourne government school year 12 VTAC applicants, by tertiary sector and SSD of school, 2004

Source: VTAC unpublished 2004/05

In particular, the outer areas of Melbourne recorded very low university offer rates. In none of the SSDs in outer areas did more than 39 per cent of government school applicants receive a university offer. South Eastern Outer Melbourne recorded the lowest rate, with only 31.8 per cent of the 899 VTAC applicants from government schools in 2004 receiving an offer of a university place.

In many areas with low proportions of university offers, the other main tertiary option – TAFE – offered a large proportion of students an opportunity to continue their education. In Moreland, more than half of all offers were for TAFE, in Dandenong, 48.8 per cent, and in Western Melbourne and Melton-Wyndham, close to 46 per cent of applicants received a TAFE offer.

Offers from the TAFE sector in some areas with low university offer rates meant that the proportion of government school VTAC applicants that missed out on a tertiary offer was low. Moreland and Dandenong in particular had relatively low rates of 'no offer' thanks primarily to offers from the TAFE sector. However, in the outer areas, which had low proportions of applicants gaining an offer for university, the TAFE sector offers did not provide the back-up that they did in Moreland and Dandenong. The result was that a large proportion of government school applicants missed out any form of tertiary education offer. This is highlighted in the cases of South Eastern Outer Melbourne, Yarra Ranges and the Mornington Peninsula, where between 18 and 22 per cent of all applicants did not receive any form of offer to continue studying after year 12.

Tertiary enrolments

While TAFE does provide a pathway to post-compulsory education, the take-up rate of these offers is low, meaning that a high proportion of students in these areas do not enter any form of post-school education following completion of year 12. The low TAFE enrolment rates in 2005 among year 12 school applicants from 2004 were discussed in Chapter 4 and the enrolment rates for government school applicants in Melbourne are outlined in Table 6.9. Among Melbourne government school students who gained a tertiary offer, the TAFE enrolment rate of 56.7 per cent was much lower than the enrolment rate for university offers (81.7 per cent).

The point of this discussion is that government school students from many areas of Melbourne have very limited post-school options and that these options are limited primarily as a result of the low tertiary entrance scores. Chapter 4 highlighted the large concentrations of students achieving low tertiary entrance scores in the government school sector and showed that these students struggle to compete with non-government and particularly independent school students. The data in this chapter show that within the government school sector the low-scoring students are concentrated in certain parts of Melbourne, making the attainment of a university offer – which, as shown, has a much higher likelihood of resulting in enrolment in further education – considerably harder, and bordering on impossible, for students in these areas.

Full-time enrolment among those gaining a university offer in 2004 was high across almost all Melbourne SSDs. There was little difference in the take-up rates between the high-scoring areas with large proportions of university offers, such as Boroondara and Eastern Middle Melbourne, and the areas with lower proportions of university offers in the north and the west. These rates show that there is a strong commitment to attend university among those students in the north and western areas who manage to gain a university offer.

The lowest university enrolment rates were recorded in the outer eastern and southern SSDs. In particular, the SSDs of Yarra Ranges, Frankston and the Mornington Peninsula had low full-time enrolment rates among those gaining a university offer.

A slightly different pattern is apparent in the take-up of TAFE offers. Students with a TAFE offer who attended school in the inner and middle eastern and southern suburbs – areas which had low proportions of offers to TAFE – were more likely to be enrolled full-time in a TAFE course than those with TAFE offers who went to school in areas where large proportions of TAFE offers were made. In the case of Moreland, where TAFE provided an alternative tertiary educational option to many students who did not have scores high enough to gain an offer to university, only 53.8 per cent of those gaining a TAFE offer were enrolled full time the following year. Forty per cent of students from Moreland who were offered a TAFE placement withdrew or did not

enrol. By comparison this figure was only 8.3 per cent among students from the same area who were offered a place in a university course.

This high take-up of university offers and low TAFE enrolment rate is consistent across all the areas of Melbourne (Table 6.9). These figures are important as they highlight the benefits of gaining a university offer and show that the TAFE alternative is only adopted by a limited number of students.

School location	Enrolment	Status (%)				Total
	Full Time	Part Time	Deferred	Withdrawn or did not enrol	Total	Offers
University offers						
Inner Melbourne	79.4	2.3	7.4	10.9	100	957
Northern and Western regions						
Inner/Middle						
Western Melbourne	87.3	1.1	3.5	8.2	100	722
Moreland City	85.2	0.9	5.6	8.3	100	108
Northern Middle Melbourne	83.0	1.0	5.6	10.4	100	483
Outer						
Melton-Wyndham	83.0	2.0	4.8	10.2	100	147
Hume City	86.6	1.6	2.7	9.1	100	187
Northern Outer Melbourne	88.6	0.3	3.7	7.4	100	299
Eastern and Southern regions Inner/Middle						
Boroondara City	83.2	1.4	4.6	10.8	100	655
Eastern Middle Melbourne	84.5	0.9	3.9	10.7	100	1,461
Southern Melbourne	79.1	1.1	5.9	13.8	100	522
Greater Dandenong City	83.6	1.2	2.0	13.3	100	256
Eastern Outer Melbourne	80.9	1.8	5.3	12.0	100	451
Outer						
Yarra Ranges Shire Part A	68.0	2.3	12.2	17.6	100	222
South Eastern Outer Melbourne	76.2	1.0	7.3	15.4	100	286
Frankston City	67.5	2.4	13.2	17.0	100	212
Mornington Peninsula Shire	62.8	1.5	21.2	14.6	100	137
Total Metropolitan Melbourne	81.7	1.4	5.7	11.3	100	7,105
TAFE Offers						
Inner Melbourne	65.0	3.3	7.5	24.2	100	120
Northern and Western regions						
Inner/Middle						
Western Melbourne	57.6	8.3	2.4	31.7	100	974
Moreland City	53.4	3.1	3.1	40.4	100	161
Northern Middle Melbourne	52.2	1.8	1.8	44.2	100	452
Outer						
Melton-Wyndham	59.5	9.8	2.0	28.8	100	205
Hume City	60.7	2.7	1.8	34.7	100	219
Northern Outer Melbourne	56.0	1.8	1.5	40.6	100	325
Eastern and Southern regions						
Inner/Middle						
Boroondara City	66.7	1.1	3.7	28.6	100	189
Eastern Middle Melbourne	65.3	2.6	1.0	31.1	100	700
Southern Melbourne	63.8	3.0	1.8	31.3	100	329
Greater Dandenong City	53.4	3.1	1.4	42.1	100	356
Eastern Outer Melbourne	57.7	1.8	2.3	38.1	100	433
Outer						
Yarra Ranges Shire Part A	52.1	3.2	1.8	42.9	100	217
South Eastern Outer Melbourne	49.4	1.6	1.0	48.1	100	387
Frankston City	38.1	1.3	4.4	56.2	100	226
Mornington Peninsula Shire	42.1	1.5	6.0	50.4	100	133
Total Metropolitan Melbourne	56.7	3.6	2.2	37.5	100	5,426

Table 6.9: Enrolment status of Melbourne government school year 12 VTAC applicants who received a tertiary education offer, by tertiary sector and school SSD, 2005

Source: VTAC unpublished 2004/05

Differentiation of outcomes among metropolitan government school students, 1996 to 2004

It is clear that in 2004, significant differentiation of outcomes existed across the Melbourne metropolitan area. Government school outcomes appeared relatively predictable according to geographic location. In order to test the hypothesis that competition for university intensified in the years preceding 2004 and that this contributed to the stratification of outcomes among government schools, the next part of this chapter explores the changes in government school achievement between 1996 and 2004. This analysis once again focuses primarily on outcomes according to school location with the initial aim of highlighting the stratification of results. Discussion of the factors contributing to this stratification is undertaken in the following chapter.

Changes in applicant numbers

Table 6.10 shows the number of government school students who applied to VTAC between 1996 and 2004 by school location. Across the metropolitan area, there was a 9.4 per cent increase in government school applicants over this period. The table shows this growth came from two fronts. One source of growth was outer suburbia particularly South Eastern Outer Melbourne, but also Northern Outer Melbourne and Melton-Wyndham. This growth is to be expected given the rapid expansion of suburbia into these areas over this period. The other sources of growth in applicants were Boroondara, Eastern Middle Melbourne and Southern Melbourne which, unlike the areas mentioned above, are relatively established suburbs. It is hypothesised that the increase in applicants from these areas is related to the schools' favourable academic outcomes. The government schools in these areas are becoming the only ones able to compete with the independent school sector for university places. As a result, patronage of the schools is growing, especially in the senior years. The high retention rates provided in Table 6.6 also reflect the relative popularity of schools in these areas in recent years (Lamb, 2007 has recently explored the issue of enrolment trends in individual urban schools in further detail). Case studies in Chapter 8 further highlight this issue.

On the other hand, the largest decrease in year 12 VTAC applicants across Melbourne SSDs, a 22.9 per cent drop in Moreland, could be the result of the reverse effect. It is likely that low academic outcomes and negative publicity about some of the schools in the area, particularly one which was eventually closed at the end of 2004, influenced the enrolment levels at schools in this SSD over this period. Some of the other areas in Melbourne with lower academic outcomes also experienced decreases in the number of government school VTAC applicants over this period. Of these other areas, the decrease in Hume is perhaps of most concern because this SSD experienced considerable population growth between 1996 and 2004 (a 21 per cent increase in resident population compared with a 10 per cent growth across the whole of Melbourne). The devastating conclusion to be drawn from this is that parents in Hume do not see the government schools in the area as effective and viable education providers.

School location	1996	1998	2000	2002	2004	Change, 1996 to 2004 (count)	Change, 1996 to 2004 (%)
Inner region							
Inner Melbourne	1,050	1,093	1,200	1,240	1,177	127	12.1
Northern and Western regions							
Inner/Middle Western Melbourne	1,895	1,695	1,804	2,206	2,122	227	12.0
Moreland City	410	303	340	359	316	-94	-22.9
Northern Middle Melbourne	1,255	1,066	1,087	1,140	1,111	-144	-11.5
<i>Outer</i> Melton-Wyndham	411	396	387	471	448	37	9.0
Hume City	546	542	479	512	505	-41	-7.5
Northern Outer Melbourne	638	562	547	771	760	122	19.1
Eastern and Southern regions							
Inner/Middle Boroondara City	718	662	771	892	957	239	33.3
Eastern Middle Melbourne	2,083	1,971	2,309	2,412	2,521	438	21.0
Southern Melbourne	895	947	933	1,035	1,075	180	20.1
Greater Dandenong City	765	714	792	808	730	-35	-4.6
Eastern Outer Melbourne	1,109	964	1,024	1,081	1,033	-76	-6.9
<i>Outer</i> Yarra Ranges Shire Part A	555	541	589	690	619	64	11.5
South Eastern Outer							
Melbourne	644	598	769	816	899	255	39.6
Frankston City	488	479	487	507	543	55	11.3
Mornington Peninsula Shire	429	363	356	405	381	-48	-11.2
Total Metropolitan Melbourne	13,891	12,896	13,874	15,345	15,197	1,306	9.4

Table 6.10: Number of year 12 government school VTAC applicants by school location, Melbourne 1996 to 2004

Source: VTAC unpublished 2004/05

The reputation of individual schools in the government system can be crucial to their survival in the highly competitive education market. As a university education becomes a vital pathway to gaining secure and stable employment, the recognition by parents of the role that schools play in paving a way to university increases. The figures in Table 6.10 show that schools which do not appear to provide this pathway have witnessed a slow decline in student numbers between 1996 and 2004, while those schools with growing academic reputations have experienced a boom in enrolments.

Academic achievement

The changing academic outcomes within the government schools in Melbourne are shown in Figure 6.1 which charts the change in the indexed median ENTER between 1996 and 2004 by school location. Figure 6.1 also indicates the ranking of each SSD according to the median scores for 1996 (shown in brackets next to the name of each area). Increases in academic achievement were recorded in only five areas of Melbourne during the period. The largest increase was recorded in Moreland City. However, the data show that this area also had the lowest ranked median ENTER of all SSDs in 1996 and therefore started from a very low level. The median ENTER recorded by students in Moreland in 2004 was still very low, as shown in Table 6.7. The increase for Moreland is likely to be a result of the large decrease in VTAC applicants in the area, outlined in the data and discussion above. This decrease left only a small number of relatively ambitious students to apply through VTAC. While these students still achieved a relatively low median ENTER, it was notably higher than in previous years when there were larger numbers of VTAC applicants.

The other four areas with increased indexed median ENTERs between 1996 and 2004 represent an entirely different situation. Three of these areas, Inner Melbourne, Boroondara and Eastern Middle Melbourne were the highest-ranked areas according to median ENTER in 1996, while Southern Melbourne was fifth. By 2004 they comprised the top four SSDs when measured by median ENTER. The significance of the results presented in Figure 6.1 is that the dominant academic areas in the government school sector have continued to improve, while government school results in other areas of metropolitan Melbourne have deteriorated, thus increasing the gap between the high academic performers and the rest.



Figure 6.1: Change in indexed median ENTER of government school year 12 VTAC applicants by location of school, Melbourne 1996 to 2004

Source: VTAC unpublished 2004/05

The decreases in the indexed median ENTER for all other SSDs in Melbourne pushed students from these regions further behind in the scramble for university places. In particular, the declines in Melton-Wyndham and Hume were large, particularly when considering that these two areas were ranked among the lowest for academic outcomes in 1996. The subsequent decreases by 2004 resulted in these two areas recording median ENTERs 30 to 40 per cent below the state median and ranking these two at the bottom of the 16 Melbourne SSDs.

Dandenong and Yarra Ranges also recorded large decreases. In academic terms, Yarra Ranges was relatively highly ranked in 1996 (6th of 16 SSDs), but steady declines in the following years pushed students from this SSD further down the ranks and consequently further away from university entry. A similar development occurred in Dandenong where the median ENTER of government school students fell from about 15 per cent below the state median in 1996 to more than 25 per cent below in 2004.

Changes in university offers

The impact of these declines in academic performance on university offers to government school students around Melbourne are displayed in Figure 6.2, which shows the proportion of applicants who gained a university offer for every second year from 1996 to 2004.

In addition to the changes in academic outcomes, the decreasing provision of university places has also had an impact on the proportion of applicants who gain a university offer each year. In Chapter 4, the impact of decreasing numbers of university offers made between 1996 and 2004 was discussed in relation to the three school sectors. The figures showed that all sectors suffered from declines in the number of university offers between 2000 and 2002. Among metropolitan government school applicants, the number of university places offered through VTAC fell from 7,610 in 2000 to 6,777 in 2002. The impact of this drop is apparent in the outcomes for most Melbourne SSDs (Figure 6.2). Between 2002 and 2004 there was a slight rise in the number of university offers made, which resulted in a small recovery in most SSDs.

Figure 6.2 also shows that across Melbourne these changes in the provision of university places impacted on some regions more profoundly than others. It was generally the academically lower-performing areas that experienced the greatest fluctuations in the proportion of university offers to applicants.

SSDs in the northern and western regions and the eastern and southern outer areas recorded significant declines in the proportion of university offers gained between 2000 and 2002. The declines over these two years in Western Melbourne, Melton-Wyndham, Hume, Northern Outer Melbourne, Yarra Ranges, South Eastern Outer Melbourne and the Mornington Peninsula were particularly large (Figure 6.2). For example, 55.9 per cent of government school applicants in Hume schools gained a university offer in 2000, compared with only 29.3 per cent two years later. Most of the areas mentioned here did experience a slight recovery in 2004 as a result of a greater number of university offers being made, but any increase still left them well behind the levels they had achieved in previous years.

Fluctuation in the number of university places being offered had a smaller impact on the higher-performing areas of Melbourne. The very high-performing area of Inner Melbourne experienced almost no variation in the proportion of university offers over the period examined here, with students achieving a consistently high proportion of university offers. The high-performing areas of the inner/middle east and south did experience a downturn between 2000 and 2002, but the increasing numbers of offers made in 2004 saw most of these areas recover. By 2004, the proportion of applicants gaining a university offer in Boroondara, Eastern Middle Melbourne and Southern Melbourne were close to the levels recorded in previous years.

Figure 6.2: Proportion of VTAC applicants gaining a university offer, government school year 12 students, by school location, Melbourne 1996 to 2004



Source: VTAC unpublished 2004/05

Figure 6.2 highlights the varying impact of the supply of university offers on individual areas. It shows that while few areas were immune to the overall decrease in university offers, the areas identified as lower academic performers bear the brunt of these declining numbers and of the resulting increased competition. This is because a decrease in offers means that a higher ENTER score is required for a university place, thus excluding those students with scores on the fringe of entry to university. As the

evidence above has shown, there are many 'fringe' students in the outer areas and in the north and west. Areas with higher academic entry scores are less vulnerable to changes in supply, as is shown in the outcomes for Inner Melbourne, Boroondara, and Eastern Middle Melbourne (Figure 6.2).

