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Aspirations, equity and higher education course choice: The path travelled

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Abbreviations

ACER	Australian Council for Educational Research
ATAR	Australian Tertiary Admissions Rank
CALD	Culturally and Linguistically Diverse background
Go8	Group of Eight
FiF	First in Family
HEPPP	Higher Education Participation and Partnerships Program
HSC	High School Certificate
ICSEA	Index of Community Socio-Educational Advantage
Low SES	Low Socioeconomic Status
NESB	Non-English Speaking Background
SES	Socioeconomic Status
STEM	Science, Technology, Engineering and Mathematics
TAFE	Technical and Further Education
UAC	Universities Admissions Centre
VET	Vocational Education and Training
WINTA	Women in Non-Traditional Areas

Executive summary

This project, *Aspirations, equity and higher education course choice: The path travelled,* examined which students realise their childhood aspirations, for what higher education courses, and why. 'Aspirations' have become a cornerstone of efforts to widen the participation of underrepresented groups in Australian higher education, with considerable practical and political attention given to 'raising' aspirations over recent decades. However, with very little longitudinal research on how students actually navigate their post-school futures, much of this activity has proceeded with limited understanding of the factors that enable or constrain the fulfilment of students' aspirations post-school.

Focusing on targeted equity groups and first-in-family (FiF) students, this project addressed the following questions:

1. How do early aspirations (at ages 10-18) relate to post-school and higher education course choices?
2. What equity insights can participants from the Aspirations studies provide with regards to the path they travelled in making their higher education choices?
3. How might recent environmental, health and economic crises shape institutional efforts to ensure more equitable participation across higher education courses?

To answer these questions, we drew on an existing data set (*n* = 12,068 surveys and *n* = 360 focus groups) documenting the post-school aspirations of students enrolled in Years 3-12 between 2012 and 2017 across a wide range of New South Wales (NSW) government schools. Additional data were collected in 2021 via online surveys (*n* = 52) and interviews (*n* = 21) with original participants who are now one to five years post-school. The additional data were central to the analysis, with the existing data primarily used as context for data collected in 2021. The expanded survey data enabled an overview of the types of educational and occupational pathways that participants followed and factors that influenced the pathways taken. Interview data were used to provide seven detailed case studies of the different university-related pathways identified in the survey data.

Major findings from the project were:

- Young people traverse a wide variety of pathways after school, ranging from those who directly pursue their educational and occupational aspirations to completion, to those who are forced to abandon their aspirations as a result of obstacles that cannot be navigated. Others choose to take up new or unexpected opportunities and end up in places they could not have envisioned, while some are still seeking a path several years post-school.
- Most participants' educational and occupational aspirations changed at least somewhat in the years following their schooling. Less than a third of participants indicated that their education (29%) and career (21%) aspirations had not changed at all.
- Participants who pursued their aspirations with few disruptions were most likely to have taken a 'path well-travelled' to a career that is aligned with their current demographic status.
- Participants from targeted equity groups who 'took the path less travelled' to university typically possessed strong motivation to improve their personal, community, or family situation, with some even framing university as a means to 'escape'. All demonstrated high levels of tenacity and determination in forging new pathways and overcoming various obstacles along the way.

