FROM ASPIRATION TO DESTINATION: UNDERSTANDING THE DECISIONS OF UNIVERSITY APPLICANTS IN REGIONAL VICTORIA

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Abstract

This paper examines the choices and destinations of prospective university students from three regional areas in Victoria. The study is based on information collected for tertiary applicants in the Gippsland, Bendigo and Mildura areas, all of which host a local university campus. Using application and enrolment data, we examine the choices that regional applicants express, and the decisions they ultimately make. In particular, we consider influences at each stage from application to offer, acceptance and then enrolment. Our findings highlight the extent of unfulfilled university aspiration in the regions and its causes. Between the aspiration and decision to undertake university study lie many impediments.

The study found an overall preference for regional university applicants to relocate to study. Applicants' preferences were mediated by demographic and educational factors, in particular school sector. The extent and diversity of local course options also influenced applications, with local courses preferred when they were available. Although most applicants did receive a university offer, many in the lower achievement range received no offer, indicating that there remains substantial unmet demand. Educational achievement also affected the likelihood of converting an offer to an enrolment.

Applicants who succeeded in securing a local university place were the most likely to accept their offer and enrol in the following year. Relocation was found to be highly correlated with deferment or non-enrolment, particularly for the Mildura cohort, underlining the ongoing impact of distance. These findings suggest a need to rethink university provision and support models to increase the participation rates of regional students.

Introduction

This paper examines the choices and destinations of prospective university students from three regional areas in Victoria. The study is based on information collected from applicants in the Gippsland, Bendigo and Mildura areas, all of which host a local university campus. Using application and enrolment data, we examine the choices that regional applicants express, and the decisions they ultimately make. In particular, we consider influences at each stage of the process, from application to offer, acceptance and then enrolment. Our findings highlight a need to better understand the relationship between the desire and decision to undertake university study.

The study is framed by an initial quantification of the extent to which tertiary applicants from regional areas aspire to university and the rate at which that aspiration translates to enrolment. Several studies have focused on underlying inhibitors to university aspiration in regional Australia, such as low secondary school achievement and gender perceptions (Parliament of Victoria, 2010; Alloway et al., 2004). However, less attention has been given to the relationship between university applications, offers, acceptances and enrolment. The failure to convert university aspiration to enrolment is considerable, and around half of regional university applicants are not enrolled in university in the following year. Understanding the reasons behind this inability to convert aspiration is central to raising regional participation rates.

Initially the authors outline the broad Australian context of regional participation and the specific scope of this study, which covers three Victorian regional areas. The extent to which regional tertiary applicants select university is then examined, along with their specific university choices. In particular, we aim to capture the extent to which regional applicants seek to relocate to study, and the factors which influence this decision. The study reveals the relative weight of demographic factors, educational background, and the breadth and reputation of course offerings in influencing the geographic preferences of applicants.

Many students apply to university but do not receive a formal university offer. Reasons for the failure to convert aspiration to offer are considered, and major predictive factors of demography, geography and educational background are identified. Further, many prospective students receive an offer but do not accept the offer, or accept it and subsequently defer their enrolment. The decision not to accept an offer appears to be influenced by the extent to which the offer reflects the highest preference of the applicant, the desire to relocate, and the level of school achievement. A range of factors also influence deferment and the likelihood of returning to study following deferment.

Finally, the paper considers the broader findings and implications of the research. The data reveal five points where regional provision and demand are misaligned. First, a majority of regional applicants choose to relocate, however where local courses are available they are preferred by most applicants. This suggests that broadening local course provision could attract more regional students than previously thought. Second, preferences to relocate reflect stratification in the school system. Students from independent schools overwhelmingly choose metropolitan courses, indicating that school sector may be a better measure of socio-economic status in this case than geographic location in understanding university aspiration. Strengthening local provision could involve strategies to attract these students to regional campuses. Third, there is a high level of unmet demand among applicants with relatively low school achievement, suggesting the need to improve preparation within schools and to offer appropriate university enabling and bridging programs and vocational pathways. Fourth, more work is required to ensure that offers are translated into enrolments. A significant number of students follow a path to enrolment but stop short of accepting their offer or taking their place. Finally, the rates of application and access are relatively low in Mildura, confirming that the extent of rurality is a strong influence on achievement and access. Policy approaches need to consider distance as a significant mediator of both aspiration and enrolment.