Changes in TAFE offers

Figure 6.3 shows the proportion of students gaining an offer to a TAFE institution. The pattern is the inverse of that seen in the university offer statistics in Figure 6.2. In general, the high performing areas had a consistently low proportion of TAFE offers between 1996 and 2004, while the opposite was true for all other areas. After a slight decline in the number of TAFE offers made to government school applicants between 1996 and 1998, there was a steady increase to 2002 (4,000 offers in 1998 to 5,626 in 2002), followed by a small decline in 2004 (5,426 offers). The proportion of TAFE offers gained by applicants across most of the SSDs in Melbourne reflected these changes in offer numbers. In addition, particularly sharp rises between 2000 and 2002 were notable in areas with low proportions of university offers.

Hume City provides a good example of these trends. As noted in relation to university offers, Hume experienced a substantial decline in the proportion of applicants gaining a university offer between 2000 and 2002. The pattern of TAFE offers in Hume in these years was the opposite – 34.4 per cent of applicants gained a TAFE offer in 2000, increasing to 47.9 per cent in 2002. In this and other academically low-performing areas of Melbourne, TAFE was the clear alternative to university as entrance became more competitive during periods of low numbers of university offers.



Figure 6.3: Proportion of VTAC applicants gaining a TAFE offer, government school year 12 students, by school location, Melbourne 1996 to 2004

Source: VTAC unpublished 2004/05

It is fortunate for students studying in these low-performing areas that TAFE provided an opportunity for students to continue their education when university places became scarce. However, as shown earlier in this thesis, these two post-school options lead to very different outcomes, with the offer of a TAFE place providing less opportunity for upward social mobility. In fact, as shown in Chapter 4 and earlier in this chapter, low enrolment rates among those gaining a TAFE offer mean that many students in this group do not end up in further education at all following year 12.

Tertiary enrolment rates

Figure 6.4 adds further evidence to this argument, showing that the proportion of metropolitan government school students with a TAFE offer who enrolled in the year following their school completion was consistently below that for those receiving a university offer between 1996 and 2004. While there was some variation during this period, there was little difference between enrolment rates at either end of the time series. Slightly more than 80 per cent of university offers resulted in full-time enrolment in both 1996 and 2004, while only 56 to 58 per cent of TAFE offers led to enrolment in these years.





Patterns of enrolment across universities and campuses

Interesting patterns emerged between 1996 and 2004 in relation to university enrolment trends across campuses and geographic regions of Melbourne. Students from the increasingly academically high-performing areas of Eastern Middle Melbourne and Boroondara emerged as winners in the competition for university, increasing their dominance of all university places and their share of enrolments at the most prestigious universities. At the same time, students from outer suburban government schools experienced a decreasing share of all university enrolments, but at the same time did increase their share at the university campuses that were closest in proximity to their schools.

Boroondara government school students comprised 6.3 per cent of all metropolitan government school year 12 VTAC applicants in 2004. However, the market shares of these students at the University of Melbourne and Monash University Clayton campus

Source: VTAC unpublished 2004/05

were much higher, at 12.1 per cent and 9.4 per cent respectively. Their share of enrolments at top universities grew in the years leading to 2004 at a faster rate than the share of all applicants from Boroondara. The market share of Boroondara students enrolled at the University of Melbourne increased by two percentage points between 1996 and 2004, while the Monash Clayton share increased by 2.6 percentage points. By comparison, the overall growth in market share of all applicants from Boroondara government schools rose by only 1.1 percentage points during this time.

The increasing academic strength of government schools in Eastern Middle Melbourne SSD is displayed in Table 6.11. In 1996, 15.0 per cent of government school applicants were from schools in Eastern Middle Melbourne and 17.2 per cent of all university enrolments were of students from schools in this area. There was a slightly higher share of university enrolments than applicants, but the difference was minor. However, the dominance of students from this area in university enrolments was much more pronounced by 2004. By this time Eastern Middle Melbourne's share of metropolitan government school VTAC applicants had increased 1.6 percentage points to 16.6 per cent, but the areas share of university enrolments had increased more sharply, up four percentage points to 21.2 per cent of all metropolitan government school students enrolled at university.

Interestingly, while Eastern Middle Melbourne experienced large increases in its market share of enrolments at the institutions with the highest academic entry requirements, its market share at lower status universities decreased. At the University of Melbourne, the share of all enrolments among government school students from Eastern Middle Melbourne increased 4.9 percentage points between 1996 and 2004, to 19.1 per cent. Their enrolment share at Monash Clayton increased even more, by 6.4 percentage points to 35.5 per cent of all of Melbourne's government school student enrolments in 2004. By contrast, despite an overall increase in their share of university enrolments, Table 6.11 shows that the share of students from Eastern Middle Melbourne enrolled at Victoria University and Swinburne Lilydale actually decreased (0.7 and 1.1 percentage points respectively).

	Eastern Middle Melbourne market share (%)							
Market share of metropolitan government school year 12 VTAC applicants	1996	1998	2000	2002	2004	Percentage point change 96 to 04		
All applicants	15.0	15.3	16.6	15.7	16.6	1.6		
All university enrolments	17.2	17.4	20.2	19.9	21.2	4.0		
Enrolments at the University of Melbourne	14.2	14.9	17.5	18.4	19.1	4.9		
Enrolments at Monash University Clayton	29.1	30.2	34.8	34.4	35.5	6.4		
Enrolments at Victoria University	8.0	8.6	8.2	8.4	7.3	-0.7		
Enrolments at Swinburne University Lilydale	31.4	31.6	37.1	27.8	30.4	-1.1		
Total university enrollees from East Mid Melb	1,050	1,006	1,156	1,112	1,248			

Table 6.11: Market share of applicants, university enrolments and enrolments at selected universities for students from government schools in Eastern Middle Melbourne in relation to all Melbourne government school applicants, 1996 to 2004

Source: VTAC unpublished 2004/05

While students in the academically high-performing areas increased their share of enrolments at the university campuses with high entry scores, those in other areas of Melbourne were increasing their market share at other more academically and practically accessible universities. Year 12 applicants from Western Melbourne and Melton-Wyndham schools gained an increasing share of all enrolments at nearby Victoria University. Both of these SSDs experienced a decrease in market share of all university enrolments, so increases in enrolments at individual universities are particularly noteworthy. Melton-Wyndham students' share of enrolments at Victoria University increased from 6.4 per cent in 1996 to 9.7 per cent in 2004 and that of students from Western Melbourne increased from 33.6 per cent to 37.6 per cent.

Students from schools in Northern Outer Melbourne experienced little overall change in their share of all university enrolments, but did increase their enrolment share at the local university campuses of La Trobe Bundoora by 3.3 percentage points and RMIT Bundoora by 5.3 percentage points. The market share of students from South Eastern Outer Melbourne at Monash University Berwick campus increased from 10.5 per cent in 1996 to 24.8 per cent in 2004, although student numbers at Monash Berwick are much smaller than at the other universities and campuses mentioned above. These figures indicate an increasing geographic and academic divide in the university attendance of Melbourne government school students. The pattern of increasing attendance of outer suburban students at local or nearby university campuses is similar to the tendency towards strong patronage of regional Victorian universities by regional government school students. Particularly in the case of the north and western outer areas of Melbourne, it seems that physical and academic accessibility are both key factors increasing the tendency towards local university enrolments of government school students. This issue is explored further in Chapter 7.

This evidence suggests that there is not just a growing academic divide among government schools and regions in terms of entry to university, but that among those who do get a university place, there is an increasingly entrenched hierarchy related to attendance at particular universities. This hierarchy matches the geographic area in which students attend secondary school and in turn relates to academic achievement of students in these areas. In essence there are tiers emerging within the government school sector in Melbourne, not only in terms of university entry, but also in terms of access to specific university campuses. Both sets of tiers neatly reflect the geographic location of the government schools in Melbourne.

Conclusion

This chapter has used VTAC data to highlight the sharp differentiation of outcomes within the government school sector in Victoria. The analyses of the data have shown that in the growing competition for university, government schools in some areas are having more success than others.

The comparison of regional Victorian and Melbourne government schools reveals that while a greater proportion of applicants from regional schools gain an offer to university, the retention and transition rates of schools in this area indicate that a smaller proportion of students actually reached the VTAC application stage. The figures also reveal a strong tendency among regional students to aim for and enrol in regional-based university campuses, where entry score requirements are lower and more accessible to regional students. It is argued that the educational challenges faced by regional students relate to issues of isolation and lack of resources, rather than the intense competition and market-driven factors that impact on the metropolitan government schools that are the focus of this thesis.

The main emphasis of the remainder of the chapter was on government schools in metropolitan Melbourne. Analysis of these schools by SSD revealed massive differences in the academic achievement levels of students in this sector. The data showed that the much higher academic achievement in the inner/middle Eastern and Southern regions of the city helped students to gain a reasonably high proportion of university places. Access to prestigious university campuses was shown to be more common among students from these areas, and variation in the number of university offers had limited impact on their outcomes. By contrast, schools in the outer suburbs and the west and north fell behind in academic outcomes, making them more vulnerable to fluctuations in the supply of university places and resulting in only small proportions of students finally enrolling at university.

Intense competition between schools for enrolments and between students for university offers from 1996 to 2004 has contributed to this geographical segmentation of the government school system. In terms of school enrolments, the figures show increased patronage of government schools in areas with high academic outcomes, but decreased patronage in lower-performing areas. In relation to university offers, the differences across Melbourne are stark.

Accompanying the pressure resulting from the competition for university places are a number of other factors driving division within the government sector in Melbourne. A number of these issues and discussion of how they relate to the outcomes highlighted above are detailed in the next chapter.
7. Factors influencing the differentiation of outcomes among Melbourne government schools

Introduction

The analysis of year 12 outcomes detailed in the previous chapter highlighted the diversity of results within the government school sector in Melbourne. In particular, the results showed stark differences in the university articulation of government school students depending on the geographic location of the school attended. The There was a clear distinction within the government sector between the winners and losers in the competition for university places in Victoria.

These findings are important in that they reveal that the disparity in the education system exists not only between the school sectors: within the largest school sector there is also a massive variation in outcomes. The factors influencing this intra-sector variation are in many ways different from those outlined in Chapter 4, in which reasons for the lower academic outcomes of the government sector were canvassed. Since funding and control of schools in the government sector is relatively uniform, these factors cannot explain the enormous variation in outcomes.

Despite this common ground between government secondary schools in Melbourne, there are also a number of factors which differentiate schools and contribute to the variation of results that was highlighted in the previous chapter. This chapter explores these factors. Specifically, the discussion relates to the socioeconomic status of the student population across government schools, the resources schools are able to secure outside their government-funded budgets, curriculum specialisation, local competition from non-government schools, and proximity to university campuses.

Some data used in this discussion rely on the assumption that the majority of government school students attend their neighbourhood school. The enrolment policy of the Victorian Department of Education and Training (DET), and the VTAC data both support this assumption. Policy documents from the four metropolitan regions of the DET stipulate that most students beginning year 7 in a government school 'will be

attending their neighbourhood school' (Department of Education and Training, 2004) and that it is a principle of the DET 'to provide each child with the right to a place in the designated neighbourhood school' (Department of Education and Training, 2006a). According to these documents, 'the designated neighbourhood school is defined as the secondary college which is nearest in a straight line distance to the student's permanent residential address' (Department of Education and Training, 2004). The VTAC data confirms the impact of these policy directives. There is a strong correlation between the postcode of each applicant's permanent residence and the postcode of the school they attend (0.79, significant at the 0.01 level).

It is therefore safe to assume that the socioeconomic profiles of government school students living in the Melbourne SSDs are indicative of the socioeconomic status of the students attending government schools in each SSD. However, some caution should be exercised with regard to the Inner Melbourne statistics because of the three selective government schools in this SSD (two academically selective and one performing arts selective school). These schools enrol students from throughout the state.

Socioeconomic status of government secondary school students

As shown in Chapter 5, there are considerable differences in the socioeconomic profiles of government and independent school students in Victoria. It was argued that the higher socioeconomic status of the independent school student population helped to explain the higher academic outcomes these students achieved. Similar patterns exist within the government school sector when the socioeconomic profiles of government school students living in different regions are analysed.

Customised data from the 2001 Census of Population and Housing shows that the four areas with the best academic outcomes across the time series (1996 to 2004) of results outlined in Chapter 6 also had the highest proportion of government school students from families in which the head is employed in a professional occupation. Figure 7.1 shows the proportion of government secondary school students who come from a 'professional' family by the SSD of their home residence. Boroondara City had by far the highest proportion of government school students from professional families (29.7)

per cent), while Eastern Middle Melbourne, Inner Melbourne and Southern Melbourne had proportions ranging between 18.2 per cent and 21.2 per cent. By comparison, government school students from many outer suburban SSDs were much less likely to come from a professional family. South Eastern Outer Melbourne, Melton-Wyndham and Hume all had less than 8 per cent of government school students in this category.

In these outer areas with low proportions of professionals, most students' parents are employed in lower-skilled occupations. In the three outer suburban SSDs mentioned above, around 20 per cent of students come from families in which the head is employed as a labourer; a much higher proportion than in most other areas of Melbourne, particularly the inner east and south.

The significance of these figures is that people employed in professional occupations are much more likely to have a university degree, be well remunerated and have secure employment tenure. In particular, having a parent with a university degree is positively correlated to the likelihood of a student attending university (James, 2002).



Figure 7.1: Proportion of government school secondary students with head of family employed in a professional occupation, Melbourne, 2001

Source: Australian Census of Population and Housing 2001, customised matrix

Given that professional occupations generate higher incomes, it is unsurprising that a similar pattern is evident in Figure 7.2, which charts the proportion of government school students from high-income families by Melbourne SSD. Once again, the same four areas have the highest figures. The rate of high income, measured by the proportion of families with an income of \$2,000 or more per week, is particularly high in Boroondara. Government school students residing in outer suburban and Western Melbourne are much less likely to come from high-income families.

In the case of the comparison between the government and independent school students in earlier chapters, the advantage of superior financial resources meant that parents could afford to purchase a private education for their children. However, an advantageous financial position can also be beneficial to students enrolled in government schools. Money can buy effective out-of-school tutors and comprehensive pre-exam subject review sessions at many of the major universities. It can also help to make the home environment more conducive to study. Wealthier parents can provide up-to-date information technology equipment (i.e. personal computers, printers, high speed internet) and space within the home for a distinct study area.



Figure 7.2: Proportion of government school secondary students from a household with a family income of \$2,000 or more per week, Melbourne, 2001

Source: Australian Census of Population and Housing 2001, customised matrix

The disadvantaged status of government schools in some areas of Melbourne can also be measured according to a system devised by the Victorian Department of Education and Training which groups 'like' schools according to two socioeconomic characteristics. In particular, the proportions of students in each school who receive welfare benefits in the form of the Education Maintenance Allowance (EMA) or, for students 16 years and over, the Youth Allowance, reveal the differences in the school populations throughout the metropolitan area. To be eligible for the EMA a student's parent must be the beneficiary of a welfare allowance or pension and hold a Health Care Card. Students over 16 years are eligible for Youth Allowance if they fall below a certain means-tested income level which is measured according to personal circumstances and in most cases, parental income.

Table 7.1 contains the proportion of government schools providing year 12 in each SSD that fall into each of the 'Like' School Group (LSG) categories with high, medium or low proportions of EMA or Youth Allowance recipients. Schools in LSG category 1, 2 and 3 have 28 per cent or fewer students on EMA or Youth Allowance, categories 4, 5 and 6 have between 28.1 per cent and 43 per cent of students in this situation, while categories 7, 8 and 9 have a proportion of EMA or Youth Allowance recipients above 43 per cent.

The table shows a concentration of schools with high proportions of students receiving welfare benefits in the west and north, as well as in Dandenong City in the south east. Few schools in the inner east and south fall into this category. Most schools in the outer east and southern SSDs are in the medium categorisation and there are relatively few schools with high rates of EMA or Youth Allowance recipients.