- Course and institution choice were based on a mixture of early interest, affective factors, and practicalities. Practicalities, such as whether early entry was offered, the proximity of the chosen university to home, and whether the course was perceived to lead to a career which would provide a ‘better’ life, were particularly influential for participants from disadvantaged backgrounds.
- There was widespread agreement among participants that university, regardless of the chosen course, is marketed as the most acceptable and desirable pathway after school, with all other pathways held in lower esteem by schools and communities. Many participants struggled with this narrative, feeling it had loomed over their choices and aspirations. Some retrospectively rejected this narrative as false and harmful.
- The most prevalent and disruptive obstacle for participants in meeting their aspirations was mental ill-health. A conglomeration of personal, relational, and economic challenges drove both acute and long-term episodes of mental ill-health. Such episodes were common in participants who were forced to abandon their pathway and begin a new journey.
- University students from equity target groups faced an array of challenges arising from their lack of access to knowledge about specific careers, specific courses, or the university system. Almost all participants indicated that the career education they received at school was insufficient to prepare them for life post-school.
- While most of the participants were largely unaffected by recent droughts and floods, the first year of COVID-19 had a diverse impact on young people. Some lost their jobs, had to move home after working internationally, faced delays in their studies or otherwise felt disadvantaged by the transition to online study. Others enjoyed studying online or took the opportunity to return to study and felt positive about their choice to do so.
- There were higher than average levels of unemployment among participants surveyed in 2021 (12%). However, in general, young people were feeling positive about their futures. Over 75% thought they would achieve their current career and educational aspirations.

Recommendations

These recommendations are largely drawn from the insights provided by participants in their surveys and interviews and inevitably overlap.

Schools

- Identify past students who can return to the school and speak about the post-school pathways they have pursued. Ideally, these students will represent a range of different pathways and will come from a diverse range of backgrounds. Past students who have followed non-traditional pathways should be prioritised.
- Strengthen career education. Broaden students' knowledge of the current economic climate and its rapidly shifting nature. Emphasis should be on helping students develop the skills to navigate increasingly uncertain and insecure working conditions. Information should also be given about the career spectrum, including careers that require university qualifications and those that do not, and support to understand the specific requirements for aspirations.
- Provide students aspiring to non-university pathways equal access to information and support in meeting their aspirations.
- Make use of research evidence. This includes making the case studies in this document available to students as a way for them to gain access to insights on the paths recently travelled by young people interested in university post-school.
- Assist students with understanding alternative pathways into different degrees, certificates, or careers. Emphasise when pathways other than direct entry into university can be used.
- Ensure students are aware of the financial support available to them after school. This could include providing information about different Centrelink payments and the eligibility requirements for these, as well as information about scholarships offered by different institutions.

Higher education providers

- Identify current university students who can return to secondary schools and share their experiences of university life. Ideally, these students will be from equity target groups and be able to understand, and speak to, the challenges that can arise for students who would not traditionally access university.
- Work with schools to provide students with information about alternative pathways into higher education, i.e., those that do not require an ATAR. This should also include information about financial support and scholarships available to students.
- Prioritise scholarships for students from equity target groups and establish targeted enrolment positions for these students where possible.
- Establish a mentoring program that assists students from equity target groups with their transition to university. Mentors would ideally be students from equity target groups who have already attended university for at least one year. These mentors could work with new students to assist them with university culture, understanding course requirements, and balancing work and study. Creating social opportunities for students from equity target groups to meet each other and share struggles they might be facing would also be beneficial.
- Establish systemic responses to disasters, including future pandemics, droughts or floods, which take into account shifts in students' financial and support systems.

- Prioritise funding for student mental health services and ensure that students are aware of the services available as well as the steps required to access these services. Providers should be aware that some students will require access to long term support while others will require intermittent support during particularly stressful periods.
- Train all teaching and professional staff who have contact with, or make decisions affecting, students in the mental health services available at their university so they effectively guide students towards appropriate professional support.

  Embed additional opportunities for post-university career planning into undergraduate degrees, with emphasis on skills to navigate increasingly uncertain and insecure working conditions. Provide students with this information early in their degrees to help them build a resilient map towards flexible destinations early on.

Government

- Provide additional funding for career education in schools. This funding should include training for *all* teachers and additional timetabled school hours dedicated to career education and planning for students.
- Establish a non-partisan body to evaluate the skills that will be in demand in the post-COVID world and how youth can be prepared for a labour market dominated by perpetual uncertainty.
- Promote policies that lift the status of TAFE, recognise that functioning societies need workers in all occupations, and alleviate the pressure on all young people to attend university.
- Fund and promote policies to support youth experiencing mental ill-health. Free access to mental health providers through bulk billing is needed for all young people, particularly given the heightened economic, social and environmental challenges faced by this generation.
- Invest in low-cost accommodation for students who need to relocate from their family home to pursue higher education in order to support the additional financial burden of attending university for these students.