Context

University participation rates across regional Australia remain low. The Bradley Review highlighted that despite constituting 28 per cent of the population, only 19 per cent of regional and remote Australians aged 15-64 years are enrolled in higher education (Bradley, Noonan, Nugent, & Scales, 2008). Several reasons have been posited for the persistence of low regional enrolments, including distance from a university campus in general (Edwards & Marks, 2008, p. vi; Hillman & Rothman, 2007); distance from a campus offering a preferred course (Blakers, Bill, Maclachlan, & Karmel, 2003); cost of study (Godden, 2007); low secondary school retention rates (Government of Victoria, 2008); socio- economic status (James et al., 1999); and lack of aspiration (Alloway, 2004).

As Daley and Lancey note (Daley & Lancey, 2011, p. 30), low regional participation rates persist despite a network of regional universities which has operated for nearly two decades. Indeed, regional Australia represents over a quarter of the nation's population but enrols less than an eighth of its higher education cohort (Department of Education, 2008). The propensity of young people to relocate to metropolitan areas to attend university is a significant reason for this discrepancy. Hugo has demonstrated that that 'there is substantial "under-representation" in the non-metropolitan age structure of young adults in the 15-29 age groups, reflecting the heavy loss of youth from non-metropolitan areas' (Hugo, 2000). This out-migration of young adults from the regions may well increase over time. In the Victorian context, Fiona Mackenzie notes that:

As demand for highly educated and skilled workers increases in the contemporary information economy, education becomes more critical to an individual's economic success. The attraction of the larger universities and training centres in Melbourne is therefore likely to increase rather than diminish. (Mackenzie, 2000)

Low levels of regional participation and the propensity of regional students to relocate has led to a lively debate about preferred university provision models. Questioning any correlation between a university presence and regional participation rates, Daley & Lancey have argued that 'it may well be that the additional spending on universities and regional campuses in smaller cities should be redirected to assist students from regional areas to study at larger campuses in our capital cities and largest satellite and coastal cities' (Daley & Lancey, 2011, p. 37). Their conclusion has been challenged on multiple grounds including methodological weakness (Crase, O'Keefe, & Dollery, 2011, p. 489) but evidence of the impact of local campuses upon participation remains contested.

Whether regional participation rates would be better increased by expanding regional provision or by easing the path to relocation depends on the nature and elasticity of student aspiration. The following study addresses these issues by specifically examining the expressed choices of regional students in areas where regional campuses operate. While many previous studies have focussed on enrolment data, it is also necessary to examine course preferences within application data in order to understand the desires of prospective students. Many applicants are constrained in their choices, while others are either unable or unwilling to convert their choices to enrolment outcomes. Understanding the causes and extent of unrealised aspiration is central to improving delivery models and, ultimately, regional participation rates.

Methodology

This study is part of a collaborative research project between Monash University and La Trobe University. Both universities are multi-campus institutions, with both metropolitan and regional locations. The study focuses on three campuses - the Bendigo and Mildura campuses of La Trobe

University and the Gippsland campus of Monash University - and their catchment regions.

Taken together, the three campuses provide a cross-section of regional and campus types. La Trobe Bendigo is the largest campus in the study, enrolling around 5,000 students. Bendigo is a large regional centre with over 100,000 people. Located 150 km from Melbourne in the geographic centre of Victoria, Bendigo is significant as a hub for transport, service provision and tourism. Monash Gippsland enrolled 4,200 students in 2011, including just under 3,000 undergraduates¹. Monash Gippsland is located in the Latrobe Valley, 160 km from Melbourne. The Latrobe Valley is the centre of the energy industry in Victoria, and also hosts significant engineering, manufacturing and service industries. La Trobe Mildura is the smallest and most remote campus in the study, with 400 enrolments, located 540 km from Melbourne in a primarily agricultural area.

The study examined the tertiary education applications, offers and subsequent enrolments of applicants from these three regions from 2009 to 2011. Data was drawn from the Victorian Tertiary Admissions Centre (VTAC), the centralised administration body for tertiary education applications in Victoria that processes applications for all the public universities and Tertiary and Further Education (TAFE) institutes, as well as many private higher and vocational education providers. The study necessarily excluded those who completed Year 12 but did not apply for tertiary study, and the small but growing cohort who applied to universities via direct entry. Over the three years studied, nearly 10,000 university applications were made, resulting in nearly 5,000 enrolments (Table 2).

The study analysed the applications and outcomes of VTAC applicants whose home residence was located within the Local Government Areas (LGAs) surrounding each of the three regional campuses. These locations were within commuting distance (defined as 90 minutes travel time) from the local regional campus.