School location	Low EMA/Youth Allowance (LSG 1, 2 or 3) (%)	Medium EMA/Youth Allowance (LSG 4,5 or 6) (%)	High EMA/Youth Allowance (LSG 7,8 or 9) (%)	Unknown (%)	Total (%)	Number of schools with VTAC applicants
Inner region Inner Melbourne	60.0	10.0	30.0	0.0	100.0	10
Northern and Western regions Inner/Middle Western Melbourne	14.3	28.6	57.1	0.0	100.0	21
Moreland City	0.0	0.0	100.0	0.0	100.0	6
Northern Middle Melbourne	18.8	18.8	56.3	6.3	100.0	16
<i>Outer</i> Melton-Wyndham Hume City	0.0 12.5	100.0 37.5	0.0 50.0	0.0 0.0	100.0 100.0	7
Northern Outer Melbourne	33.3	22.2	44.4	0.0	100.0	9
Eastern and Southern regions Inner/Middle	00.7	22.2		0.0	400.0	0
Boroondara City	66.7	33.3	0.0	0.0	100.0	6
Eastern Middle Melbourne	70.0	30.0	0.0	0.0	100.0	20
	40.0	50.0	10.0	0.0	100.0	10
Greater Dandenong City	0.0	33.3	66.7	0.0	100.0	9
Eastern Outer Melbourne	76.9	15.4	1.1	0.0	100.0	13
Outer Yarra Ranges Shire Part A	33.3	55.6	11.1	0.0	100.0	9
South Eastern Outer Melbourne	22.2	66.7	11.1	0.0	100.0	9
Frankston City	16.7	66.7	16.7	0.0	100.0	6
Mornington Peninsula Shire	20.0	60.0	20.0	0.0	100.0	5
Total Metropolitan Melbourne	33.5	35.4	30.5	0.6	100.0	164

Table 7.1: Government schools with VTAC applicants by 'Like' School Group, Melbourne, 2003

Source: http://www.sofweb.vic.edu.au/standards/improve/likesch.htm, and DET (2004) Summary Statistics Victorian Schools

The relationship between high socioeconomic status and gaining entry to university is highlighted in Map 7.1. This map shows the location of government schools in Melbourne within the top and bottom quartiles when measured by the proportion of government school VTAC applicants receiving a university offer in 2004. The map is also shaded according to the socioeconomic status of each Census Collection District (CCD) in the metropolitan area. Socioeconomic status in Map 7.1 is measured according to the Index of Education and Occupation calculated by the Australian Bureau of Statistics which 'is designed to reflect the educational and occupational structure of communities' (Australian Bureau of Statistics, 2001, p. 4).

As the map shows, schools within the top quartile of university offers (represented by a clear circle) are almost exclusively located in areas of high socioeconomic status (lightly shaded areas). The largest clusters of these academically high-performing schools are in the inner eastern suburbs and inner city as well as in the middle suburbs in the east. There is a distinct lack of these schools in the outer suburban areas of Melbourne and in areas where socioeconomic status is relatively low.

Equally important is the fact that almost every school in the bottom quartile (according to proportion of university offers) are located in areas of low socioeconomic status. The link between low academic outcomes and low SES is well illustrated in the strip of low SES that runs down the south east of the metropolitan area beginning about 20 kilometres from the CBD. Spread throughout this strip is a group of six schools in the bottom quartile of university offers. Other areas with groups of schools with low academic outcomes are located in the low SES areas in the middle northern suburbs, the middle western suburbs and also in the outer west.



Map 7.1: Location of government schools* in the top and bottom quartile of university offers, 2004 and socioeconomic status^ of Melbourne CCDs, 2001

The year 12 outcomes data show that there are definite hierarchies of academic performance within the government school sector in Melbourne. In addition, the results here indicate that socioeconomic status plays a key role in determining the chances of year 12 students gaining access to university. As shown in earlier chapters, university entrance may be determined by small variations in entrance scores – five points can make a substantial difference to the tertiary options available to students. Therefore, the advantage associated with financial or academic support can be crucial in gaining access to university.

This evidence shows that the education system in Melbourne is not particularly effective in providing opportunities for upward social mobility to students from disadvantaged backgrounds.

^{*}Government schools with 10 or more VTAC applicants in 2004 were included in the calculation of quartiles. 161 metropolitan government schools in total formed the analysis.

[^]Blank areas (white with diagonal stripes) within the Melbourne SD are CCDs with no SIEFA SES index score. In most cases these areas are open farmland, parks or concentrated industrial areas and therefore have small or no resident populations. Source: ABS (2001) Socioeconomic Indexes For Areas, Version 1.5.32 and VTAC 2004/05 unpublished.

School resources

School resources within the government sector primarily come from the state and federal governments in the form of per capita recurrent funding and once-off capital works grants. Within Melbourne, funding for government schools is based primarily on a per student allocation, with small variations in resource allocation according to disadvantage. This means that government schools start on a level playing field in terms of their main component of government funding.

However, in addition to government funding, schools are able to generate extra revenue from other sources. The primary source of additional revenue is through voluntary school fees, set at a level determined by the principal and school council. As their name suggests, these fees are not mandatory, but there is generally an expectation that parents will pay them if their financial circumstances permit. Other forms of revenue come from fundraisers, donations, mandatory fees charged to international students, hiring of school facilities and even the leasing of school space for advertising (Department of Education and Training, 2006c). Any additional financial resources that a school can obtain are helpful in preparing students for postschool pathways, particularly, access to university.

Quantifying the amount of additional revenue schools are able to generate is difficult. However, there are a few sources of data available, namely figures on international full fee students and data detailing voluntary contributions to government schools, which can be used to determine the financial advantages achieved by some government schools in Melbourne.

International students provide significant revenue to schools through the mandatory fees that they are required to pay. The Victorian Department of Education and Training has a unit dedicated to attracting international students into Victorian government schools. Individual schools advertise their international calibre on their web sites and in brochures produced in conjunction with the Department. Each international student enrolled in a government school paid up to \$11,500 per year in

2005 (Leung, 2006). There were nearly 2,200 full-fee paying international students enrolled in Victorian Government secondary schools in 2004.

According to enrolment figures, some government schools in Melbourne are attracting large numbers of international students. While the Minister for Education in Victoria has been quoted as saying the Government 'would be "very, very disappointed" if schools were enrolling international students for money' (Leung, 2006), there is no doubt that this lucrative market is an incentive for schools to open their doors to the overseas students.

The government schools in Victoria with the largest international student populations are predominantly located in the inner eastern and southern suburbs of Melbourne. Of the 18 secondary schools in 2004 which enrolled more than 50 overseas students, 15 were located in the SSDs of Boroondara, Eastern Middle Melbourne and Southern Melbourne. These enrolments benefit the bottom line of each of these schools. The extra money from these students can be used to upgrade facilities and fund additional resources in order to improve the outcomes of students. Those schools which are not in a position to compete for international students are left with smaller budgets and a more challenging task in preparing their students for their post-school lives.

Attracting additional resources from domestic students through voluntary fees is arguably even more important for government schools. The amount charged per year is set at the discretion of the school council and principal and there is no obligation on parents to pay to send their children to a government school. Given that voluntary payment for school tuition is dependent on parental financial resources, schools in the more disadvantaged areas of Melbourne are likely to have a lower capacity for collecting voluntary fees.

Figure 7.3 shows that in the majority of SSDs in Melbourne, the average voluntary fee⁷ collected per student in the first half of 2006 was between \$150 and \$250. Only three areas, Inner Melbourne, Southern Melbourne and Eastern Middle Melbourne were above the \$250 per student mark. The high figure of \$383 per student in Inner

⁷The revenue figures used here are for 2006, but enrolment figures matched to them are for 2005. Therefore these are indicative rather than exact figures.

Melbourne schools is to be expected given the existence of the selective schools in this area, while the relatively high socioeconomic status of the other two areas also helps to explain the higher average amounts paid by parents. Interestingly, Boroondara, which had by far the highest proportion of government school students from high income families, was just below the median for all areas on this measure.

The three areas with the lowest average voluntary fees per students were all areas with low levels of socioeconomic status. Clearly schools in these areas can only provide the basics of education. The lack of additional resources and the prevalence of students from disadvantaged backgrounds mean that it is a considerable challenge to compete for university places with other government schools, let alone the privileged independent schools.





* Voluntary contributions include money for books, class sets or other requisites for curriculum needs, including outdoor education, sport education and other tuition fees such as instrumental music.

Note: average per student is approximate – revenue figures are for 2006, but enrolment figures matched to them are from 2005. Source: DET (2006) *Miscellaneous revenue, government schools*, printed in *The Age*, August 14, 2006 and DET (2005) *Summary Statistics, Victorian Schools* The success of schools in attracting additional funding from other activities, such as school fundraisers and donations, is also likely to be linked to the socioeconomic profiles of the communities they serve. While specific data on this for Victoria are not available, various studies have found that this is the case. Welch notes that some schools 'can depend on the enthusiastic support of a wealthy set of parents with useful "contacts" while others are quite unable to draw upon such extra resources' (1997, p. 218).

In addition, the involvement of parents in schools through fundraising and working bees also tends to be greater in schools located in more affluent areas. Parental involvement in activities, such as working bees to help maintain facilities and remedial reading assistance programs, saves schools money. According to Caldwell (1999), strong participation in these sorts of activities is essential to creating an effective school. In a US study, Holme (2002) found that schools which catered to affluent communities benefit from greater parental involvement: 'middle-class parents in the school communities who have time, resources, and are comfortable with the school culture tend to volunteer a great deal of time to the school' (2002, p. 202). This involvement helps create an atmosphere of encouragement and relieves teachers from menial tasks, giving them more time to concentrate on educating students.

Curriculum specialisation

Chapter 3 outlined the changing structure of the government school system in Victoria, from the comprehensive curriculum introduced in the 1960s, to the gradual specialisation of schools from the mid-1990s onwards. These specialisations have been adopted by schools in order to maintain enrolments at a time when the comprehensive government school has become increasingly unpopular – it appears that parents are no longer attracted to the 'one-size-fits-all' philosophy of the public school system. Specialisation in the government school sector has resulted in a wide range of different options offered by schools.

A government school system offering a broad spectrum of opportunities is particularly important in contemporary society because it ensures that there are options that cater to a wide range of abilities and aspirations. However, because students are generally required to attend their neighbourhood government school, the options across the government system are, in practice, very limited as far as the individual student is concerned. If your neighbourhood school does not specialise in the subjects that interest you, your chances of being able to bypass it in favour of another school are remote. This becomes particularly problematic for students looking for government schools emphasising an academic curriculum. There are numerous examples in Melbourne of schools with good academic reputations having to implement strict enrolment caps, which mean that students from outside the local neighbourhood have a poor chance of gaining a place.

Another problem with the specialisation of schools in the government sector is that it has occurred in an *ad hoc* manner, leading to concentrations of certain specialisations in some parts of Melbourne, rather than a spread of options throughout the metropolitan area. This is particularly the case in terms of the two broad categories of specialisation: vocational and academic. Evidence relating to the implementation of the Victorian Certificate of Applied Learning (VCAL) – a certificate designed to be a vocational-based alternative to the VCE – is used here to articulate this.

The VCAL was introduced in Victoria in 2002. According to the Minister for Education, who oversaw the program's implementation: 'unlike the VCE, widely used as a pathway to university, VCAL is directed at year 11 and 12 students who are more likely to go on to TAFE, an apprenticeship or the workplace after school' (Kosky, 2005a). The VCAL has been a particularly useful vehicle for vocational specialisation within government schools. The certificate combines a range of subjects and options including VCE subjects, Vocational Education and Training (VET) certificates, work placements and specific VCAL literacy and numeracy subjects.

There are variations in the extent to which schools that offer the VCAL have embraced it. In some, only a small proportion of year 11 and 12 students are enrolled, while in others, large numbers are involved. In principle, schools still offer a broad curriculum so that each student has the opportunity to follow a number of post-school pathways. But as the specialisation of curriculum areas becomes more sophisticated and resource intensive, offering the VCAL may impact on any possibility of also improving academic outcomes. Commitment of resources towards programs of

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specialisation can be a substantial strain on school budgets. For example, the VCAL requires a coordinator, teachers and the development of new program-specific curriculum. VCAL programs also often require capital works upgrades to facilitate the practical elements involved in teaching technical subjects. As funding is diverted to these programs, the spread of resources may become weighted towards the area of specialisation.

Figure 7.4 shows that schools in the outer suburbs and the north and west of Melbourne have been much more likely to adopt the VCAL than those in the inner east and south. In addition, Figure 7.5 highlights the fact that the outer suburban areas have a much larger market share of all VCAL enrolments than they do of VTAC applicants.

These figures are important because the VCAL is an alternative to the VCE; therefore, students who undertake the VCAL do not gain an ENTER and are not able to apply for university at the end of their schooling. The large proportion of schools adopting the VCAL and the substantial market share of VCAL students in the outer suburbs of Melbourne clearly highlights the curriculum direction of government schools in these areas. The concept of the VCAL itself is certainly necessary and should be welcomed, but the concentration of this specialisation limits the range of opportunities available to some students through the government school system.



Figure 7.4: Proportion of government school year 12 providers with students enrolled in the Victorian Certificate of Applied Learning, Melbourne, 2004

Figure 7.5: Market share of VTAC applicants and VCAL students across Melbourne government schools, by SSD, 2004



Source for Figures 7.4 and 7.5: VCAA (2004) http://www.vcaa.vic.edu.au/vce/statistics/schoolstats/index.html

It is apparent from these figures that it is the academically lower-performing areas which have adopted the non-academic curriculum in the greatest numbers. Analysis of the median ENTERs of students at VCAL and non-VCAL schools reveals that has been a stratification of academic achievement in these two groups of schools since the introduction of the VCAL in 2002 (Table 7.2). In the years before the VCAL was introduced (1996, 1998 and 2000), there was already a notable difference in the outcomes of students from the two groups, perhaps indicating the existing educational advantages and disadvantage between these schools. These results may also be an indication that a number of the schools which eventually adopted the VCAL where already engaged in some forms of vocational specialisation.

Regardless of these factors, the results shown in Table 7.2 do reveal a noteworthy change in academic achievement in 2002 and 2004 (the years following the introduction of the VCAL program) in both these school groups. These figures suggest that the increased emphasis on a vocational curriculum may have had a negative impact on students from these schools who still decided to follow the academic, VCE option and that conversely, the outcomes of students in schools that had not adopted the VCAL (and presumably have instead focussed more specifically on the VCE and academic outcomes) improved over this time.

	1996	1998	2000	2002	2004	Change, 1996- 2004
Schools which had VCAL by 2004	0.81	0.81	0.80	0.78	0.76	-0.05
Schools with no VCAL program	1.01	1.03	1.03	1.05	1.06	0.05
All Metropolitan Government schools	0.89	0.90	0.89	0.89	0.89	0.00

Table 7.2: Indexed median ENTER of year 12 VTAC applicants from Melbourne governmentschools by VCAL and non-VCAL status, 1996 to 2004

Source: VCAA (2004) http://www.vcaa.vic.edu.au/vce/statistics/schoolstats/index.html and VTAC unpublished 1996/97 to 2004/05

There are many factors that have contributed to the differentiating outcomes of the schools shown in Table 7.2, so to attribute these changes just to the introduction of the VCAL would be to ignore a range of other issues. Nonetheless, the large and increasing gap in achievement between these two groups is of note when examining the extent of specialisation in Melbourne and its effect on the options available to government school students.

The tables and graphs above highlight the difficulty in accessing a school which offers an academic emphasis for many government school students in Melbourne. Despite the fact that the government system overall seems to offer a wide range of curriculum options, the structure of the enrolment system in Melbourne, whereby students are in most cases required to enrol at their neighbourhood school, is such that the academic options of a large number of students are severely reduced. In some cases, it appears that this lack of options is resulting in changes in the enrolment trends in the government school sector.

Enrolment figures for VCAL and non-VCAL government schools in Melbourne indicate that those which have not adopted the vocational program are experiencing much larger enrolment growth than those schools with a VCAL cohort. Table 7.3 shows that year 12 enrolments in all Melbourne government schools increased by 8.3 per cent between 2000 and 2004. The enrolment growth in schools with the VCAL program (5.8 per cent) was lower than the average growth in the sector. By comparison, year 12 numbers increased by 12.5 per cent in those schools which had no VCAL enrolments, a rate of growth larger than the metropolitan average in the government school sector.

School type	2000	2004	Change 2000- 2004 (number)	Change 2000- 2004 (%)
VCAL provider (107 schools)	12,198	12,910	712	5.8
Non-VCAL provider (57 schools)	7,296	8,208	912	12.5
All Melbourne government schools	19,494	21,118	1,624	8.3

Table 7.3: Year 12 enrolment numbers in Melbourne government schools, by VCAL and non-VCAL schools, 2000 and 2004

Source: VCAA (2004) http://www.vcaa.vic.edu.au/vce/statistics/schoolstats/index.html and DET Summary Statistics Victorian Schools, 2000 and 2004

The growth of enrolments in the non-VCAL government schools cannot be attributed to demographic trends, since most of these schools are located in established suburbia. If anything, the VCAL schools tend to be more prevalent in areas of high population growth, yet this is not reflected in patterns of enrolment.

Therefore, these enrolment trends could indicate a desire on the part of parents to seek academic options for their children. The reduction in academic achievement among students in the VCAL schools (shown in Table 7.2) may be an indication of the declining interest in these schools among those with academic ambitions. This issue is explored further in the comparative and case study analyses in Chapter 8.

In the context of a funding system that operates on per capita allocation of resources, schools with significant increases in senior students are in a better situation than those with minimal or no growth. In a recent analysis of Melbourne government schools, Lamb (2007, p. 33) found a strong relationship between school size and student achievement, noting in this regard that enrolment size can impact on the range of curriculum options offered. For those with the capacity to exercise educational choice (i.e. those with the financial resources to pay tuition fees in the independent sector, or those living in close proximity to a number of government schools that offer a range of different specialisations), the trend apparent here is not an issue. However, many students in Melbourne do not have such finances and don't live in close proximity to a range of schools. For those with academic ambitions who are in this position, there are limited prospects of gaining a university offer at the end of year 12.