Introduction

The number of Australians who enrol in higher education has increased dramatically in recent decades. Between 1989 and 2014, the number of higher education enrolments doubled, and the social, economic and academic backgrounds of the student population expanded (DET, 2015). Despite these changes, however, higher education enrolments still fail to reflect the diversity of broader society (Bennett et al., 2015; Fray et al., 2020; Gore et al., 2017a; Naylor & James, 2015), with targeted equity groups remaining particularly underrepresented. These equity groups are: Indigenous Australians, people from low socioeconomic status (SES) backgrounds, people from regional and remote Australia, those from non-English speaking backgrounds (NESB), people with a disability, and women in non-traditional areas (WINTA). Universities are also increasingly recognising those who are the first in their families to attend university as an important equity group, although they are not currently recognised in policy (Patfield, Gore & Fray, 2020).

Disparities also persist in the programs and institutions students choose. For example, many students living in remote areas often have a strong desire to remain in their communities (Gibson et al., 2021) which leads them to aspire to and attend universities that are geographically proximate. As a result, their aspirations are often tied to less 'prestigious' universities and careers than students in metropolitan areas (Gale et al., 2013). Students from low SES backgrounds are similarly underrepresented in the metropolitan-based Group of Eight (Go8) universities (DEEWR, 2008; NCSEHE, 2021), deemed to be the most 'prestigious' in Australia. At the program level, students from targeted equity groups are most likely to be enrolled in Agriculture, Health or Education, and least likely to enrol in Medicine, Architecture, Law and Creative Arts (Bennett et al., 2015; DEEWR, 2008).

These disparities in enrolment persist despite myriad policy changes and initiatives implemented by the Federal government. In particular, as a result of the 2008 *Review of Australian Higher Education* (the 'Bradley Review'), the Commonwealth government injected hundreds of millions of dollars into universities in the name of improving access. The Review prompted the introduction of the demand-driven funding system in 2012, where the number of university places in most undergraduate degrees was uncapped, as well as the establishment of the Higher Education Participation and Partnerships Program (HEPPP), which funded initiatives to improve the enrolment and retention of students from low SES backgrounds (Bennett et al., 2015). In line with the recommendations of the Bradley Review, these initiatives have often focused on 'raising' the aspirations of students from disadvantaged social backgrounds. However, considering trends to 2019, many equity targets initially set during this era are unlikely to be met (NCSEHE, 2021).

Regrettably, a series of national and global events have complicated attempts to increase equity in recent years. Drought, bushfires, and particularly the COVID-19 pandemic have negatively impacted the higher education sector. In August 2021, the Mitchell Institute reported trends suggesting that declining international student enrolment as a result of COVID-19 will leave universities with reductions in revenue of between $2 billion and $2.5 billion annually for the foreseeable future (Hurley, Hoang & Hildebrandt, 2021). This loss of revenue has led to universities embarking on significant cost cutting measures. In the 12 months from May 2020 to May 2021, around 40,000 university staff positions were lost in Australia, 90% of which were full-time positions (Littleton & Stanford, 2021). These measures may lead to staff shortages in some disciplines and a decline in the quality of programs for domestic students (Tjia et al., 2020). Complicating matters further, the government has recently implemented the *Job-ready Graduates* Package aimed at steering enrolments towards programs that are perceived as more likely to result in employment (Norton, 2020). This package significantly increases fees for students enrolling in Arts and Humanities programs, while reducing fees for Science, Technology, Engineering and Mathematics (STEM) programs. In addition, the package includes plans to reduce

government funding for Commonwealth supported places, leaving universities to make up a shortfall in costs if they are to continue to offer a similar number of places (Marshman & Larkins, 2020). The predicted impact of this budget situation on the Australian higher education sector is grim, with unknown consequences for student aspirations and participation in higher education (Buchanan, 2020).