Table 1: Campuses and regions

Regional campus	Monash University Gippsland	La Trobe University Bendigo	La Trobe University Mildura
2011 campus size (undergrad enrolments)	2629	3962	460
Local Government Area	Baw Baw (S)	Greater Bendigo (C)	Mildura (RC)
(LGA)	Bass Coast (S)	Campsaspe (S)	
	La Trobe (C)	Loddon (S)	
	South Gippsland (S)	Mount Alexander (S)	
2010 Population	114 703	109 420	34 794
(Age 15 - 64)			

¹ Monash Gippsland is also a distance provider, with about one-third of students (both undergraduate and postgraduate) studying externally and one-fifth studying in mixed mode.) Only a small proportion (7% in 2011) of Gippsland students enrolled at Monash Gippsland chose external mode.

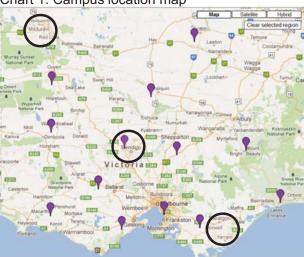


Chart 1: Campus location map

Applications. The study considered those applicants who listed a university course as their first preference among the ten choices permitted in the VTAC system. This assumes that first preference application accurately reflects student aspiration. The VTAC data do not allow observation of the broad range of factors that influence how applicants construct their preferences, including the quality of advice available. Applicants were separated into two categories for the purpose of the study. Three quarters of the applicants were Year 12 completers, that is, students completing the Victorian Certificate of Education (VCE) or equivalent in the year examined. The balance were non-school leavers, who are eligible to apply for admission on the basis of secondary school qualification, vocational education and training (VET) qualification, previous higher education course or professional or other qualification.

Relocation preferences. The study examined whether prospective students within each region were applying to study locally or to relocate. For each region, applicants' first preferences were disaggregated by university campus location. Three geographic categories were created: 1) local regional campus (Monash Gippsland, La Trobe Bendigo or La Trobe Mildura); 2) other regional campus (including all the regional campuses located outside Melbourne or Geelong); 3) metropolitan campus (including all campuses within Geelong and Melbourne).

Offers. Offers are made by individual universities on the basis of applicants' course preferences and academic achievement. Offers proceed in rounds, with universities offering to the highest ranked applicants first, then to remaining applicants who have not accepted an offer in subsequent rounds. The study considered the final university offer for each applicant. That is, the university offer rate includes any university offer (not necessarily the applicant's first preference) but excludes offers to VET or private providers.

Enrolments. The enrolment rate was calculated on the basis of students reported to VTAC as enrolled at 31 March in the year following application. It includes students enrolled both full time and part time.

Deferments. The deferment rate was calculated as those applicants who accepted their university offer and elected to defer commencement of their course. Most universities permit students to defer their offer for six to 24 months.

Not enrolled. The not enrolled rate includes both students who did not respond to their university offer, and those who enrolled but formally withdrew before 31 March.

Regional. Throughout the study, the term 'regional' is used to include all non-metropolitan, rural and isolated locations unless otherwise indicated.

Aspiring to university

Some of the most important factors influencing aspiration to university precede the focus of this study. People from regional areas in Australia continue to be under-represented in higher education, an imbalance that can be traced in part to higher attrition in secondary schools. Young people in regional areas are more likely to leave education before completing Year 12 and to disengage from formal learning or work than their urban peers. Apparent retention of Year 10 to 12 students in regional Victoria is 73.9%, 13% lower than in metropolitan schools. Similarly, one in five 15 to 19 year olds in regional areas is not engaged in school, work or further education, above the Victorian average (Department of Education and Early Childhood Development, 2011). In considering the choices of school leavers who are aspiring to university, it is important to remember that many have already chosen other pathways and/or disengaged from formal education.

The students who do complete Year 12 in regional schools and apply through VTAC appear to have strong aspirations to university study. Table 2 shows that in the three regions identified, 87.3% of VTAC applicants listed a course offered by a university (rather than VET or private provider) as their first preference, compared with 82.2% of all VTAC applicants. These data are consistent with statewide trends, and may reflect a higher proportion of direct entry admissions for regional TAFE institutes.

Table 2: Combined regional applications, offers and enrolments, 2009-2011

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Applications	2009-2011	STUDIED REGIONS	METROPOLITAN	ALL APPLICANTS
Preferences	"University Aspiration rate"	87.3%	80.7%	82.2%
	1st Preference to University (n)	9952	152600	194967
	Total VTAC applicants (n)	11403	189116	237169
Offers	University offer rate	79.3%	76.9%	77.3%
	Total final University offers (n)	7887	117367	150636
Enrolments	Enrolment rate	61.5%	71.6%	67.8%
	Total Enrolled at University (n)	4853	84077	102204
Non-enrolments	Non-enrolment rate	38.5%	28.4%	32.2%
	Total non-enrolments (n=a+b)	3034	33290	48432
	Deferment rate	20.6%	9.5%	11.8%
	a) Deferred university offer	1627	11111	17850
	b) Did not take up university offer	1407	22179	30582

Analysis of VTAC data (Table 2) shows that applicants in the three regions received university offers at a slightly higher rate than metropolitan students. These high rates of offer did not translate to enrolments in the following year, however, with only six in ten students from the selected regions enrolled in the following year, and twice as many students deferring their offer as in metropolitan areas. The gap between offers and enrolments is partly associated with the need for students to relocate.