Further analysis of outcomes according to specialisation and geographic location also shows that between 1996 and 2004 academic options diminished in many government schools. VTAC applicants from schools in areas with increasing vocational emphasis were less likely to gain a university offer in 2004 than they were in 1996, even when the reduced supply of university places and the increasing dominance of the independent school sector are controlled for.

Map 7.2 highlights the location of government schools in Melbourne which have experienced the greatest improvement in university and TAFE offers gained by year 12 students between 1996 and 2004. This improvement has been calculated using an index⁸ comparing the variation of outcomes in each school from the mean outcome for all government schools in the Melbourne metropolitan area. Other factors such as the number of university places being offered and the performance of government school students relative to students from other sectors are controlled for in calculating the index. Therefore, the index shows how outcomes of individual government schools have changed regardless of outside influences on academic results.

The index measures how an individual school's results varied from the mean of all metropolitan government schools in both 1996 and 2004. The purpose of this calculation is not to rank schools according to how large a proportion of university or TAFE offers their students gain, but rather to measure the change in their student outcomes between 1996 and 2004 when compared to the mean for government schools in those years.

The results for each metropolitan government school in 1996 and 2004 are compared and the 30 schools showing the greatest change over the period in offers to university and TAFE are displayed in Map 7.2. The majority of schools in Melbourne with the most improvement in access to university were situated in Inner Melbourne, Boroondara, Eastern Middle Melbourne and Southern Melbourne. TAFE outcomes increased in middle suburbia. There were few schools showing improvement in either tertiary outcome in the outer areas of the city. These results are particularly important when it is considered that this is a measure of improvement in outcomes, not a measure of the best outcomes. As was shown earlier in Map 7.1, the schools with the best university outcomes were also concentrated in the inner east and south.

⁸ See Appendix 2 for details about the calculation of this index.

Therefore, the best schools for academic outcomes are also improving these outcomes at the fastest rate. This again highlights the increasing stratification of government school outcomes in Melbourne.

The outcomes in Map 7.2 reflect a number of factors. In relation to curriculum emphasis, the map shows that improvements in academic outcomes were concentrated in schools in a relatively small part of Melbourne, thus limiting the options for students with university ambitions living elsewhere. Of the 26 schools in the SSDs of Western Melbourne and Melton-Wyndham, six were among the schools with the best improvement in TAFE outcomes, while none were among the best improvers in university offers. By contrast, in the inner east, the changing outcomes of government schools reveal greater choice for students. Of six schools in Boroondara, four recorded excellent improvement in TAFE offers.

Map 7.2: Government schools with the greatest improvement in university and TAFE outcomes between 1996 and 2004, Melbourne



Source: VTAC 1996/97 and 2004/05 unpublished

The case for specialisation is not thwarted using the data outlined above. Rather, the data highlight the need for a measured approach to specialisation which ensures that schools with a range of specialisations are located in each region, so that every student has access to a school which gives him/her the best possibility of reaching his/her desired post-school outcome. In 2004, many students were faced with limited access to government schools showing improvement in academic outcomes or offering an academic specialisation. Chapter 6 showed that students in the areas bereft of government schools with a clear academic emphasis struggled to compete for access to university places.

Competition from local non-government schools

Fierce competition from the independent sector for school enrolments and university places has no doubt had a large impact on government schools since the mid-1970s when government funding for non-government schools was introduced. The data and discussion in chapters 4 and 5 highlighted the growing dominance of the independent sector in relation to university access. This competition has been detrimental to the government school sector as a whole. However, in some small-scale local contexts, it appears that close competition from the independent school sector is pushing government schools towards higher academic achievement. In Melbourne, the highest concentration of prestigious independent schools occurs in the inner east and south – the same areas in which many of the highest performing government schools are located.

The areas of the inner east and south are home to the most elite and long established private schools in Melbourne. Independent schools existed in these areas long before government secondary schools were built. McCalman notes that even when government high schools were being built across the city in the early 1920s,

'the entire eastern and southern suburbs of Melbourne were left to the private schools, and, not until the mid-1950s, when Box Hill Boys' High and Camberwell High started their first matriculation classes, was there anywhere east of the inner city for a state-schooler to qualify for university' (1993, p. 114)

Even in 2004, the proportion of independent schools in these areas remained high. In Boroondara, 55 per cent of all secondary schools belong to the independent sector and in Southern Melbourne the figure is 43 per cent.

As shown earlier in this chapter, these areas are also the most affluent in Melbourne, and so there is no shortage of parents willing to pay large amounts of money to enrol their children in the private system. Therefore, the enrolment numbers of government schools in these areas are under constant threat. In order to remain viable, government schools in the inner east and south have found that they need to provide a high quality academic curriculum for their students. As a result, many students attending government schools in these areas are academically successful. As Henry notes, these schools, in effect, mimic schools in the independent sector: 'within the government sector there are...secondary schools, often situated in the more affluent suburbs, which operate in a fashion similar to that of the elite private schools' (1988, p. 169).

In this local context, it could be argued that the competition from the independent school system has helped to raise the academic achievement of government school students. However, this factor should not be accorded undue emphasis in the explanation of these schools' success. The other factors outlined in this chapter are all relevant to the higher academic outcomes of government school students from the inner east and south. For example, prestigious independent schools are almost always concentrated in affluent areas and socioeconomic status is a good predictor of academic outcomes, so it is likely that the academic success of government school students as their proximity to independent schools.

Geographic issues in accessing university

The data in Chapter 6 revealed that although enrolment in university is relatively high among those gaining an offer, significant academic barriers affect students' access to a university offer in the first place. In addition to these academic barriers, there are also geographic (or physical) accessibility issues that affect the pathways taken by Melbourne students. A study by James et al. (1999) found that proximity to university campuses was a significant factor in both the choice of, and final enrolment, in university. The data displayed in Table 7.4, Table 7.5 and Table 7.6 highlight the strong preference among government school applicants for enrolling at a university in the same region as the school that they attended. These tables show the proportion of university enrolments taken up by government school students from each SSD at selected university campuses according to the location of the campus in Melbourne. The tables feature three separate groups of universities: those located in the centre of Melbourne and the inner and middle southern and eastern suburbs (Table 7.4), those located in the northern and western suburbs (Table 7.5), and those located in the outer eastern and southern suburbs (Table 7.6). Map 1.1 displays the exact geographical location of the university campuses highlighted in these tables. The tables also show the median ENTER achieved by students who gained an offer to these universities in 2004. The discussion in relation to these tables will first focus on the geographical locations of the universities in relation to the location of the students who enrol in them (physical accessibility), and will then discuss these findings in relation to the entry requirements at the universities selected (academic accessibility).

Beginning with the university campuses located in the city and inner and middle east and south (Table 7.4), the link between university location and enrolment is clear. Deakin Burwood and Monash Clayton, located in the middle suburbs of the east, were heavily patronised by those in the inner and middle suburbs of the east and, in the case of Deakin, students from the Yarra Ranges in the outer east. Monash Clayton, located in the Eastern Middle Melbourne SSD, but not far from Southern Melbourne, attracted a large proportion of all university enrolments by government school students from these two areas. Patronage by students from the northern and western SSDs was very low at Deakin and both Monash Clayton and Caulfield.

The centrally-located university campuses noted in Table 7.4 (RMIT City and the University of Melbourne) attract students from a range of areas. RMIT in particular has a strong enrolment base in the west and north. Students who went to school in Inner Melbourne had large enrolment numbers at the University of Melbourne. In this case, the outcome is likely to be linked to the higher scores of student in this area due

to the existence of the academically selective schools rather than the residential location of students – many of whom did not live in Inner Melbourne.

School location	n City, inner and middle Southern and Eastern university campuses (% of all university enrolments among government school applicants)										
	Deakin Burwood	Monash Caulfield	Monash Clayton	Swinburne Hawth/ Prahran	RMIT City	University of Melbourne	Other Uni Metro Melb	Rest of Vic Campus	Other	University enrolments (%)	Total university enrolments
Inner region											
Inner Melbourne	5.0	3.6	16.6	2.7	9.2	42.5	18.0	2.0	0.4	100	782
Northern and Western regions											
<i>Inner/Middle</i> Western Melb	3.1	2.5	2.5	4.4	16.0	19.7	44.7	6.7	0.3	100	638
Moreland City	2.2	2.2	2.2	4.3	21.5	15.1	50.5	2.2	0.0	100	93
Northern Mid. Mel	lb 4.9	1.7	2.7	2.2	17.0	18.7	49.0	3.7	0.0	100	406
Outer											
Melton-Wyndhan	n 0.0	0.8	2.4	1.6	8.0	17.6	44.0	25.6	0.0	100	125
Hume City	2.4	0.0	0.6	4.2	19.4	10.9	55.2	7.3	0.0	100	165
Northern Outer Mel	b 2.6	0.0	1.1	3.0	21.8	12.0	54.9	4.1	0.4	100	266
Eastern and South	ern regio	ons									
Inner/Middle Boroondara City	11.7	7.8	13.2	8.1	7.0	26.2	23.5	2.3	0.2	100	554
Eastern Mid. Melb	16.5	5.4	21.2	5.8	6.7	18.3	23.2	2.6	0.2	100	1,248
Southern Melb	15.3	7.4	21.7	4.3	10.3	13.8	23.9	3.3	0.0	100	419
Gr. Dandenong	14.3	7.4	17.5	4.1	13.4	10.1	31.3	1.8	0.0	100	217
East. Outer Melb	20.9	2.4	12.1	8.0	7.8	11.0	30.8	6.4	0.5	100	373
Outer Yarra Ranges A	20.5	13	38	77	83	22.4	28.8	7 1	0.0	100	156
South East Outer	12.2	3.6	13.6	5.0	6.8	9.5	34.4	14.9	0.0	100	221
Frankston City	10.1	5.4	16.9	1.4	12.2	10.1	33.8	10.1	0.0	100	148
Mornington Pen.	12.5	4.5	9.1	9.1	5.7	11.4	27.3	18.2	2.3	100	88
Total Metro Melb	10.5	4.1	12.7	4.9	10.8	20.3	31.5	5.0	0.2	100	5,899
Total Yr 12 VTAC enrolments	621	242	747	287	638	1,195	1,861	294	14	5,899	
Median ENTER for VTAC offer	79.55	84.85	91.43	81.65	79.65	94.45	84.95*	68.85	87.18	82.65	82.65

Table 7.4: Year 12 government school applicant university enrolments by school SSD for selected campuses located in CBD, inner/middle southern and eastern suburbs, 2005

Source: VTAC unpublished 2004/05

Anterstate or overseas university campuses applied for through VTAC

*median for all Metro Melbourne university campuses

The university campuses located in the north and west (Table 7.5) are well patronised by students who attended government schools in the same areas. A large proportion of students who enrolled at university and attended schools in the Northern Middle and Northern Outer Melbourne SSDs went to either La Trobe Bundoora or RMIT Bundoora, both located close to the border between these two SSDs. Of the students from these areas who enrolled at university in 2005, 46.6 per cent from Northern Outer and 39.2 per cent from Northern Middle Melbourne were enrolled at one of these two campuses. Compared to the overall market share of enrolments held by these university campuses (14.8 per cent), the local loyalty to these campuses is substantial.

Victoria University has campuses spread throughout the western suburbs of Melbourne, from inner suburban campuses such as Footscray to outer suburban satellite campuses of Melton and Sunbury. The university is heavily patronised by students living in the western SSDs. Thirty-five per cent of government school students from Melton-Wyndham who enrolled at a university in 2005 were did so at Victoria University. Similarly, the figures for Western Melbourne (26.6 per cent) and Hume (21.8 per cent) were particularly high given that Victoria University held only a 7.7 per cent share of all Melbourne government school university enrolees in 2005. By contrast, Victoria University had very few enrolments by students who attended school in Inner Melbourne (1.9 per cent), Boroondara (2.2 per cent) and Eastern Middle Melbourne (2.6 per cent).

Among the SSDs in the west of Melbourne, it is also interesting to note that more than one quarter of all university enrolments by students from the Melton-Wyndham SSD in 2005 were at university campuses in regional Victoria. There are two main reasons for this, one relating to geography and the other to academic achievement. Firstly, Melton-Wyndham is an outer suburban area of Melbourne and parts of it border with Geelong, which has a number of university campuses operated by Deakin University. The regional town of Ballarat and the University of Ballarat are also within commuting reach of some areas of the Melton-Wyndham SSD. In addition, the university campuses outside the metropolitan area have much lower tertiary entrance requirements, therefore, for those students from Melton-Wyndham with low ENTER scores (of which there are many) who aspire to university, a preparedness to study outside of Melbourne in Geelong or Ballarat increases the chance of a university offer.

School location	North and Western university campuses (% of all university enrolments among government school applicants)							
	La Trobe Bundoora	RMIT Bundoora	Victoria University (AII)	Other Uni Metro Melb	Rest of Vic Campus	Other	University enrolments (%)	Total universi enrolments
Inner region								
Inner Melbourne	7.7	2.6	1.9	85.4	2.0	0.4	100	782
Northern and Western regions								
Inner/Middle Western Melbourne	10.7	4.9	26.6	50.8	6.7	0.3	100	638
Moreland City	21.5	14.0	10.8	51.6	2.2	0.0	100	93
Northern Middle Melbourne	26.1	13.1	5.9	51.2	3.7	0.0	100	406
<i>Outer</i> Melton-Wyndham	6.4	2.4	35.2	30.4	25.6	0.0	100	125
Hume City	13.9	18.8	21.8	38.2	7.3	0.0	100	165
Northern Outer Melbourne	25.2	21.4	4.9	44.0	4.1	0.4	100	266
Eastern and Southern regions								
Inner/Middle Boroondara City	8.8	3.8	2.2	82.7	2.3	0.2	100	554
Eastern Middle Melbourne	6.8	3.3	2.6	84.4	2.6	0.2	100	1,248
Southern Melbourne	1.4	2.9	6.9	85.4	3.3	0.0	100	419
Greater Dandenong City	2.8	2.3	9.2	83.9	1.8	0.0	100	217
Eastern Outer Melbourne	9.7	3.2	2.4	77.7	6.4	0.5	100	373
<i>Outer</i> Yarra Ranges Shire Part A	6.4	1.9	5.8	78.8	7.1	0.0	100	156
South Eastern Outer Melb.	2.7	2.3	5.4	74.7	14.9	0.0	100	221
Frankston City	4.7	1.4	9.5	74.3	10.1	0.0	100	148
Mornington Peninsula Shire	4.5	1.1	2.3	71.6	18.2	2.3	100	88
Total Metropolitan Melbourne	9.5	5.3	7.7	72.4	5.0	0.2	100	5,899
Total Yr 12 VTAC enrolments	561	310	452	4,268	294	14	5,899	
Median ENTER for VTAC offer	80.35	75.35	71.05	84.95*	68.85	87.18	82.65	82.65

Table 7.5: Year 12 government school applicant university enrolments by school SSD for selected campuses located in northern and western suburbs, 2005

Source: VTAC unpublished 2004/05

Anterstate or overseas university campuses applied for through VTAC

*median for all Metro Melbourne university campuses

Among the small university campuses located in the outer eastern and southern suburbs, the pattern of local enrolment continues (Table 7.6). Swinburne Lilydale campus, situated in the Yarra Ranges to the outer east, attracted 12.2 per cent of enrolments of Yarra Ranges students and 10.2 per cent of enrolments of Eastern Outer Melbourne students, despite accounting for only 3.2 per cent of all metropolitan enrolments.

Monash Berwick campus, a small campus in the outer south east comprising only 1.7 per cent of all enrolments in Melbourne by government school students in 2005, attracted 11.3 per cent of all university enrolments from students who attended a government school in the South Eastern Outer Melbourne SSD. A similar situation is apparent for Monash Peninsula campus, located in Frankston and nearby the Mornington Peninsula. Among school students from Frankston who enrolled at university, 10.1 per cent attended the Monash Peninsula campus and for Mornington Peninsula students, the figure was 12.5 per cent. This figure, in the context of the small total market share of this campus (1.1 per cent), highlights its strong local patronage. Further evidence in support of the hypothesis that universities attract local students is that in 2005 there were no enrolments at Monash Berwick and only 3 enrolments at Monash Peninsula by students from schools in any of the northern or western SSDs.