In this context, our research seeks to shed light on what motivates young people to choose, or not choose, different university institutions and degree programs, and why some students realise these aspirations and others do not. Our data on student aspirations, collected between 2012 and 2017, provides a unique opportunity to investigate both the *formation* and *realisation* of young people's aspirations over time. By combining existing survey and interview data on student aspirations with new surveys and interviews conducted with a sub-sample of participants after finishing formal schooling, we aim to produce fresh insights into how equity factors shape students' higher education course choices. The impact of recent catastrophes such as drought, bushfire and COVID-19 will also be explored via our new surveys and interviews. The following research questions underpin the study:

1. How do early aspirations (at ages 10-18) relate to post-school and higher education course choices?
2. What equity insights can participants from the Aspirations studies provide with regards to the path they travelled in making their higher education choices?
3. How might recent environmental, health and economic crises shape institutional efforts to ensure more equitable participation across higher education courses?

Background and context

Why study aspirations?

Aspirations are considered a key factor in shaping students' post-school trajectories. This focus is reflected in government policy, university outreach, and academic research (Prodonovich, Perry & Taggart, 2014; Gore et al., 2017b). 'Raising' aspirations is a central pillar of most university outreach programs, which often provide information directly to young people as a way to increase their awareness about university pathways and possible careers that can be pursued through higher education (Bennett et al., 2015).

Despite the policy and outreach focus on 'raising' aspirations, there is little evidence that inequity in university enrolments is due to a lack of aspiration among people from disadvantaged social and economic backgrounds (Bok, 2010; Chesters & Cuervo, 2021; Gore, 2017b; Naylor & James, 2015). In fact, an Australian study found that "students from low SES backgrounds have similar career aspirations to those from higher SES categories" (Gore et al., 2017a, p.1398). Similar findings have been observed elsewhere, with a UK study finding that many young people actually hold aspirations that are unrealistically high given the number of professional jobs available in the workforce (St. Clair et al., 2013). In light of such research, recent commentary has suggested that the discourse of 'raising aspirations' is premised on a deficit view of individuals and their families, who are chided for lacking the 'correct' level of aspiration, thus overlooking difficult social, cultural, economic and political conditions for aspiring (Gale, 2015; Zipin et al., 2015).

Arguably, all people wish to lead a 'good life'. However, definitions of the 'good life', and what is possible for one to achieve, vary depending on one's social and economic position (Bok, 2010). That is, aspirations are influenced by the level of freedom an individual has to aspire and the capability of that individual to achieve the aspiration (Hart, 2016). Therefore, while most outreach interventions are focused on 'raising' aspirations, it has been suggested that "nurturing" and "supporting" aspirations might be a more fruitful approach (Gore et al., 2017a, p. 1398). Aspirations for a 'good life' are more likely to be met when there are fewer structural barriers and support is available to navigate barriers that do emerge. This study has the potential to underpin this 'nurturing' process, providing a better understanding of how social structures inhibit the capacity to aspire and to pursue aspirations.

What are aspirations?

Aspirations can be conceptualised in a multitude of ways, ranging from more individualistic to more culturally embedded interpretations. For example, aspirations have been described as "something to do with wants, preferences, choices, and calculations" (Appadurai, 2004. p. 67), "an indication of a person's sense of their future" (Archer, DeWitt, & Wong, 2013, p. 59), or "driven by conscious and unconscious motivations" (Hart, 2016, p. 326). While a diverse array of conceptualisations exists, we argue that it is critical to acknowledge the influence of social systems and structures on aspirations (Gale, 2015; Kosec & Mo, 2017; Rondini, 2016).