Of the cohort who applied for university between 2009 and 2011, the study found that most applicants sought to relocate. Of VTAC university applicants in the regions considered, only one third of applicants placed a local university option as their first preference. The preference to relocate was consistent across the three regions, although where courses were available locally they were preferred by regional applicants.

The following sections explore the factors influencing applicants' choices, the patterns of offers and the conversion of offers to enrolments.

Factors influencing choice

Three primary factors impact on the likelihood of regional applicants to prefer relocation: the scope of local course offerings; demographics; and educational background.

Both the capacity and diversity of local course offerings are significant determinants of choice. The Bendigo campus of La Trobe offers a wide variety of courses and enrols over 5,000 students. The Gippsland campus of Monash enrols 3,000 students, while course offerings at the Mildura campus of La Trobe are more limited, with only 400 students enrolled. Limited local offerings explain, for example, the overwhelming preference of science applicants to study in metropolitan areas. Nevertheless, where local courses are provided, the majority of local applicants tend to select those courses, despite some variations by course and campus.

The study revealed that Nursing and Teacher Education courses in particular attract local applicants across all three regional campuses. Of applicants seeking to study Nursing, over 70% in Mildura, Bendigo and Gippsland chose their local university as their first preference. Over three quarters of Teaching applicants in Mildura and Bendigo as well as more than half of Teaching applicants in Gippsland selected their local option as first preference. For courses in Business Management and Commerce, the regional campuses also dominated the number of first preferences from local applicants. Beyond these fields of study, limited course provision drove applicants to look further afield. For example, despite the fact that specific La Trobe course offerings in Bendigo nearly all attracted a majority of local preferences, more than half of Bendigo applicants still preferred to relocate than study locally.

Demographically, the influences of age, gender and socio-economic status appear to be significant in the choices of prospective students. The charts at Appendix 1 present the rates of application to relocate among different demographic cohorts in each region. Non-school leaver applicants in the selected regions were more likely to prefer local study than the school leaver cohort. In Gippsland, around half of non-school leavers selected a course at Monash Gippsland as their first preference, compared with just a quarter of Year 12 applicants. In Bendigo and Mildura, over half of non-school leavers and over a third of school leavers selected a local course as first preference. While the data underline the tendency of school leavers to look beyond a local university option, they also reveal the reluctance of some mature age applicants to study locally. In Gippsland, more than half of non-school leavers selected a metropolitan course as their first preference.

Gender is another demographic factor relevant to choice, with male applicants less likely to select a local university option as their first preference. Only 23% of Mildura applicants who applied to study locally in 2011 were male, compared with almost half of the applicant pool selecting a metropolitan option. These data intersect with the factor of course profile, as many courses offered regionally are traditionally female-dominated, such as Nursing and Teaching.

Finally, the influence of socio-economic status is evident, particularly in Gippsland, with low socio-

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economic status (LSES) students more likely to prefer a local campus than non-LSES students.² Interestingly though, even among LSES students often only a minority of students selected a local option. In Gippsland, 40% of LSES students selected a local course option as their first preference, compared with 30% of non-LSES students, while in Mildura all SES categories preferred a non-local course option. In Bendigo, just under half of LSES students chose to relocate. First-in-family data reveal a similar pattern, with students who would be the first generation in their family to attend university being more likely to select a local course offering as their first preference.

Educational background appears to be even stronger than demography in influencing the preference of students to relocate. Most notably, school type emerges as a highly significant factor. In Gippsland and Bendigo, more than 80% of applicants from independent schools selected a first preference course at a non-local campus. Ninety per cent of non-low SES Gippsland Year 12 completers from independent schools sought to relocate, compared with just over two thirds of Year 12 applicants from government schools. The influence of school sector persisted among non-school leaver applicants, who were more likely to seek to relocate than their peers who attended government schools. School sector in this case perhaps represents a better indicator of socio-economic status than postcode-based measures in these regions. Mildura has no independent schools, which limits comparisons to Bendigo and Gippsland, however a comparable difference between the Catholic and Government sectors was evident.