School location	Outer Eastern and Southern university campuses (% of all university enrolments among government school							
	applicants)							rsity
	Monash Berwick	Monash Peninsula	Swinburne Lilydale	Other Uni Metro Melt	Rest of Vic Campus	Other	University enrolments (%)	Total unive enrolments
Inner region								
Inner Melbourne	0.8	0.5	0.4	95.9	2.0	0.4	100	782
Northern and Western regions								
Inner/Middle Western Melbourne	0.0	0.0	0.5	92.5	6.7	0.3	100	638
Moreland City	0.0	0.0	1.1	96.8	2.2	0.0	100	93
Northern Middle Melbourne	0.0	0.7	1.5	94.1	3.7	0.0	100	406
Outer								
Melton-Wyndham	0.0	0.0	0.0	74.4	25.6	0.0	100	125
Hume City	0.0	0.0	0.0	92.7	7.3	0.0	100	165
Northern Outer Melbourne	0.0	0.0	0.8	94.7	4.1	0.4	100	266
Eastern and Southern regions								
<i>Inner/Middle</i> Boroondara City	0.9	0.2	3.4	93.0	2.3	0.2	100	554
Eastern Middle Melbourne	2.0	0.3	4.6	90.1	2.6	0.2	100	1,248
Southern Melbourne	2.6	4.1	1.7	88.3	3.3	0.0	100	419
Greater Dandenong City	5.5	0.9	8.8	82.9	1.8	0.0	100	217
Eastern Outer Melbourne	2.7	0.5	10.2	79.6	6.4	0.5	100	373
Outer								
Yarra Ranges Shire Part A	0.6	0.0	12.2	80.1	7.1	0.0	100	156
South Eastern Outer Melbourne	11.3	3.2	5.4	65.2	14.9	0.0	100	221
Frankston City	2.7	10.1	2.0	75.0	10.1	0.0	100	148
Mornington Peninsula Shire	2.3	12.5	1.1	63.6	18.2	2.3	100	88
Total Metropolitan Melbourne	1.7	1.1	3.2	88.7	5.0	0.2	100	5,899
Total Yr 12 VTAC enrolments	101	66	191	5,233	294	14	5,899	
Median ENTER for VTAC offer	78.15	81.70	64.50	84.95*	68.85	87.18	82.65	82.65

Table 7.6: Year 12 government school applicant university enrolments by school SSD for selected campuses located in outer eastern and southern suburbs, 2005

Source: VTAC unpublished 2004/05

^Interstate or overseas university campuses applied for through VTAC

*median for all Metro Melbourne university campuses

In addition to these strong geographical patterns of attendance, there is a link between enrolments and the ENTER requirements of these campuses. This was mentioned above in relation to Melton-Wyndham students enrolling in lower-entry status regional Victorian campuses and Inner Melbourne students enrolling at the highly selective University of Melbourne. The pattern is also evident for some of the universities with lower ENTER requirements in conjunction with geographic areas that had low ENTER outcomes.

Dandenong City SSD provides an illustration. As Chapter 6 showed, students from government schools in this area had a low median ENTER (51.10) and three quarters had an ENTER below 70.00 in 2004. As a result, nearby universities such as Monash and Deakin (with median ENTERs of those gaining an offer at 91.43 and 79.55) were inaccessible to many students from this area. Consequently, many students from Dandenong enrolled at the university campuses requiring the lowest ENTERs, even if these campuses were distant. Nearly nine per cent of students from this area enrolled at Swinburne Lilydale (which held a market share of only 3.2 per cent of all university enrolments) (Table 7.6). This campus is physically difficult to access from Dandenong, but academically it is the most accessible university campus in Melbourne – the median ENTER of those gaining an offer in 2004 was 64.50. Even further for the Dandenong students were the campuses of Victoria University, which were attended by 9.2 per cent of all year 12 applicants enrolling at university in 2005 (Table 7.5). This university is also one of the most academically accessible in Melbourne. Students who gained an offer to Victoria University in 2004 had a median ENTER of 71.05.

These findings indicate that the geographical location of a university campus affects enrolment choices of students, but that academic accessibility is also important. A close comparison of Hume City in the outer west and South Eastern Outer Melbourne helps to emphasise the role that a local 'academically accessible' university can play in providing a university pathway for disadvantaged students.

Table 7.7 outlines some key socioeconomic characteristics and year 12 outcomes for government school students who attended schools in Hume and South Eastern Outer Melbourne. Both of these areas have relatively low socioeconomic status when compared with the Melbourne averages. Between the two SSDs, South Eastern Outer Melbourne has a slightly higher proportion of families with a professional head and a larger proportion of families with incomes of \$2,000 or more per week. In Hume, half the secondary schools are in the high EMA and Youth Allowance group, whereas the figure is only 11 per cent in South Eastern Outer Melbourne. The Australian Bureau

of Statistics index of education and occupation score for these areas is also slightly lower in Hume.

In terms of year 12 academic achievement, the median ENTER for students from these two areas are low in comparison to the median for all Melbourne government school students – slightly lower in Hume than in South Eastern Outer Melbourne. These results are so far consistent with the established positive relationship between higher academic outcomes and higher socioeconomic status. However, is no longer the case this changes when university offer and enrolment rates are taken into account.

As shown in Table 7.7, government school students from Hume were more likely than their peers on the other side of the city to gain a university offer and were much more likely to enrol at university if they did receive an offer. Of all 2004 year 12 VTAC applicants, nearly one third of Hume students were enrolled at university in 2005, while less than a quarter of those from South Eastern Outer Melbourne were in the same position. This is despite the fact that students from South Eastern Outer Melbourne came from slightly more affluent families and had slightly higher ENTER scores.

Government school students	Hume City	South Eastern Outer Melb	Total Melbourne
Socioeconomic characteristics			
Professional head of family (%)	7.2	7.9	13.1
Weekly family income above \$2,000 (%)	3.4	4.2	6.8
Schools with high EMA/Youth Allowance (%)	50	11.1	30.5
SEIFA Education Occupation Index (score)	926.7	944.03	1025.72
Year 12 outcomes	40.00	50.00	04.45
Median ENTER	46.00	53.20	61.45
University offers (%)	37	31.8	46.8
Enrolment rate of those with university offer (%)	86.6	76.2	83.1
University enrolment rate of all VTAC applicants (%)	32.7	24.6	38.8

 Table 7.7: Socioeconomic profile (2001) and year 12 university outcomes (2004) for government school students in Hume City and South Eastern Outer Melbourne

Source: Australian Census of Population and Housing 2001, customised matrix, ABS (2001) Socioeconomic Indexes For Areas, V1.5.32 and VTAC 2004/05 unpublished The key difference between these two areas is that Hume students are near to Victoria University campuses that offer a wide range of disciplines and have relatively low entrance requirements, whereas there are no university campuses in the south east of Melbourne that are both academically and geographically accessible for students in the area. The lack of a comparable nearby option for students in the outer south east means that fewer students are in a position to enrol at university.

Conclusion

In the competition for university offers, this thesis has shown not only that the government school sector on the whole is at a distinct disadvantage, but that there are varying levels of disadvantage present within the government sector that contribute to differential outcomes. The following chapter investigates a number of the issues explored in this chapter at the local level, via a comparative analysis of two Melbourne suburbs and through case studies of a number of individual schools.

The delineation between the academic winners and losers within the government school sector is related to a number of factors, some of which are beyond the control of individual schools or governments. However, other factors outlined above are possible to control and change through policy, in order to ensure that government school students are not disadvantaged in the final year of secondary school. In this regard, policy options that could be realistically implemented are discussed in Chapter 9.

8. The impact of competition on schools and school choice

The weaknesses of the education system in regard to its capacity to deliver equality of educational opportunity have been outlined in the preceding analyses. Pursuit of the university pathway became more difficult for Melbourne students between 1996 and 2004. By 2004, only those students enrolled outside the government sector or living in relatively advantaged neighbourhoods had a better-than-even chance of gaining a university offer. While the situation was also tough for government school and disadvantaged students in 1996, the reduction in the number of university places and the increasing number of school graduates from 1996 to 2004 exacerbated the disadvantage of many of the students enrolled in the government school system.

The discussion so far has focussed on vast geographic areas and large numbers of students and schools. This chapter examines the way in which the broad issues of competition, specialisation, choice and change have been experienced at the local level. The examples used help to illustrate these issues. In keeping with the ideas discussed in the previous chapter, they reveal a complex web of interacting factors that influence the fortunes of individual schools and students.

The first section of the chapter involves a comparative analysis of two areas encompassing a small number of government and non-government schools in very different parts of Melbourne. It illustrates the way in which demographic change and school outcomes can influence patronage of the government school system. The section shows that successful academic outcomes are important to the long term survival of the government school system. The analysis reveals that regardless of the socioeconomic status of the locality, parents are deserting the government sector in favour of the non-government sector in areas where government schools are unable to offer a fair opportunity for their children to access university. It also shows that in the opposite scenario, government schools with good academic outcomes will attract parents to the sector and away from private alternatives. This local level analysis shows how the macro-level issues discussed in this thesis are affecting individual government schools and communities. The consequences for the government sector are further accentuated in this comparative analysis. The implication is that unless policies are implemented that bring about genuine improvement of academic options for students in the government sector, many of the schools in the system will continue to lose those students who aspire to a university.

The second part of this chapter focuses more closely on the government school sector in Melbourne and outlines the changes occurring in three individual schools and their immediate communities. These individual case studies also show that the macro-level issues addressed in earlier chapters do have a significant influence on the performance of individual schools and their communities. They also provide a reminder that each school faces unique circumstances which affect its operation and ultimately the outcomes of its students. The case studies show that issues such as curriculum specialisation, socioeconomic status of students, school enrolments, local competition and year 12 outcomes interrelate differently in individual schools.

The purpose of the comparative analysis and the case studies is to show that individual neighbourhoods and schools in Melbourne experience government school education in different and inconsistent ways. Choices for parents and students are not always as readily available as departmental brochures and ministerial media releases might suggest. In particular, the opportunity to use the government school sector as a stepping stone to university is limited to a small number of fortunate students in Melbourne.

A tale of two cities

Grace Hills and Rossbank (fictional names for actual places) are two very different areas of Melbourne. Both a similar distance from the Melbourne CBD (between 15 and 20 kilometres), Grace Hills is located in the east and Rossbank to the west. Both areas consist of older established homes as well as more recent housing developments. In 2004 there were five government secondary schools offering year 12 in Rossbank and four in Grace Hills. In addition, Grace Hills had one independent school and two Catholic boys' schools. Rossbank had one independent and one Catholic school.

These areas have been chosen for analysis because they represent two very different scenarios evident in the government school sector in Melbourne. Neither area has

schools with widespread reputations for good or bad results and both have a high concentration of school aged persons and are of similar geographic and population size, making them a good match for a comparative analysis. It could be argued that the Grace Hills area typifies many parts of Melbourne's middle class eastern suburbs, while Rossbank represents the blue collar areas in the western suburbs of the city.

Both these areas are family areas. According to the 2001 Census, both areas have high proportions of families (93 per cent of households in Grace Hills and 95 per cent in Rossbank, compared with 87 per cent of all persons in Melbourne) and secondary school aged residents (15,000 or 14 per cent of the Grace Hills population and nearly 14,000 or 16 per cent of the population in Rossbank). The north western tip of Rossbank sits on the large growth corridor of north western Melbourne. Due to the increasing numbers of people in this area a new government secondary school was established in the growth area in the late 1990s. It began offering year 12 in 1997.

Grace Hills and Rossbank differ significantly as regards the socioeconomic status of residents. Few residents of Rossbank have a university qualification when compared with those in Grace Hills. Of those aged over 15 in Rossbank, only 8.8 per cent had a Bachelor degree or higher in 2001 compared with 20.7 per cent in Grace Hills (Table 8.1). These educational qualifications directly affect the types of jobs held by people in these two areas. As a result of their higher educational attainment, 24.3 per cent of those employed in Grace Hills were in a professional occupation in 2001. By comparison, only 11.4 per cent of the employed residents of Rossbank worked in a professional field. At the other end of the spectrum, a large proportion of the employed population in Rossbank was in low-skilled occupations, with 36 per cent employed in basic sales, clerical, transportation, production, or labouring jobs. The proportion of employed persons in these occupations in Grace Hills was only 19 per cent.

In turn, the large proportion of people in low skilled occupations in Rossbank meant that the incomes of residents there were lower than for those living in Grace Hills. In 2001 the median weekly family income in Grace Hills was between \$1,200 and \$1,499 while in Rossbank it was \$800 to \$999. Sixty per cent of secondary school students in the Rossbank area came from families with a weekly income below
\$1,000. The corresponding figure for Grace Hills was only 36.1 per cent (Table 8.1). Conversely, in Grace Hills 20.3 per cent of secondary school students came from a family with an income of more than \$2,000 per week, while only 4.7 per cent of Rossbank students' families had a similarly high income. When compared to income levels for the whole of Melbourne, these figures place the incomes of Grace Hills residents above the Melbourne average and those of Rossbank residents below it.

Selected Census variables	Rossbank	Grace Hills	Melbourne
No. secondary school aged residents (10-19 years)	13,855	15,124	451,218
Persons (15 and over) with Bachelor degree or higher (%)	8.8	20.7	16.1
Persons employed in professional occupation (%)	11.4	24.3	20.6
Weekly family income below \$1,000 (families with children) (%)	60.0	36.1	45.5
Weekly family income above \$2,000 (families with children) (%)	4.7	20.3	12.5
Lone parent families (families with children) (%)	10.9	8.5	12.5
Unemployment rate	8.7	4.6	6.6
Language other than English (%)	55.5	38.8	31.2
Median house price	\$165,000	\$327,500	\$220,000

Table 8.1: Comparison of selected characteristics of Rossbank, Grace Hills and Melbourne, 2001

Source: ABS (2001) Census of Population and Housing, Time series profile, customised matrix and Valuer General Victoria (2001)

The figures in Table 8.1 relating to education, occupation and income show that there is a profound white collar/blue collar divide between the two areas under analysis. It could not be argued that residents of Rossbank are particularly underprivileged – there is still a high rate of employment and home ownership in the area. Nevertheless, there is a certain educational disadvantage in the community of Rossbank due to the lower educational and occupational status of its residents.

Other points of difference between the two areas which increase the disadvantage of Rossbank in relation to Grace Hills included a larger proportion of lone parent households in (10.9 per cent of all family households compared with 8.5 per cent), higher unemployment (8.7 per cent compared with 4.6 per cent) and a larger proportion of people from non-English speaking backgrounds (55.5 per cent compared with 38.8 per cent) (Table 8.1).

Between the 1996 and 2001 Australian censuses there were also notable changes in the social and economic characteristics of each of these areas. A customised Census matrix which charts the movement of families with school aged children into and out of these areas helps to highlight these changes. Key demographic changes identified in this data include an increase in the numbers of lone parent families and school students living in low income households in Rossbank. Other data, illustrated below, also show differences in the housing market in each of these areas and interesting patterns of international migration between 1996 and 2001.

Domestic migration figures from 1996 to 2001 show that families moving into Grace Hills were predominantly high income families. The families moving into Grace Hills from other parts of Australia helped to increase the proportion of households with a weekly income above \$1,000 per week by 12 per cent between 1996 and 2001. At the same time, a larger number of low income families moved out of Grace Hills than moved in, resulting in a net decrease of low income families. In Rossbank, domestic migration resulted in almost the opposite outcome. Families with low incomes (less than \$600 per week) who moved into the area between 1996 and 2001 comprised 11 per cent of all low income families in the area in 2001 and there was only modest growth in the number of high income families. Overall the movement of families in and out of Rossbank between 1996 and 2001 helped to cement this area's status as home to a large number of low income families.

A similar domestic migration pattern occurred in these areas in relation to lone parent families. Between 1996 and 2001 more lone parents moved out of Grace Hills than moved in (473 moved out of the area while 356 moved in), thus reducing the number of lone parent families in the area. In Rossbank, the number of lone parent families increased as a result of a large number of lone parent families moving into the area during this period (610 moved in and 466 moved out).

Data from DIMIA show that the settlement of international migrants in these two areas was also different between 1996 and 2001. The numbers of migrants settling in Grace Hills were not particularly high during this time. However, of the school aged migrants who did settle in the area, the majority were from China, Hong Kong and Taiwan as well as South Africa and Malaysia. According to the DIMIA data, more than three quarters of these students entered the country on a skilled migrant visa (held by their parents). Therefore, there students predominantly came from well educated and highly skilled families – 37 per cent of principal migrant applicants who settled in the Grace Hills area had between 3 and 5 years of tertiary training (a high figure when compared to the Melbourne average of 24 per cent).

The contrast in international migration between Grace Hills and Rossbank is significant. A larger number of school aged migrants settled in Rossbank than in Grace Hills between 1996 and 2001. The majority of school aged migrants that settled in Rossbank were from the Former Yugoslavia and particularly areas such as Bosnia-Herzegovina and Macedonia. Many of these migrants had moved to Australia as a consequence of the Bosnian War in the mid-1990s; 46 per cent of school aged children who settled in Rossbank were on humanitarian visas. The parents of these migrants were not nearly as highly educated as those who settled in Grace Hills; only 17 per cent had between 3 and 5 years of tertiary education.

Information from the Victorian Valuer General (2002) shows that there were also notable changes in the housing markets in these two areas between 1996 and 2001. As in the whole of Melbourne, the median prices of houses in both these areas rose substantially during this time. However, prices were much higher and grew faster in Grace Hills than they did in Rossbank. In 1996 there was a difference of \$76,000 in the median house prices in each of these areas – Grace Hills' median was \$180,000 and Rossbank's \$103,900. In the following years, prices in Grace Hills rose 82 per cent, while the increase in Rossbank was 59 per cent. The larger gains in property prices in Grace Hills meant that by 2001 the median house price in Grace Hills (\$327,500) almost doubled the median price for a house in Rossbank (\$165,000).