In most policy narratives to date, aspirations have tended to be treated as largely individualistic. For example, in response to the Bradley Review (2009), the Federal government suggested that "low awareness of the long-term benefits of higher education" among people in low SES groups leaves individuals with "little aspiration to participate" in university (p. 13). Similar conceptualisations are also evident in international policy narratives, such as when then-UK Prime Minster David Cameron suggested that if people simply aspired to go "all the way to the top" then they would surely do just that (Prodonovich, Perry & Taggart, 2014). These proclamations assume a "poverty of aspiration" in the "left behinds" (Zipin et al., 2015, p. 229) and blame individual shortcomings for a lack of university participation, rather than acknowledging structural influences deeply embedded

within society. Not the least of which is that there are only a limited number of positions at 'the top' and all societies require so-called 'low status' workers.

Using the work of Arjun Appadurai (2004), we conceptualise aspiration as a "cultural capacity" (p.66), derived from broader cultural norms. In so doing, we acknowledge that aspirations exist within a culture that provides a "system of ideas" which shapes what we value and what we imagine is possible and, therefore, what we aspire to (Appadurai, 2004). This approach recognises that structural limits within society influence aspiration formation and realisation, working differently "according to where a person is positioned within social, cultural and economic arrangements" (Gale et al., 2013, p. 9). In this understanding, aspirations are acknowledged as socially constructed, a result of the "interplay between agency and social structures within young people's lives" (Archer, DeWitt & Wong, 2013, p. 59).

Appadurai (2004) describes the capacity to negotiate paths towards realisation using the metaphor of navigation. He observes that people from disadvantaged backgrounds do "express horizons in choices made and choices voiced" (p. 68), but that the map of aspirations for them provides a "thinner, weaker sense of the pathways from concrete wants to intermediate contexts to general norms and back again" (p. 69). The less advantaged are likely to have fewer experiences with connecting means to ends and less opportunity to accumulate shared knowledge about navigation to higher education from family members and peers. Without experience and shared knowledge, "a map is simply a document covered in unfamiliar symbols and words" (Bok, 2010, p. 164). To read the map, and expand their capacity to aspire, students must gain "knowledge and experiences that enable them to make powerful choices" (Bok, p. 164). However, this is not always possible if their families and other people in their communities do not possess this knowledge and experience themselves.

The navigation metaphor can be extended to further delineate the different navigational capacities of social groups. More privileged members of society might be described as possessing "map" knowledge which constitutes an understanding of the journey from beginning to end, and a capacity to navigate obstacles (Gale et al., 2013 after Certeau, 1984). These members of society might even have the power to alter the map itself. Less privileged members of society are limited to "tour" knowledge only, meaning they are privy only to the parts of the map that a guide chooses to share with them and are limited in the way they can plan routes towards an end point. Obstacles might throw these individuals off course, and they may be forced to begin another journey (Gale et al., 2013).

Factors that influence university access

A belief in personal agency and a view that individual effort will lead to desired outcomes is often promoted in society (Croll, 2008), as reflected in dominant policy approaches to widening participation. However, desire is limited by possibility, and there can be great "disparity between aspirations and their realisation" (Bourdieu & Boltanski, 1990, p. 159). Previous longitudinal studies conducted outside of Australia have shown that many young people have aspirations for higher education participation, but those from disadvantaged social backgrounds are less likely to end up at university than their more advantaged peers (Croll, 2008; Tafere, 2014). Perhaps not surprisingly then, what young people dream of becoming and what they understand to be their probable future do not often align. While young people from disadvantaged backgrounds hold similar aspirations as their more advantaged peers (Gore et al., 2017a), a recent report from the Australian Council for Educational Research (ACER) on the aspirations of Australian 15-years-olds found that disadvantaged students are 26% less likely to *expect* to work in a professional occupation when they are 30 years of age (De Bortoli, 2021).