For Year 12 completers, academic achievement, reflected in the Australian Tertiary Admissions Rank (ATAR)³ is a pivotal factor in their course selection. High achieving students have a much wider choice of courses, including a broader range of metropolitan options. A higher proportion of metropolitan students achieve high ATARs. In 2011, 43.4% of Year 12 students in urban areas achieved an ATAR of over 80 while only 28.4% of regional Year 12 students did. Students from independent schools have a higher ATAR average, reflecting the stratification of the school system (Marks, McMillan, & Hillman, 2001, p. 24).

Lower achieving applicants appeared to adjust their choices in line with their expected results, although around one third of students with an ATAR below 50 still chose a metropolitan course offering as their first preference. In Bendigo and Mildura, over half of students with an ATAR below 50 chose a local course as their first preference, compared with less than a third of students with an ATAR above 80. The mean ATAR of Gippsland Year 12 completers aspiring to metropolitan study was 70.56, compared with 59.21 of those choosing to study locally. Admission to a local regional campus is less competitive and given a more constrained set of course options, the advantages of studying locally may weigh more highly. In contrast, high achievers are presented with a wider range of course choices, including many areas of study that are only offered at metropolitan campuses, such as Architecture and specialties within Engineering. As the following section demonstrates, the preferences of applicants do not always translate to enrolments.

From aspirations to offers

Receiving a course offer is the next step between application and enrolment. Almost 80% of applicants in the selected regions who aspired to university were successful in receiving a university course offer.

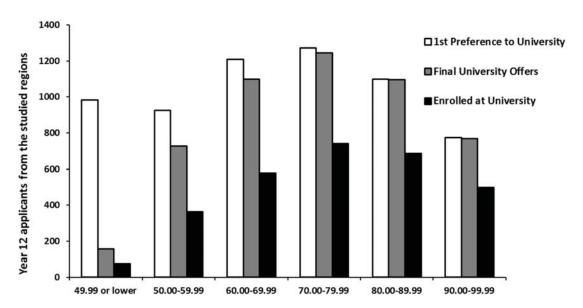
² None of the regional areas in this study is classified within the top quartile. That is, all areas are classified as 'low' or 'mid' SES and none as 'high SES'

³ The ATAR is a percentile ranking used by universities to assist in the selection of school leavers for entry into undergraduate courses. It is used as an indication of a student's suitability for study at university level, and to allow universities to select appropriate numbers of students for each course. Students' study scores are aggregated, calcuated as a percentage rank and converted to an ATAR, which is the estimate of where the student came in the relevant age group, taking account of the students who have successfully completed VCE as well as those who moved or left school before Year 12. The ATAR is a number from 0 and 99.95 in intervals of 0.05. The highest rank is 99.95, the next highest 99.90, and so on. The lowest automatically reported rank is 30.00, with ranks below 30.00 being reported as 'less than 30'.

These applicants received university offers at a slightly higher rate than the Victorian average. No definitive reason for the higher regional offer rate could be determined, however a number of factors may be involved including special consideration in admission provisions for regional applicants and the lower ATAR thresholds for some regional campus courses. Despite the overall strong offer rate, some applicants in the selected regions did not receive any university offer, and others did not receive an offer at their preferred location. Across each group, ATAR appears to play an important role.

The Year 12 completer applicants who did not receive a course offer were clustered in the lower ATAR range. Chart 2 shows the distribution for applicants in the three studied regions. Over the three years analysed, there were about 800 applicants in the three regions who aspired to university but did not receive a university offer. As discussed above, these lower achieving applicants were more likely to have applied to a local campus. For example, almost six in ten Bendigo applicants with an ATAR of 60 or below listed Bendigo as their first preference. Many of these applicants did receive a TAFE or other offer.

Chart 2: Preferences, offers and enrolments (Domestic VTAC Applicants, Current Year 12, from Gippsland, Bendigo, and Mildura by ATAR band - 2009-2011 combined data, includes only applicants with recorded ATAR)



Most applicants secured an offer in their preferred location, whether local or metropolitan. This suggests that most applicants are effectively matching their preferences to their academic achievement. Non-school leaver applicants choosing to study locally were more likely to receive their first preference offer than non-school leaver applicants seeking to relocate. Unsurprisingly, applicants with stronger academic achievement were more likely to receive a preferred offer. This trend was particularly evident among students choosing to study at a metropolitan campus. Of Gippsland students who listed a metropolitan campus as their first preference, 79% received a metropolitan offer and 9% received another offer.