Despite the fact that both Rossbank and Grace Hills are family areas in relatively established suburbia, the figures above paint a contrasting picture of these two areas. Rossbank is a working class area and there was no major change in socioeconomic status despite higher-than-average population growth between 1996 and 2001, while Grace Hills is an affluent middle class area with a growing number of wealthy families and diminishing numbers of low income residents.

From the earlier findings of this thesis, it is easy to predict the outcomes of students attending government schools in these areas. In 2004 Grace Hills' government

schools were among the highest academic performers in the Melbourne area, while Rossbank's government schools were among the lowest. Additionally, between 1996 and 2004 some significant changes occurred in the outcomes and enrolment patterns of the schools in these two areas that suggest both good and bad news for the government school sector.

In 1996, students from government schools in Rossbank generally achieved relatively low ENTER scores. However, due to the large number of university places available, students from government schools in the area did articulate to university in relatively large numbers. In 1996 48 per cent of all government school applicants from Rossbank schools gained a university offer. On the other side of the city, the government schools in Grace Hills performed slightly better on academic measures (as would be expected given the socioeconomic status of the students in the schools) but not substantially better than Rossbank; 64 per cent of students from schools in the area gained an offer for university study at the end of year 12.

As competition in the education market changed over the following years, so too did the outcomes of government schools and their students. By 2004 the school situation had changed considerably in Rossbank. A new secondary college which had opened in the early 1990s began to offer a year 12 curriculum and the main independent school in the area had established roots. Partially in response to the growing competition for university in Victoria, most of the government schools in Rossbank shifted their focus towards a vocational curriculum in the senior years. All implemented Vocational Education and Training (VET) programs in the late 1990s and by 2004 every government secondary school in the area was also offering the Victorian Certificate of Applied Learning (VCAL) as an alternative to the VCE. On average across the government schools in Rossbank, more than a quarter of all subjects offered to year 12 students were VET or vocational subjects.

The focus on the VCAL was stronger in some Rossbank government schools than in others – in one school nearly 20 per cent of year 11 and 12 students were enrolled in the VCAL in 2004, while another in the area had six per cent of senior students in the VCAL program. Overall in Rossbank, 8.5 per cent of year 11 and 12 students were undertaking the VCAL instead of the VCE – a rate higher than the metropolitan

government school average of 6.5 per cent. By contrast, Grace Hills had no students enrolled in the VCAL.

This changing curriculum emphasis and the increased competition for university places in Victoria had a profound effect on the proportion of government school applicants for Rossbank gaining a university place. Between 1996 and 2004 the proportion of government school students in the area that gained a university offer fell from 48 per cent to 29 per cent. In addition, a total of 15 per cent of VTAC applicants from these schools failed to gain an offer for any form of tertiary education upon completion of year 12 in 2004 (increasing from 11 per cent in 1996).

The government schools in Grace Hills also experienced a downturn in university offers between 1996 and 2004. However, during this time the schools in the area continued to teach the VCE as the only curriculum option for year 11 and 12 students – not one school had introduced the Victorian Certificate of Applied Learning by 2004. The effects of increasing competition for university places were not nearly as devastating in Grace Hills' government schools as the were in Rossbank. In 2004, 57 per cent of all applicants from government schools in Grace Hills gained a university offer, a seven percentage point decline that closely matched the overall decline in Melbourne. This drop was considerably smaller than the decline among students at government schools in Rossbank (a 19 percentage point decline in the proportion of applicants gaining a university offer).

The diminishing academic fortunes of schools in Rossbank illustrate the difficulties faced by many schools in the government sector. Not only did academic outcomes decrease in this area, but patronage of the government school sector also began to decline. This raises a serious alarm for many government schools in places like Rossbank. It is evident that parents are voting with their feet and leaving government schools, even if that means tightening budgets to afford fees for schools in the independent sector.

Between 1996 and 2001, there was robust growth in the number of secondary school students living in the Rossbank area. In total, the number of residents attending all secondary schools increased by 759, an 11.6 per cent overall rise in enrolments (Table

8.2). However, nearly half of this increase in students was absorbed by the independent school sector – a very high proportion given that this area is traditionally a bastion of government school patronage. The influx of enrolments to the independent sector between 1996 and 2001 resulted in a 48.6 per cent increase in the number of Rossbank residents attending an independent secondary school. Government school enrolments also increased over this time, but at a slower pace than the overall rate of student growth.

School sector	1996	2001	Change, 1996-2001		
			Number of students	Percentage	
Government	4,311	4,690	379	8.8	
Catholic	1,560	1,611	51	3.3	
Independent	677	1,006	329	48.6	
Total	6,548	7,307	759	11.6	

Table 8.2: Attendance at secondary schools in Rossbank by school sector, 1996 to 2001

Source: ABS (2001) Census of Population and Housing, Time Series Profile

There are two possible explanations for such changes in enrolment patterns. The first is that the disposable income of the families in the area increased, thus making private schooling more affordable. However, as discussed earlier, the socioeconomic profile in Rossbank did not change in a manner that would suggest increasing numbers of families with extra resources to afford a private school education. In fact the proportion of high income families in this community declined over this time. The second explanation is that as competition for university increased and the government schools failed to keep pace, parents envisaging a university education for their children turned to the independent school sector. Given the trends outlined above, this second scenario seems to be the more likely explanation for the enrolment changes in Rossbank.

This finding is consistent with the argument that government schools that are unable to compete academically face a dire situation. Between 1996 and 2004, the academic performance of the government schools in Rossbank declined. It is evident that this decline was closely linked to the increasing competition for university entry over this time and the change in curriculum emphasis of the schools in the area. Conversely, the local independent school in Rossbank had ENTER outcomes that were consistently above average and a university offer rate of 70 to 75 per cent between 1997 (when it first offered year 12) and 2004. As the opportunity to access university diminished in the government schools in Rossbank, an increasing number of parents opted for the private sector instead.

The opposite effect has occurred in Grace Hills. Between 1996 and 2001 the Census figures show an increasing number of students from the area enrolling in government schools and a decrease in independent and Catholic school enrolments. Over this period of time the number of secondary school students living in Grace Hills hardly changed (Table 8.3). However, enrolments in government schools increased by 154 students while the independent sector lost 41 and Catholic sector 96 students. This is significant given the relatively high socioeconomic status of families in the region, and the fact that traditionally this area has a high patronage of the private school sector. In Grace Hills, the academic pathways provided by the government schools have resulted in an increased patronage. In Rossbank the opposite has occurred.

School sector	1996	2001	Change, 1996-2001		
			Number of students	Percentage	
Government	3,955	4,109	154	3.9	
Catholic	2,060	1,964	-96	-4.7	
Independent	2,532	2,491	-41	-1.6	
Total	8,547	8,564	17	0.2	

Table 8.3: Attendance at secondary schools in Grace Hills by school sector, 1996 to 2001

Source: ABS (2001) Census of Population and Housing, Time Series Profile

These contrasting outcomes show that there is no universal movement away from the government school sector in Melbourne. Schools that are able to show that they can compete academically continue to remain attractive to parents. However, government schools that have struggled to meet the tightening university entrance requirements and the increasing competition for enrolments from the non-government sector are less attractive to those with academic aspirations.

The examples of these two areas of Melbourne once again demonstrate that choice in the government school sector is particularly limited when options at the local level are considered. The fact that the VCAL is offered by all schools in Rossbank, yet no school in Grace Hills, highlights the ineffective implementation of specialisation throughout the government school sector in Melbourne.

Government school students in the two areas examined here have few options but to follow the curriculum direction chosen almost universally by the schools in their local area. The enrolment data from these two areas indicate that the main growth in enrolments is occurring in schools and sectors that are able to compete academically. As a consequence, the government schools in Rossbank, which tend to have a more vocational emphasis, are not able to maintain the enrolment dominance they have historically enjoyed. On the other side of the city in Grace Hills, enrolments in the traditionally well-patronised non-government sectors are declining as a result of the strong performance of government schools in the area, which have not adopted a strong vocational curriculum.

In both these scenarios, some students are missing out. In Grace Hills, those interested following a vocational pathway have no opportunity to do so in their local schools. The option for these students is to travel further from home, to a government school that offers the VCAL (if there is a place available). In Rossbank, students who want a good chance of gaining a university place are not well served by their local government schools. The main alternative for those in Rossbank pursuing academic excellence is to switch to the non-government sector. As demonstrated in the case studies to follow, finding a place in a government school with good academic credentials can be almost impossible if it is not classified as your local school.

Unless changes are made to this situation, students in different parts of Melbourne will have no choice but to follow the pathway chosen for them by their schools. The government school system is likely to see greater polarisation between the academic winners and losers and enrolments in the schools seen by parents as 'losers' will decline.

Three individual schools – different situations and different outcomes

In order to show how changing school enrolments and increased competition for university are experienced at the neighbourhood level, three government schools in Melbourne have been chosen for case study analyses. These schools have been given pseudonyms. They represent three very different scenarios evident in the government school system. Schools chosen for these case studies include a high-performing school with a reputation for academic prowess, a school in the outer suburbs which has a comprehensive curriculum and little local competition for enrolments from other government schools, and a school on the fringe of Melbourne with a strong vocational emphasis and competition from a number of other nearby government schools. The analysis draws on information from the 1996 and 2001 Australian Census, VTAC data from 1996 to 2004, enrolment data from the Department of Education and Training and other information found in each school's Charter and Annual Report.

To analyse the socioeconomic composition of the neighbourhood areas of each school in 1996 and 2001, data from a small cluster of Census Collection Districts (CCDs) surrounding each school have been extracted. In each case, data from CCDs for which the school is the closest government school – and therefore by the enrolment definitions outlined in Chapter 7, the neighbourhood school – have been aggregated in order to present an accurate snapshot of the types of families for whom the school is the allocated government 'neighbourhood school'.

These case studies highlight the effects of the competition in the school and university markets on individual schools. In carrying out these analyses, issues relating to school choice and the different experiences of choice across Melbourne are explored.

Raven Valley Secondary College

Raven Valley is a high profile government school located in the heart of Melbourne's eastern suburbs. The school is well recognised for the academic achievements of its students and is regularly mentioned in the media when issues relating to high-performing government schools are discussed. As a result, enrolments at the school are highly sought after. The school has a strict policy of enrolling only those students

for whom it is the 'designated neighbourhood school', but has no specific boundary for enrolments. It is one of the largest secondary colleges in Victoria and had nearly 1,900 enrolments in 2004. The enrolment policies of Raven Valley SC are clearly stated on its web site, where it also highlights the issues associated with its popularity: 'The College continues to experience exceptional, unabated growth in its school population. The increase in numbers has been particularly exacerbated by the number of families moving into the school neighbourhood area'.

As noted on the school web site, the area surrounding the school has undergone a recent regeneration of younger families. Between 1996 and 2001 there was little net population growth overall (2.8 per cent). However, in the main school age groups, there was remarkable growth – an 11.5 per cent growth in 5 to 9 year olds and a 12 per cent increase in 10 to 14 year olds.

There are a number of other government, independent and Catholic schools nearby, most of which also have reasonably good academic outcomes. However, among government schools in the area, this school has the highest reputation and the best outcomes.

Socioeconomic profile

Census data shows that Raven Valley was a typical middle class suburb in 1996 (Table 8.4). A socioeconomic profile of the school's neighbourhood area shows that its proportions of professionals, persons with a bachelor degree and high family incomes were higher than the Melbourne averages. On other measures such as non-English speaking background and proportion of single parent families, the area was slightly below averages for the whole of Melbourne in 1996.

In the period between 1996 and 2001, the socioeconomic status of the Raven Valley school neighbourhood increased. Table 8.4 shows that on measures of socioeconomic status, such as persons employed as professionals, educational qualifications and family income, the area experienced greater growth than did the Melbourne metropolitan area.

Selected Census variables	Raven Valley SC area			Melbourne		
	1996 (%)	2001 (%)	Percentage point change 1996-2001	1996 (%)	2001 (%)	Percentage point change 1996-2001
Persons employed in professional occupation	25.2	28.2	3.0	19.1	20.6	1.5
Persons (15 and over) with Bachelor degree or higher	18.6	23.6	5.0	13.1	16.1	3.0
Unemployment rate	5.1	5.7	0.6	9.1	6.6	-2.5
Language other than English	24.2	32.0	7.8	26.0	25.6	-0.4
Lone parent families (families with children)	19.8	19.5	-0.3	21.3	22.8	1.5
Weekly family income above \$2,000 (families with children)	12.2	18.3	6.1	7.1	12.8	5.7

Table 8.4: Selected characteristics of Raven Valley SC and Melbourne areas, 1996 and 2001

Source: Census of Population and Housing, Basic Community Profile, ABS, 1996 and 2001

The Raven Valley *School Charter* highlights the fact that a large proportion of the student body comes from non-Australian backgrounds, in particular '37 per cent ethnic Chinese and nearly 20 per cent Indian and Sri Lankan'. The data in Table 8.4 show that this is a growing trait of the school catchment area, with the rate of persons speaking a language other than English increasing from 24.2 per cent in 1996 to 32 per cent in 2001. This increase was due almost entirely to increases in Chinese languages (Mandarin, Cantonese and other Chinese languages) during this time. By 2001, Chinese speakers made up 44 per cent of all non-English speakers in the area.

Year 12 outcomes

According to its School Charter, Raven Valley's educational philosophy is 'All students can learn. Work hard, get smart. Failure is not an option'. This attitude is reflected in the year 12 outcomes of its students. Its robust academic reputation is matched by the scores its students achieve and the post-school pathways they take. The curriculum at the school has an unashamedly academic focus and few vocational options are offered. In 2004, the College offered only two VET subjects (the average for a Victorian government school was 12) and did not offer the VCAL, yet offered the choice of three different languages at VCE level and a full complement of other academically rigorous subjects.

The median ENTER scores of Raven Valley students were consistently above 80 in the years between 1996 and 2004, and consequently over this period more than three quarters of VTAC applicants received a university offer. The academic strength of the school meant that the increased competition for university places that occurred between 1996 and 2004 did not slow the school's progress. In fact, despite the growing competition, the rate of university offers to Raven Valley students increased from 77.1 per cent in 1996 to 78.9 per cent in 2004. Of the minority of students who do not get a university offer, most gain entry to TAFE (about 15 per cent of VTAC applicants each year between 1996 and 2004).

With these results, Raven Valley Secondary College betters almost all other nonselective government schools in Victoria and also rivals most independent schools.

Enrolments

There is little doubt that the popularity of the school is driven by its successful academic outcomes. Raven Valley has an oversubscription of enrolments. The *School Charter* states, 'the number of applications for the year 7 program at the College substantially exceeds the 280 places that are available each year'. By the early 2000s, the school was undertaking random checks of students' residential addresses to stop people using false addresses in order to gain enrolment. Real estate in the school's neighbourhood area is sold at a premium on the basis that it is in the Raven Valley 'school zone'.

It appears that the success of the school is also attracting a disproportionately high number of Chinese and sub-continental families to the area. Migrant settlement data shows that the majority of these families are arriving on skilled migrant visas and are employed in professional occupations. These new residents have high aspirations for their children and have recognised the value of living nearby to a high-performing government school. This area is in the midst of a regeneration of families, with the trend appearing to be one of older Australian 'empty nesters' moving out and new middle class migrant families moving in. The enrolment trends in the area are also affecting on the other school sectors. In the school's neighbourhood area, there was a decrease of secondary school students in the Catholic (-23.8 per cent) and independent (-3.7 per cent) school sectors between 1996 and 2001. At the same time, government sector patronage by students in the area rose by 17.8 per cent. In 2001 the market share of the government school sector in the area was 62.4 per cent; an increase from below the Melbourne average to well above it by 2001. This is a particularly high rate given the socioeconomic status of the area and the growing shift towards the independent sector in Melbourne as a whole. In this pocket of middle suburbia, the government sector is alive and well.

Conclusion

Raven Valley Secondary College is an example of a government school which recognised the potential of its middle class neighbourhood and ensured that it set a curriculum with a focus that made the school attractive to these families. Its academic reputation has been built over decades, but since the mid-1990s, as university entrance became more competitive, the value of the school has been fully appreciated. Against the general trend in Victoria, this government school is not being abandoned in favour of the private alternative.

This outcome is beneficial for those families who live in the school's neighbourhood area. But as the data above show, the neighbourhood area around the school is becoming increasingly affluent. The real estate market in the area is booming on the back of the school's results and the only families able to now enrol in the school are those with the resources to afford property in the area. The result is that access to this high quality government school has become contingent on wealth.

Logan Park Secondary College

Logan Park Secondary College is surrounded by a relatively well established family neighbourhood located in the outer south west of Melbourne. Not far from the school are a number of new housing developments. The population of the neighbourhood area immediately surrounding the school did not grow between 1996 and 2001, but the wider community served by the school grew substantially. As a result of the nearby housing growth, enrolments at the school are booming. The school has very little competition for enrolments from other government schools, but a number of non-government schools are slowly establishing themselves within the new housing estates not far from Logan Park. A former technical college, Logan Park Secondary College now markets itself as a comprehensive school offering 'a broad curriculum'.