Indeed, research has shown that young people from low SES backgrounds fear the possibility that they will be "found out", that they will not "fit in" or will not be high achieving

enough, if they were to enter higher education (Reay, 2001). When students from low SES backgrounds *do* go to university, they are prone to imposter syndrome and some report feeling that they do not belong (Jury et al., 2017). Students from low SES backgrounds might also be led to believe they will be disadvantaged within the higher education system and that they will be more likely to fail than their more advantaged peers (Reay, 2001). For example, messages about success being based purely on individual effort can be internalised, leading young people to believe if they fail, then it is entirely their own fault (Archer & Yamashita, 2003). The fear of not being accepted at university was shown to be justified in one Australian study (McKay & Devlin, 2016) which found students from low SES backgrounds felt discriminated against by some lecturers and on the receiving end of a deficit discourse regarding less advantaged students. This sentiment is echoed in the Australian media where the message persists that universities are an elite option available to the best students, potentially destabilising the policy goal of broadening access (Snowden & Lewis, 2015).

School achievement levels also contribute to the difference between what is aspired to and what is achieved. Inequities in achievement exist between high and low SES students and Indigenous and non-Indigenous students across all school years, limiting access to university and potential life opportunities (Croll & Attwood, 2013; Gore et al., 2015; Parker et al., 2013). In the British context at least, it has been found that the decision *not* to attend university made by those from low SES backgrounds is not based simply on choice, but that lower achievement contributes to limited opportunities (Chowdry et al., 2012). The relationship between aspirations and academic achievement is complex, with students potentially failing to do their best academically if they feel that university is unnecessary for their chosen career or giving up on aspirations for university if their achievement is low (Naylor et al., 2013). One UK study found that holding both high expectations (which consider the perceived *likelihood* of an outcome and can be related to the socio-economic realities faced by students) and high aspirations (students' more abstract values and beliefs regarding the future), combined with high achievement is the most reliable indicator of future educational choice (Khattab, 2015). However, even when expectations are low, high aspiration combined with achievement can lead students to apply for a university course. Such findings suggest that policy and outreach initiatives must target aspirations *and* relative academic achievement if they are to be most effective (Naylor et al., 2013). Importantly, attempts to improve participation at age 16 or 18 are unlikely to have a significant impact (Chowdry et al., 2012). Rather, efforts should be made to improve inequities for students from low SES backgrounds as early as the latter years of primary school (Chowdry et al., 2012).

For some students, financial constraints influence decision making processes, particularly in times of crisis. Financial limitations might affect students' choice of university, with rural and remote students choosing a regional university over one in a capital city because of lower living costs (Aslin & Russell, 2008). Although payments such as Youth Allowance, Austudy and Abstudy are paid by the government to young people, these payments are much lower than unemployment or pension payments (Baglow & Gair, 2019), leaving recipients at higher risk of food insecurity than those on an age pension or no government payment (Temple, Booth & Pollard, 2019). For many students, these payments need to be supplemented with part-time work, which might encroach on study time (Baglow & Gair, 2019). In some families with more than one child hoping to go to university, one might offer not to go, or might not have the option to go, to take pressure off family finances (Aslin & Russell, 2008).

Of note, while university might be framed as the most desirable post-school choice in policy, for some students it is simply not an appealing or appropriate path. Relying on dominant conceptions of the value of higher education is "potentially offensive" (Sellar et al., 2011, p. 38) and a "weak form of social inclusion" (p. 37) as it devalues alternative post-school trajectories and outcomes. Such a stance suggests that to aspire to an outcome other than university indicates a "lacking" in the "right kinds" of aspirations (Zipin et al., 2015, p. 229). The danger is that students who are aware of the gap between society's expectations and

their own situation "see their inability to project themselves into the future as 'abnormal'" (Baillergeau & Duyvendak, 2019, p. 4), something that further divides social groups.

Factors that influence university completion

While disparities continue to occur in access to university, students from the majority of equity groups who enter university are almost as likely to complete their studies as the general higher education population (Commonwealth, 2009; Naylor & James, 2015). In 2018, Australian students from low SES backgrounds were only around 4 percentage points more likely to prematurely leave university than the general population of Australian students (NCSEHE, 2021). Similarly, the completion rates for women in science, technology, engineering, and mathematics (STEM) fields are comparable to the rates of completion by women in other fields (McMillan et al., 2021).