Bendigo applicants were successful overall in securing an offer in their preferred location, with three quarters of applicants to both metropolitan and regional campuses achieving an offer in their preferred location. Mildura applicants' success rate was slightly lower, at 70% for both regional and metropolitan locations. Gippsland students aspiring to study locally had the lowest offer rate, at 58%, although non-school leavers selecting a Gippsland course were more likely to receive their first

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preference than Year 12 applicants.

From offers to enrolments

Major factors influencing the conversion of offers to enrolments include geography, educational achievement, and deferment levels. Within our study, only about half of the prospective regional students who applied for university study were enrolled in higher education in the following year. The location of the offer, and whether it was the applicant's preferred location, were critical factors in enrolment. Students who aspired to study locally and accepted a local offer were the most likely to be enrolled in the following year, while students who accepted a metropolitan place were more likely to defer their offer. Seven in ten students accepting an offer at Bendigo were enrolled in the following year, with two deferred and one not enrolled. In contrast, 57% of Bendigo students relocating to a metropolitan campus were enrolled in the following year, with 26% deferring their offer. The proportions for students relocating to another regional location are similar, suggesting that the relocation process itself is a barrier.

While many barriers to relocating are shared across the regions, isolation presents particular impediments. Distance was particularly a factor at Mildura, with only half of Mildura applicants accepting an offer to a metropolitan campus enrolled in the following year. Mildura students receiving a metropolitan offer also revealed the highest rate of non-enrolment (27%), with 104 students over three years who were selected for university study not enrolling or deferring their offer.

What happens to students who aspire to relocate but do not receive an offer to relocate? Gippsland students aspiring to a metropolitan campus tended to accept a Gippsland offer (64% enrolled, 22% deferred) but not an alternative regional offer (32% enrolled, 29% deferred). The outcomes for Bendigo students are similar. There is a small but potentially significant cohort of qualified students here who choose not to enrol at all if they do not receive their first preference. The influence of geography upon the conversion of offers to enrolments is thus significant and multi-faceted.

Educational achievement remains another influence on university enrolment. Chart 2 reveals that the applicant cohort with ATARs between 60 and 69 actually received more offers than the 80-89 ATAR cohort, but these resulted in fewer enrolments. Similarly, the 50-59 ATAR cohort made more applications and received more offers than the 90-99 ATAR cohort, but again recorded fewer enrolments. The impact of stratification is powerful and continues past the point of offer. Importantly, school achievement affects not only the chances of receiving a university offer, but also the likelihood of accepting an offer.

Finally, as previous research has indicated, deferment remains a significant influence on regional higher education participation rates (Parliament of Victoria, 2010; Polesel, 2009; Polesel, O'Hanlon, & Clarke, 2011). Regional students are significantly more likely than metropolitan students to defer an offer of university enrolment. As Polesel (2012) notes

In regional Victoria this [deferral] rate has risen from 9.9 per cent in 2004 to 15.6 per cent in 2011, although in terms of actual numbers, the rise is even more significant – from 541 young people in 2004 to 1441 young people in 2011. (Polesel, Klatt, & O'Hanlon, 2012, p. 5)

Deferment rates were volatile over the period of the study, spiking in 2009 when 21% of regional applicants across Victoria and 36% Bendigo applicants. This suggests that broader economic factors in this case, the global financial crisis - have an impact on prospective students' confidence.

Applicants defer their university offer for both personal and financial reasons. Taking a 'gap year' as a break from study or to travel is an established practice for many school completers, and most of these students return to study in the following year. However, for other students, deferring their offer is necessary to earn money to fund their studies or to prepare to relocate. Polesel found that regional and

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metropolitan young people cited personal reasons such as 'wanted to travel or take a Gap year' or 'not ready for more study at the moment' at a similar rate. However regional students were significantly more likely to identify financial and practical barriers such as 'The course was not offered locally', 'Difficult to support yourself' or 'It would have meant leaving home' (Polesel et al., 2012, pp. 19-20). Changes to eligibility for the Independent rate of Youth Allowance have also appeared to have an impact on patterns of deferment and return, with regional students four times more likely than metropolitan students to cite Youth Allowance eligibility as a reason for deferring (Polesel et al., 2012, p. 19).

The Polesel study found that most students who defer their university offer made a successful transition to higher education, with most being satisfied with their choices. However, Polesel also found that approximately three in ten young people who deferred their university offer did not take up the place or took up their place only to discontinue.

At each step in the process from application to enrolment there is a risk of students disengaging from higher education. There is a strong pattern of transition for students with sound academic achievement who choose to relocate to metropolitan campuses, and for students who aspire to study locally and accept a local offer. The destinations of students who do not receive an offer at all, or do not receive their preferred offer, are not known.