Socioeconomic profile

The neighbourhood area of Logan Park Secondary College ranks relatively low on most measures of socioeconomic status. Less than 10 per cent of employed persons in the area were in a professional occupation in 2001, much lower than the Melbourne average (Table 8.5). The main reason for this is that only a small proportion of the adult population held a university degree (6.2 per cent), once again very low in the context of the Melbourne average (16.1 per cent). The largest occupational groups in the area in 2001 were intermediate clerical, sales and service workers (19.4 per cent), followed by tradespersons (15 per cent) and intermediate production and transport workers (14.3 per cent). There was little change in the occupational structure of the area between 1996 and 2001.

Table 8.5 shows that the area suffers from a particularly high unemployment rate that did not improve substantially between 1996 and 2001. Compounding this disadvantage is a high and growing rate of lone parenthood. As a consequence of these issues, there are very few high-income families in the area (6 per cent of families earn more than \$2,000 per week – less than half the average Melbourne rate) and nearly one third of families survived on less than \$700 per week in 2001.

The proportion of the population from non-English speaking backgrounds in the Logan Park Secondary College neighbourhood area did not change between 1996 and 2001. Non-English speakers consisted slightly less than 20 per cent of the population, below the Melbourne average. Of this group, the majority were of Italian heritage.

Selected Census variables	Logan Park SC area			Melbourne		
	1996 (%)	2001 (%)	Percentage point change 1996-2001	1996 (%)	2001 (%)	Percentage point change 1996-2001
Persons employed in professional occupation	10.2	9.9	-0.3	19.1	20.6	1.5
Persons (15 and over) with Bachelor degree or higher	5.5	6.2	0.7	13.1	16.1	3.0
Unemployment rate	11.4	9.3	-2.0	9.1	6.6	-2.5
Language other than English	18.7	18.7	0.0	26	25.6	-0.4
Lone parent families (families with children)	26.8	30.8	4.0	21.3	22.8	1.5
Weekly family income above \$2,000 (families with children)	2.6	6	3.4	7.1	12.8	5.7

Table 8.5: Selected characteristics of Logan Park SC and Melbourne areas, 1996 and 2001

Source: Census of Population and Housing, Basic Community Profile, ABS, 1996 and 2001

Year 12 outcomes

Logan Park Secondary College operates in the manner of the traditional comprehensive school. It offers a 'broad curriculum', covering a wide variety of VCE subjects as well as a number of VET options. Of all the subjects offered to year 12 students, nearly 40 per cent are VET and other vocationally-oriented subjects. The school also offers the VCAL as an alternative to the VCE, which was undertaken by about 10 per cent of the year 11 and 12 cohort in 2004.

The low socioeconomic status of the area does seem to have a negative impact on the academic outcomes of students. However, while the data in Table 8.5 show there were only small changes in the socioeconomic status of the Logan Park SC's neighbourhood area in the intercensal period, the changes in the school's academic outcomes were substantial.

Between 1996 and 2004, the median ENTER of VTAC applicants from Logan Park fell from a position slightly below the state median for government schools to 40.05, more than 20 ENTER points lower than the government school median. This decline in academic achievement has considerably reduced students' chances of gaining an offer to university, particularly in the context of increasing university entrance scores. In 2004 only 27 per cent of VTAC applicant from the school gained a university course offer. By contrast, in 1996, 56 per cent received an offer. The TAFE pathway was more accessible to students from Logan Park. By 2004, it was the main tertiary education pathway taken by year 12 students, with 41 per cent of applicants gaining an offer. However, as in most areas of Victoria, actual enrolment rates at TAFE by those gaining an offer were low. As a result, a low proportion of students from the year 12 group of 2004 were enrolled in any form of education by 2005 and, of particular concern, 15 per cent of this group were unemployed following completion of year 12 (On Track 2004).

In this case, the balanced curriculum offered by the school is failing to produce positive outcomes. In academic terms, it is struggling to keep up with the increasing competition for university places. In vocational terms, many students are not engaging with the system, dropping out and following the pattern of high unemployment common in the local community.

Enrolments

Logan Park Secondary College experienced large growth in enrolments between 1996 and 2004, mainly as a result of the growing housing estates nearby and the lack of any other nearby schools. Enrolments grew from 1,000 to 1,250 in this time. The government sector is by far the largest education provider in the area, despite a small rise in non-government school enrolments during the intercensal period.

Because there are few other government schools nearby, Logan Park has a monopoly on the government school market in the area and because the incomes of families in the area are quite low, even the cheapest independent school would be beyond the means of many. Therefore, the school is in a fortunate position in that it is able to increase enrolments despite the low academic and vocational year 12 outcomes of its students.

Conclusion

The situation faced by Logan Park Secondary College is a difficult one. It has no problems in attracting enrolments to the school, yet the academic (and to a lesser

extent vocational) outcomes of its students are less than ideal. Competition from the school market has not affected this school, but the competition for university places certainly has. The task of educating a large group of disadvantaged children is difficult and this is compounded by the fact that the school maintains a 'broad curriculum' in an attempt to provide at least something for everyone.

The result for local students is that they have very few options. Students in this area have no choice but to attend the school – other government schools are too far away, and the non-government options are too expensive. In this case, it appears that the government school sector is far from being able to provide students with the opportunity to use the education system to improve their chances in life. As more low-fee independent schools establish themselves in the growth areas nearby Logan Park SC, the school's current influx of enrolments may taper, thus potentially exposing the school to enrolment declines.

Emily McWilliams College

Emily McWilliams College is located on the fringe of Melbourne's south east growth corridor, approximately 40 kilometres from the CBD. It is a relatively large school, but enrolments (of nearly 1,000 students in 2004) have been declining despite a swelling local population. The school competes for enrolments with a number of nearby government schools, including one with a relatively good academic reputation. There are also several Catholic schools nearby, a low-fee Christian school and a high-fee independent school. The relatively large number of local options nearby means that there is competition between schools for enrolments, even though the population in the area is growing quickly. Presumably as a way of differentiating itself from other government schools in the area, the school recently changed its name, dropping the standard suburb name formula common to most Victorian government schools and adopting the name of a local patron instead.

The difficulties faced by a fast-growing, young population are well recognised by the school. Its *School Charter* identifies the key challenges facing the community as a 'lack of community infrastructure for young people, problems with binge drinking

among young people [and] poor levels of parental support and guidance in some sections of the community'.

Socioeconomic profile

The families living in the Emily McWilliams College neighbourhood area are generally of modest background. Unemployment figures for the area are very low, indicating that there is almost full employment among residents. However, the occupational profile of the community is also relatively low-skilled with few people employed in professional occupations. Additionally, only 7 per cent of the population held a bachelor degree or higher in 2001 (Table 8.6). The largest occupation groups were those of intermediate clerical sales and services workers, and tradespersons. The rate of lone parent families in the neighbourhood in 2001 was only slightly higher than the Melbourne average and weekly incomes of families tended to be just below the Melbourne average. In the area there are few very low-income families and few high-income families. The community is almost exclusively Australian-born. Among the small number of those in the area who were not born in Australia, the majority were from the United Kingdom. There are a very low proportion of people from a non-English speaking background.

Between 1996 and 2001 there were no noteworthy changes in the socioeconomic profile of the Emily McWilliams College neighbourhood area. This is interesting considering the fact that the population grew by 11 per cent during this time. It indicates that the new residents in the area are of similar background to those who were already living there in 1996, ensuring that the population remained relatively homogenous. The only large change in the area, as shown in Table 8.6, was an increase in weekly family income, however this increase was similar to that for the whole of Melbourne and when inflation is taken into account is not particularly noteworthy.

Selected Census variables	Emily McWilliams College area			Melbourne		
	1996 (%)	2001 (%)	Percentage point change 1996-2001	1996 (%)	2001 (%)	Percentage point change 1996-2001
Persons employed in professional occupation	12.2	11.9	-0.3	19.1	20.6	1.5
Persons (15 and over) with Bachelor degree or higher	6.1	7	0.9	13.1	16.1	3.0
Unemployment rate	5.1	4.7	-0.5	9.1	6.6	-2.5
Language other than English	4.2	3.7	-0.5	26	25.6	-0.4
Lone parent families (families with children)	20.5	22.4	1.9	21.3	22.8	1.5
Weekly family income above \$2,000 (families with children)	3.3	9	5.7	7.1	12.8	5.7

Table 8.6: Selected characteristics of Emily McWilliams College and Melbourne areas, 1996 and 2001

Source: Census of Population and Housing, Basic Community Profile, ABS, 1996 and 2001

Year 12 outcomes

Emily McWilliams College offers a wide-ranging vocational program and one third of its senior students are enrolled in the school VCAL program – one of the highest rates in the state. Even for those students undertaking the VCE, almost 40 per cent of the subjects offered are VET or other vocational subjects.

On academic measures, Emily McWilliams College outcomes changed substantially between the mid-1990s and 2004. Firstly, fewer students from the school were applying to VTAC for a tertiary course in 2004; only 54 per cent, down from 61 per cent in 1996 and well below the average for Melbourne government schools of 73 per cent. At the same time, the median ENTERs achieved by students applying to VTAC dropped from slightly below the government school median in 1996, to well below it nine years later. In 2004 the median ENTER for VTAC applicants from the school was only 50.15. As a result of these scores, a diminishing proportion of students from the school articulate to university each year. In the mid-1990s almost half of the school's VTAC applicants received a university offer, but by 2004, less than one quarter of applicants gained an offer.

During this time, TAFE has become the most commonly offered tertiary pathway, increasing from 37.3 per cent to 43.9 per cent of the offers to applicants. Data from

the *On Track* program (2004) show that after TAFE, the second most common pathway for year 12 completers at Emily McWilliams College is regular employment, the third most frequent being apprenticeships or traineeships. The growth in these two options is indicative of the decreasing VTAC application rates among students from the school mentioned above.

These changes are likely to result from the combination of increasing competition for university places and a shift in school policy from a comprehensive curriculum, to one with a strong vocational emphasis. The growing competition for university has been well documented throughout this thesis. In the case of this school, the pressure to compete in the context of rising entrance scores made university an unrealistic option for many students. It is likely that the reduction in university places and the corresponding increase in academic entrance requirements prompted the College to turn its attention towards vocational alternatives. The school has become a Registered Training Organisation, meaning that it can facilitate, teach and assess in a number of vocational Certificate subjects. As mentioned, it has also adopted the VCAL wholeheartedly. The College offers two versions of the VCAL, one the standard VCAL option and the second a more specialised version called 'VCAL Sport and Leisure – Basketball and Dance'.

Enrolments

As mentioned in the introduction (8.2.3), Emily McWilliams College experiences local competition for enrolments both from within the government system and from the non-government sectors. The increasing population base in the area means that all local schools are able to remain viable. However, the strain of competition for enrolments is apparent.

Between 1996 and 2004, the number of year 12s enrolled at the College decreased by 14 per cent, while enrolments in all year levels dropped by 5 per cent. Enrolment numbers in the school were still robust in 2004 but the fact that it experienced decreasing enrolments in the context of a 19 per cent growth in the number of secondary school students living in its neighbourhood area suggests that the school is suffering in the local market. The growth in the number of secondary school students

in the area was absorbed primarily by the Catholic (37 per cent increase) and independent (27 per cent increase) sectors. Another government school in the general area with excellent academic outcomes also provided some competition for enrolments. This school increased the size of its year 12 cohort by nearly 60 per cent over this period of time.

Despite this decline, the school still had enrolments of almost 1,000 students in 2004. The Emily McWilliams College *School Charter* states that nearly 50 per cent of its enrolments come from outside its designated neighbourhood area indicating that it has a wide reach across the region and that it is providing a worthwhile alternative to those students with an interest in pursuing vocational pathways.

Conclusion

As the vocational options at Emily McWilliams College have grown in prominence, the academic outcomes of students have declined. At the same time, enrolments also decreased. However, the downturn in enrolments for the College does not appear to be terminal.

The role that Emily McWilliams College is playing in the local community appears to be a particularly important one, especially when considered the context of its proximity to other government schools in the area. The College is providing a vocational alternative that no doubt appeals to many students. For those that are not so interested in this pathway, another local government school with strong academic credentials is a possibility, or there are other government schools in the area offering more balanced curricula. From the perspective of government school students in this area, the options offered by the government sector are diverse. This scenario within the government system in Victoria is rare. In order to ensure government school education in the state remains attractive to all students, such arrangements should be encouraged.

9. Conclusion

Introduction

This research has highlighted the increasing stratification occurring within the Victorian education system. This is manifested in the well known divergence of the fortunes of the three school sectors and in relation to the diverging outcomes of students within the government school sector.

The study shows that educational disadvantage has been exacerbated by the increasing competition within the system for access to higher education places over the past decade. This is particularly evident within the government school sector where the comprehensive high schools have struggled to keep up. The Victorian Government has recently responded by promoting some specialisation within the comprehensives, but the implementation of these policies has been detrimental to the educational opportunities of many students. The failure of governments (both state and federal) to adequately address these issues has meant that stratification in educational outcomes of students in Victoria has grown unchecked.

The conclusion to this thesis builds on these findings in order to explore some of the key policy issues arising from the study.

Education provision

This thesis began with a discussion of the indispensable role that the government school system played in achieving universal provision of schooling to children in Australia. In the second half of the 20th century, Government secondary schools extended the educational experience of young Australians well into the teenage years. In the 1950s, 1960s and 1970s, provision of secondary schooling was administered primarily via a comprehensive public school system, whereby neighbourhood schools provided a broad curriculum to students from a wide variety of social backgrounds.

The provision of universal secondary schooling created the opportunity for children from underprivileged backgrounds to improve their social and economic situation. These opportunities were further enhanced in the early 1970s through the Whitlam Government's reforms which were designed to further rectify 'educational inequality' (Barcan, 1993, p. 187). As a result, government school enrolments and school participation rates continued to rise. In essence, the comprehensive schools at the time successfully fulfilled their role as 'agencies of social cohesion and democracy' (Vinson, 2002, p. 2).

However, the Whitlam reforms also benefited the non-government school sectors. Alongside Whitlam's massive boost to funding of government schools was a formalisation of recurrent, per-capita federal government funding for the non-government school sectors. Initially this funding had little impact on government school enrolments. Rather, it meant that Catholic and independent schools catering for disadvantaged communities were able to provide a better quality education to their students. But in the longer term, non-government schools serving the better-off also benefited immensely. From the late 1970s onwards, enrolments in the Catholic and independent school sectors have grown faster than those in the government sector, with independent school enrolments in particular expanding rapidly.

Government funding for these schools has helped them build superior education facilities, employ the most experienced teachers and attract the brightest students via scholarships. These factors have facilitated an academic advantage in the independent school sector that has been crucial to its enrolment success in the past few decades. Widespread recognition of the benefit of high academic outcomes in the final years of secondary school has attracted a growing number of families to the independent sector.

Competition and stratification

Academic competition intensified for all schools and sectors between 1996 and 2004 because the number of university places offered to year 12 students declined, while the number of school completers increased. The academic advantage held by the independent school sector meant that the effect of this change on its students was relatively minimal. But figures for the government school sector show that this growth in academic competition led to a shrinking of opportunities for university entry on the part of its students.

However, the effects of a growing competition for university did not impact on all government schools in the same manner. Within the government school sector, there are

varying degrees of advantage and disadvantage. Disadvantage was exacerbated by the competition for university entry. In Melbourne, there was an obvious divergence of academic outcomes by geographic location within the government sector between 1996 and 2004. Multiple factors have caused this divergence. One is the existing inequity between schools and regions, as measured by socioeconomic variables. Another factor, a focus of this thesis, relates to change in the government school sector – in particular, the growth in curriculum specialisation.

This specialisation emerged in the late 1990s with the introduction of Vocational Education and Training (VET) in schools and in the context of growing academic competition. In a competitive education market with a strong private sector and declining access to university, the comprehensive system struggled. The alternative, encouraged by government, was to develop curriculum specialities in which government schools could excel. However, the implementation of specialisation across the government sector was *ad hoc*. As a result, curriculum specialisation is unbalanced across Melbourne; some areas have high concentrations of schools with a vocational emphasis, while schools in other areas are mostly academic in focus.

In particular, this study has shown that the opportunity to access university decreased in regions where the specialisation of most government schools has been vocational. While these government schools are still required to provide a broad curriculum, the emphasis on non-academic subjects does affect the opportunities of those students wishing to pursue a university pathway. The findings of this thesis highlighted the difference in academic outcomes between schools that had adopted the Victorian Certificate of Applied Learning (VCAL) and those that had not. Despite choosing the academic option – the VCE – the academic achievements of students in schools with the VCAL do not match the outcomes of students in those schools which had not taken this vocational direction. The implication from this finding is that VCAL schools may have less time and resources to devote to academic disciplines as a result of their specialisation in a vocational field.

Choice for whom?