Findings

In line with previous research, the proportion of young people applying to university from the regional areas analysed was relatively low. This reflects lower secondary school retention rates and a variety of other factors outlined in the research (Parliament of Victoria, 2010). Nevertheless, of the applications made through VTAC, the overwhelming majority (82.2%) reflected a preference for higher rather than vocational education. There is a wide range of aspiration within the regional cohort, and the extent and direction of aspiration is influenced by demographic factors such as socio-economic status, age and gender, as well as educational background, particularly school achievement and sector. Some cohorts, particularly those from independent schools and high-achieving males, demonstrate little inclination to study locally, indicating the importance of perceptions as well as realities.

While demographic and educational factors are clearly important mediators of aspiration, the extent of local course provision appears to be an even more significant factor in determining preferences. In almost every case where a local course is offered, that course is preferred by the majority of locally based applicants. High levels of aspiration to relocate can thus be explained in large part by the limited capacity of local course provision.

From applications to offers, the influence of educational achievement is manifest. Most notably, there are large numbers of Year 12 students who achieve ATARs below 50 and who do not receive a university course offer. This trend is most striking in Mildura where school achievement is the lowest of the three areas studied. The destinations of students who apply to university but do not receive an offer are difficult to determine but important in measuring the true extent of unmet demand. Students who aspire to relocate but receive either a local or alternative regional offer have relatively low acceptance rates and above average deferment rates.

Finally, in the conversion of offers to enrolments, there are several discrete cohorts. Students who prefer and receive a local university offer are most likely to accept and enrol the following year. By contrast, students who receive their preferred offer to relocate are more likely to defer and are also significantly more likely not to accept that offer. This is particularly the case for the Mildura-based cohort, underlining the ongoing tyranny of distance. The likelihood of conversion from offer to enrolment is also affected by factors of demography and educational background. Educational achievement clearly affects the likelihood of receiving an offer but it also affects the likelihood of

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accepting an offer if received.

Implications and further research

In the regions studied over three years, around 5,000 prospective students applied to university but were not enrolled in the subsequent year. Despite the push to widen participation, many aspirations remain unfulfilled. Our study revealed several points where provision and demand are misaligned, with consequent effect on higher education participation rates. The findings of this study have at least five potential implications.

First, a majority of regional applicants aspire to relocate to study, so reducing the barriers to the realisation of these aspirations is crucial. Further research is also required to identify why some cohorts, e.g. independent school students, are particularly reticent to study locally.

Second, an expansion and diversification of regional course offerings would be attractive to students if sustainable provision models could be established. Paradoxically, despite the general propensity of regional students to relocate (and the particular propensity of some cohorts), most local applicants choose to study locally if their preferred course is offered.

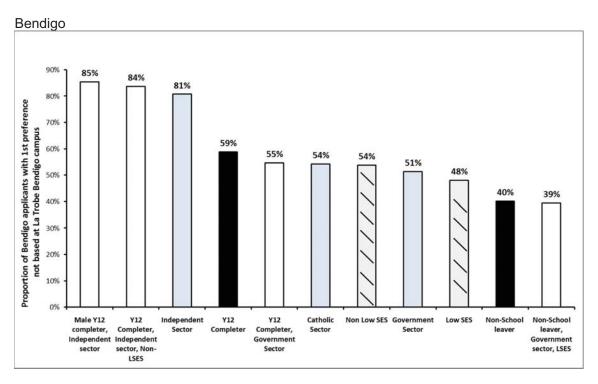
Third, there is a high level of unmet demand among students with ATARs of 50 and below, suggesting the need to improve preparation within schools and to offer appropriate university enabling and bridging programs and vocational pathways. The study reveals a large cohort of prospective students who aspire to higher education but are unable to convert this aspiration into a university offer.

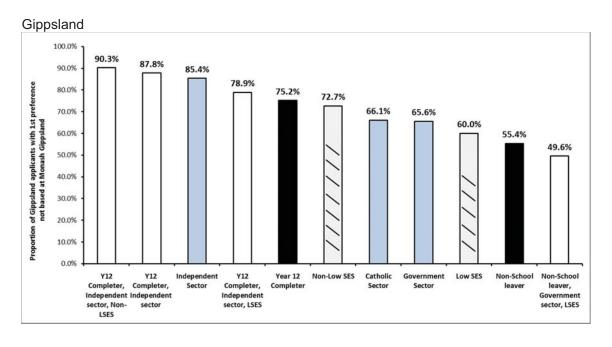
Fourth, more work is required to ensure that university offers are converted to enrolments. The findings indicate a significant number of regional applicants who receive an offer but are not enrolled the following year. Barriers to relocation remain high, and the influence of educational achievement on the conversion of offers to enrolments further underlines the need to focus on raising school achievement and preparatory university programs.