The result of this direction taken by government schools (and encouraged through government policy) has been a reduction in educational choice for many Melbourne students.

School enrolment policies (whereby students are guaranteed a place at their nearest government school and can only access others if there is room) and the practical consideration of distance travelled each day to attend school essentially mean that most government students attend a school close to their home. If there is limited variety in the curriculum emphases of government schools in a certain region, the opportunities for local students to pursue a range of different post-school pathways are restricted.

Despite the rhetoric of 'choice' in Federal Government discourse, choice in education has diminished over the past decade for most. This is because the Federal Government's rhetoric does not fit reality; its rhetoric is fixated on the choice of private over public education. However, this kind of choice is neither affordable nor appealing to many families. In reality, the most important element of school choice policy relates to choices within the government sector. But do families living in outer suburbia have any choice?

The lack of choice in the government sector is diminishing the ability of government school students to access university in Victoria. This is notable in the outer south east of Melbourne but also in other outer suburban areas and in low socioeconomic neighbourhoods, where the majority of schools have adopted specialities in vocational pathways and where few (if any) have specialised in academic curriculum areas. It is apparent that schools in these areas have not had the resources or government encouragement to compete in a market increasingly dominated by the private school sector.

By contrast, the government schools with the highest academic outcomes in the Melbourne metropolitan area are almost exclusively located in areas with high and growing socioeconomic status. Enrolment in these schools is generally contingent on living nearby. The opportunity for enrolment by students from lower socioeconomic backgrounds is therefore severely limited by the expenses associated with living in such areas. At the same time, the academic results of some schools are attracting middle class families into their neighbourhoods, thereby boosting the socioeconomic profile and educational advantages of the schools.

In this sense, the academic reputation of schools is self-fulfilling. This is apparent in both the government and private school sectors. In most cases academic results are enhanced by the presence of students from higher socioeconomic backgrounds, these results attract more high

SES families and thus results improve further. In a situation in which competition for university is growing and the public has an increasing number of published school benchmark indicators available, making an informed choice of school is becoming easier for parents and students. However, your ability to exercise this choice depends on whether or not you can afford a house in the neighbourhood area of your chosen school, or private school fees.

Seeing things differently

The general findings of this study – that there is decreasing opportunity for social mobility within the Victorian school system – are not dissimilar to those articulated in the case of Melbourne by Teese (2000), Teese and Polesel (2003) and Lamb (2007). However, this study has added to the existing commentary by closely exploring the trends within the government school system in Melbourne – confirming not only that socioeconomic factors have a substantial influence on academic outcomes, but also that geographical location, changing academic competition, curriculum-based policy decisions and other school organisation/governance policies have also had an influence on the prospects of students in the government sector.

These findings imply the need for a different approach to be taken in analysing outcomes and discussing policy options within secondary schooling. There are two main (opposing) views relating to government school provision espoused by academics who have been influential in government school policy in Victoria over the past few decades. One continues to advocate for the comprehensive ideal, by which each school would offer the same curriculum and ideally enrol students from a wide spectrum of social backgrounds, with strong support from the state education department. Teese (2000, 2002; 2003), whose findings in relation to disadvantage within the system are consistent with those in this thesis, is the most prominent advocate of policies designed to return to the values espoused through the 'comprehensive ideal'. The opposing policy solution has been that of marketisation, with Caldwell (1999) being the most prominent figure in the Victorian scene. Under the implementation of an education market, schools are given freedom to govern themselves but have little support from the state and must face the consequences of being closed if they fail to compete successfully for enrolments and results with other schools.

Both policies have been incorporated into the Victorian education system in some form over the past half century. However, neither has succeeded in promoting equality of opportunity to government school students. In the case of the comprehensive school system, it has been argued here that while the system was effective during the boom in secondary school participation in the mid 20th century, in the following decades it was unable to offer academic opportunities to all students and lost its appeal among many middle class parents. This resulted in substantial enrolment decline and reduced its capacity to fulfil the 'comprehensive charter' of providing a broad curriculum to students from a range of different backgrounds. The evidence presented in this thesis also shows that the shift towards the marketisation of schools over the past few decades has been detrimental to the outcomes of all but the most advantaged students. The stratification of academic results following the school-based management approach adopted in the early 1990s in Victoria was highlighted in chapters 4 and 6.

The thesis has argued that there is a substantial (and growing) group of disadvantaged students within the Victorian education system and that previous and current governments have failed to properly acknowledge this, let alone implement policy to redress the imbalance. Academic commentary in relation to student outcomes and school policy has also largely missed the problems emerging in relation to academic opportunity in Victorian schools that have been described above. This has inhibited the development of policy, both state and federal, that offers constructive solutions which might have addressed these problems earlier.

The section below draws on the findings of this research regarding the lessons learnt from past and present policy and offers a number of suggestions which may help to improve the equity and opportunity of government school students in Victoria. These ideas will have to be coupled with a range of other initiatives concurrently for any major impact to be felt (especially by those in the most disadvantaged positions). However, these initiatives are outlined here because they are considered to be important first steps in the creation of a more equitable education system in Victoria.

What can be done?

Angus claims that 'in exposing the limited opportunities for genuine equality in education, educators, pupils and parents have a powerful theme through which they might begin to

consider curricular and organisational reforms in schools which might lead to greater equality within them' (1992, p. 392). The situation faced by year 12 students in Victoria is unlikely to alter unless there is impetus for change from both the Federal and State governments. This impetus for change is likely to be inspired by the educators, pupils and parents to whom Angus refers; essentially pressure from constituents is crucial in providing the motivation for governments to implement change.

There are four key strategies that would promote change for the better in the current situation: a State Government-led reorganisation of specialisation within the government school system; greater attention among individual universities to creating admissions policies that recognise disadvantage; an evaluation of the number of government funded university places available in Victoria and Australia; and a re-evaluation of the school funding and policy priorities of the Federal Government. Arguments for the latter two strategies are implicit throughout this thesis but were not the main focus of this work. The second strategy has more relevance to the outcomes culminating from this thesis and is discussed briefly below. However, the first strategy is particularly relevant to the work of this thesis. As such, it is examined in more detail following the discussion of university admissions policies.

Greater recognition of disadvantage by universities

An important way of making university entrance more equitable is to encourage universities to recognise that disadvantage – due to socioeconomic factors, or issues with the curriculum direction of individual schools – is likely to result in many capable students being overlooked for a university offer. This is particularly relevant in the outer south east of Melbourne where the local university, Monash, has set its ENTER cut-offs far above the scores achieved by the majority government students in the area. Dobson and Skuja's (2005) evaluation of student outcomes at Monash University revealed that, controlling for ENTER, government school students performed at a higher level than independent school students in their first year.

In the past couple of years a number of universities have broken from the mould of allocating places solely on the basis of a student's ENTER, instead using additional independent testing procedures to choose students for certain courses. The Australian Council for Educational Research in particular has been developing and administering such tests in Australia for a number of universities and specialist courses (ACER, 2007).

So as to ensure that students who are at a disadvantage in the VCE are given a realistic chance to enter the university system, the role of universities and their interaction with their local community needs to be considered in the allocation of places each year. In the present situation, universities in Melbourne are increasingly maintaining social hierarchies, rather than providing opportunities for upward social mobility to students with aptitude but lacking financial, social and cultural resources.

Reorganising government secondary schools

In order to expand equality of opportunity, a rethinking of the organisation of government secondary school education is necessary. Suggestions for restructuring of Victorian schools have very recently been articulated by Lamb, who argues policy makers must 're-examine the system of educational provision in poorer communities to consider alternative options in the structure and organisation of schools' (2007, pp. 34-35). His suggestions primarily relate to physical restructuring of campuses and altering the current models of provision in general, but he also emphasises the need for cooperation between government schools in order to maintain enrolments and provide a range of opportunities for students. The suggestions for reorganisation discussed below fit with many of the suggestions of Lamb, but have more of a focus on addressing the issues occurring in relation to the specialisation occurring in the government school system.

It must be noted that the program of specialisation suggested here should not be confused with the policy based around the Specialised Schools Program (SSP) in England described in Chapter 3. The SSP is strongly reliant on private sector sponsorship of government schools and operates on the basis of competition rather than collaboration between schools. It is an initiative which has evolved from a market-based policy platform (Ball, 2003). The proposal below is designed to be encouraged, funded and implemented by government, working closely with school communities.

In the metropolitan area at least, the comprehensive school system is losing the support of government and parents. The lack of parental support is evident in the declining enrolments in the sector since the mid-1980s. Meanwhile, the insistence that government schools are no longer one-size-fits-all education providers, articulated clearly by the Bracks Labor Government (Department of Education and Training, 2003a, p. 26), is an example of the diminishing support for the comprehensive system even within the Labor Government. As

discussed, the alternative to the comprehensive ideal has been the unbalanced implementation of specialisation within government schools. Unfortunately, this has only served to increase inequality within the education system, especially with regard to university entry.

By rethinking the approach to specialisation it may be possible to improve the opportunities of students from the outer suburbs and low socioeconomic areas of Melbourne. This would require close collaboration and cooperation between existing government schools. Schools would belong to geographical clusters and each school in a cluster would offer a unique specialisation. Together, a cluster of schools would offer expertise and competency in a range of academic and vocational pursuits. As is current policy, schools would be funded for their particular expertise, but each specialisation would need to be justified in order to show diversity of expertise in relation to other local schools and the overall benefit to students in the region or cluster. In such a scenario, teaching resources and specialist facilities would be shared between schools in order to consolidate personnel and capital and to attract students.

Each school in a cluster would be open to local students who could tailor their final years of school education with a curriculum emphasis that offered realistic chances for all to follow their desired post-school pathways. The aim would be to expand choice within the government school sector and to ensure there is at least one school with a strong academic focus in each specified region. This direction needs to be driven by government, but with close consultation with and support from individual schools.

The ideas of cooperation and collaboration between schools are evident in the current Victorian Government's Leading Schools Fund policy (Vickers, 2004). However, while this policy has encouraged some schools to form new clusters (most successfully in regional centres of Victoria), it has not specifically focussed on curriculum diversity and balanced specialisation (academic and vocational).

In addition, the Bracks Government did finally change its policies and rhetoric regarding academic pursuits in government schools in 2006. Funding for schools to join the SEAL program was allocated and during the Victorian election campaign, Bracks announced plans to establish two new academically selective government schools in Melbourne. However, these policies (especially the new selective schools) will offer better options for few students.

While academic programs are beginning to gain some momentum, the fashionable policy focus of both state and federal governments (and opposition parties) continues to be the expansion of technical and vocational education. This kind of initiative is welcome and may help address problems related to skills shortages in traditional trades in Australia, but these policies need to be balanced by equal attention to the academic needs of students in order to ensure that Australia also has a sufficient pool of workers to address shortages in professional occupations (as outlined by Birrell, Edwards, Dobson, & Smith, 2005; Birrell & Rapson, 2006).

The Victorian Government would serve students best by ensuring that some balance of specialisation across the whole government sector is achieved. Every student should have the option of finding a place in a government school that offers them a realistic opportunity to follow their desired post-school pathway.

Reorganisation in this way is not likely to work in a uniform fashion across Victoria. Outside the Melbourne metropolitan area in particular, the forces of competition, organisation of schools and sparse population make this diversified school cluster approach less workable. In many circumstances, regional schools are already forging new ways to offer a wider range of opportunities to their students. In the larger regional centres (such as Bendigo and Mildura) the establishment of a single, large senior college with a number of smaller 'middle schools' that feed into it appears to have been an effective way of consolidating resources. These schools are large enough to offer a diverse range of subjects and special courses in regions that would otherwise struggle to support a number of separate high schools. In more isolated regional areas, where there is less competition for enrolments, there is evidence to suggest that comprehensively organised schools are still successfully providing a range of opportunities to students (Campbell & Sherington, 2004). Therefore, continued support for existing endeavours may be best for schools in these areas.

In the metropolitan area, the implementation of a policy promoting diversified clusters of schools would be more challenging (and costly) in some areas than in others. Such a policy may be relatively easy to implement in an area such as the on served by Emily McWilliams College (see Chapter 8). In this case, there is already an element of diversity in curriculum focus; Emily McWilliams College has a strong sport-focussed VCAL program, while another local school has a well-recognised academic program. Therefore, establishing formal links

between schools and identifying specialisations for the three or four other schools in the immediate area would see this region well-placed to offer a range of options to local government school students. Greater challenges in the implementation of such a policy are likely to arise in areas which have a high concentration of schools with a particular form of specialisation; for example, in South Eastern Outer Melbourne, where all schools have already adopted the VCAL. In such cases, encouraging schools to change focus and cooperate with regional neighbours in establishing diverse options may require additional effort on behalf of the Department of Education and Training.

Conclusion

Change in the provision of senior school education in Melbourne, Victoria and in Australia more broadly is necessary if the education system is to provide opportunities as originally intended. Despite the best intentions of those who established and staunchly defended it, in many cases the comprehensive government school system is no longer able to provide genuine opportunities for government school students. However, to date, the alternatives to the comprehensive system have been inadequate. The starting point to change the current situation must be recognition by government of diverging outcomes, shrinking choice and growing inequity. It is my hope that this study will contribute to this outcome.

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Appendix 1 – VTAC Data

The VTAC data used in this thesis is a dataset primarily used for administrative purposes. It records details of each tertiary education applicant to Victorian universities, TAFEs and private training institutions each year. There are two types of information provided in this dataset. Firstly category includes details of applicant characteristics, including residential and contact postcode, category (i.e. year 12 leaver, applying after completing a TAFE course, etc.), place of birth, language spoken at home, and, for school applicants, the school attended in year 12. The second type of information contained in the dataset relates to the application made to VTAC. This includes the courses that the applicant applied for, whether an offer was made for any of these courses and the enrolment details of the applicant if a course offer resulted in enrolment.

This dataset covers applications, offers and enrolments for every course in Victoria beginning in Semester 1 of each year. Mid-year intake figures are not included in this data. This research uses the VTAC files for applicants in 1996, 1998, 2000, 2002 and 2004.

In this analysis, a number of the above variables have been recoded to create broader categories. For example, in the analysis in Chapter 4, the school of each applicant has been coded into the three school sectors. An additional step was necessary for the analysis of the VTAC data for Melbourne government school students in Chapter 6. The analysis here aggregated government school students by the location of their school into SSD regions. To achieve this, a geographic label was applied to each individual school and using this label, students were allocated to the regions.

Appendix 2 - Calculation of index for Map 7.2

The index used as the basis of Map 7.2 has been created in order to assess changes in tertiary offers over time relative to the overall performance of Melbourne government schools. This is a measure of improvement, not a ranking of those schools which have the highest proportion of university or TAFE offers. The index gives an accurate assessment of how the outcomes of government schools have changed in relation to the overall trend for all government schools in Melbourne, regardless of the actual proportion of tertiary offers in each year examined.

The index has been calculated using year 12 VTAC applicant outcomes in 1996 and 2004. Student outcomes have been aggregated by school, and 158 government secondary schools located in metropolitan Melbourne have been used in this calculation. These schools make up 95 per cent of all the government schools in Melbourne that provided year 12 in 2004. The schools offering year 12 in 2004 that were not included in this analysis either had no VTAC applicants in 2004, or did not have a year 12 cohort in 1996 with which to compare results.

The outcomes, according to the proportion of applicants receiving a university or TAFE offer, have been analysed using a formula which Gorard calls the Segregation Ratio (SR): 'a general measure of unequal representation, which can be used to make safe comparisons over time, place and other categories because it takes into account changes in both of the proportions involved' (2001, p. 69). In other literature relating to statistical methodology in human geography, this ratio is referred to as the 'location quotient' (Smith, 1975, p. 161). Using this ratio it is possible to compare the tertiary offers of individual schools accurately across years.

The SR is calculated as follows: SR = (o/t) / (O/T) Here o represents the number of tertiary offers at a school and t represents the number of applicants at the school, while O is the total number of offers in all Melbourne government schools and T is the total number of applicants from Melbourne government schools.

A SR of 1 for a given school means that the school is perfectly represented in relation to all other metropolitan government schools. In other words, if the result is 1 then the proportion of tertiary offers at the school is the same as the norm for all the schools in the sample. If the SR is more than 1, the school's results are above the norm for all metropolitan government schools. If the SR is below 1, its results are below the norm.

The SR for each government school in relation to university and TAFE offers has been calculated for both 1996 and 2004, as has the change in these rates between these two years. It is this change that forms the basis of Map 7.2.

In order to compare the change in offers for schools over time (C) the SR for 2004 (i) is subtracted from the SR of 1996 (j) for each individual school:

$\mathbf{C} = SR_i - SR_j$

Therefore, if C equals zero then there has been no change in the school's tertiary offers in relation to the Melbourne government school norm. If C is greater than zero there has been an improvement in the schools' outcomes, and if C equals less than zero then there has been a deterioration in the outcomes of the school in relation to change across the whole of the government school sector in Melbourne.

In Map 7.2 the locations of the 30 schools with the largest positive change (C) in university and in TAFE offers are displayed.