Finally, the rates of application and access are lowest for Mildura, confirming that the extent of rurality is a strong influence on achievement and access. Policy approaches need to consider distance as a significant mediator of both aspiration and enrolment.

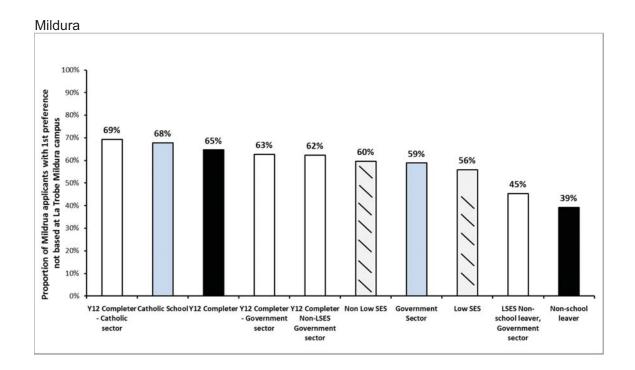
Appendix: Applications to relocate for study by cohort

University applicants from regional areas: the most and least likely to seek to relocate





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References

- Alloway, N., Gilbert, P., Gilbert, R. & Muspratt, S. (2004). Factors impacting on students aspirations and expectations in regional Australia. In Evaluations and Investigations Programme (Ed.). Canberra: Department of Education, Science and Training.
- Blakers, R., Bill, A., Maclachlan, M., & Karmel, T. (2003). Mobility: Why do university students move? Canberra: Department of Education, Science and Training.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). Review of Australian Higher Education: Final Report (Bradley Review). Canberra: Department of Education Employment and Workplace Relations.
- Crase, L., O'Keefe, S., & Dollery, B. (2011). Nuances of Regional Growth and its Public Policy Implications: Some Comments on the Flaws in the Grattan Institute's Investing in Regions; Making a Difference Report. *Economic Papers*, 30(4), pp. 481-489.
- Daley, J., & Lancey, A. (2011). Investing in regions: Making a difference. Melbourne: Grattan Institute.
- Department of Education and Early Childhood Development (2011), published statistics at: http://www.education.vic.gov.au/
- Department of Education, E. a. W. R. (2008). Higher Education Statistics Summary Canberra: DEEWR.
- Edwards, D., & Marks, G. (2008). 'Preliminary Report on University Participation, Access and Entry in Victoria', Appendix 4 in Victorian Government Submission to Review of Australian Higher Education. Victoria: Government of Victoria.
- Godden, N. (2007). Regional Young People and Youth Allowance: Access to tertiary education. Wagga Wagga: Centre for Rural Social Research.
- Government of Victoria. (2008). Submission to the Review of Australian Higher Education. Melbourne: Government of Victoria.
- Hillman, K., & Rothman, S. (2007). Movement of non-metropolitan youth towards the cities: Longitudinal Surveys of Australian Youth (LSAY) research report. Melbourne.
- Hugo, G. (2000). What is happening in rural and regional populations? Paper presented at the First National Conference on the Future of Australia's Country Towns, Bendigo. www.regional.org.au
- James, R., Wyn, J., Baldwin, G., Hepworth, G., Mcinnis, C., & Stephanou, A. (1999). Rural and Isolated Students and their Higher Education Choices: A re-examination of student location, socioeconomic background, and educational advantage and disadvantage. Canberra.
- Mackenzie, F. (2000). *The Ageing of Regional Victoria: Problem or Opportunity?* . Paper presented at the First National Conference on the Future of Australia's Country Towns, Bendigo. www.regional.org.au
- Marks, G., McMillan, J., & Hillman, K. (2001). Tertiary entrance performance: the role of student background and school factors *LSAY research reports*. Camberwell: Australian Council for Educational Research.
- Parliament of Victoria. (2010). Inquiry into Geographical Differences in the Rate in which Victorian Students Participate in Higher Education. Melbourne: Victorian Parliament Education and Training Committee.
- Polesel, J. (2009). Deferring a University Offer in Regional Victoria: The University of Melbourne.
- Polesel, J., Klatt, M., & O'Hanlon, C. (2012). Deferring a University Offer in Regional Victoria. Melbourne: Youth Affairs Council of Victoria.
- Polesel, J., O'Hanlon, C., & Clarke, K. (2011). Deferring a University Offer in Regional Victoria. The 2006 Year 12 Graduates, Four Years Out. Melbourne: Youth Affairs Council of Victoria