It should be acknowledged that there are two equity groups that still experience high rates of attrition once enrolled in higher education. First, while Indigenous Australians are now enrolling at substantially higher rates than they were before the demand-driven funding system was introduced (Pitman et al., 2017), they do not always complete their studies. In 2018, attrition for Indigenous students was 27.12% compared to 15.47% for the general student population (NCSEHE, 2021). While more Indigenous students are getting 'through the door' than they did in the past, higher education institutions have not yet adequately addressed the "necessary support and cultural change to ensure student success and completions" (Pitman et al., 2017, p. 238). This situation suggests that Indigenous students are a group for whom support from universities during enrolment must be strengthened (Stahl et al., 2020). There is some evidence that enabling programs have a positive influence on resilience and confidence for Indigenous Australians, but less certainty around the efficacy of the scaffolding of academic skills that might lead to retention and success (Pitman et al., 2017). In this light, universities must consider how they improve their recognition and understanding of the aspirations of Indigenous students, so that they might serve them in more culturally appropriate and valuable ways (Gore et al., 2017b).

Second, students from remote locations have retention rates which are slightly lower than the general university student population (Wilson, Lyons & Quinn, 2013). In 2018, remote students were 7 percentage points more likely than others to leave university before completing their program (NCSEHE, 2021). One explanation for this disparity is the tension felt by young people from remote areas to "transform" themselves into educated and readily mobile members of capitalist society, staying local and helping to rebuild their struggling home communities (Corbett & Forsey, 2017, p. 430). A recent study examined this tension (Boyd, 2021), finding that the emotional needs of young people who preferred the peace, space and security of rural areas sometimes overpowered the pressure they felt to move to "the big smoke" and attend university in order to find a "better life" (np.). The learning of students in remote areas is also affected by inadequate infrastructure, and, as they are often isolated, a lack of interaction with other learners and sometimes with their teachers (Gibson et al., 2021; Kilpatrick & Bound, 2003).

Recent events and the exacerbation of inequality

Even before the COVID-19 pandemic emerged in early 2020, Australians had been exposed to a series of events such as drought, floods and bushfires, with often severe impacts on day-to-day life and, inevitably, on education. Disasters can have "devastating social, psychological and economic consequences for students" and can affect learning (Trip et al., 2018, p. 320). Events such as Hurricane Katrina in the United States have provided evidence that students who experience disaster require their higher education institution to respond in a systemic way, taking into account varying types and degrees of loss: jobs, homes, family members, other support systems, and in some cases, local communities (Phillips & Herlihy, 2009).

Globally, COVID-19 has brought “a pervasive sense of being unsettled and losing control” (Settersten et al., 2020, p. 3), making planning for the future extremely difficult (Settersten et al., 2020, p. 3). The impact of the pandemic is likely to be felt most acutely by those who are already vulnerable, such as those from low SES and other equity group backgrounds, and it is likely that losses in education investments will have more impact on lower-income families (Blundell et al., 2020). As university students have transitioned to online learning, those from equity groups face greater challenges due to the digital divide, making them less likely to return to their study when campuses reopen (Bassett & Arnhold, 2020). Moreover, due to COVID-19 restrictions, students from less affluent backgrounds have often been unable to undertake the paid work they need to support themselves, exacerbating financial inequity (Archer, 2020).

In Australia, the pandemic has “both widened and exacerbated student equity issues” in higher education, augmenting traditional barriers faced by students from equity groups (O’Shea, Koshy & Drane, 2021, p.1). A study of student wellbeing during the pandemic, for example, found that being female and having lower subjective social status (as estimated by participants), were both associated with low wellbeing (Dodd, Dadaczynski, Okan, McCaffery & Pickles, 2020). In terms of aspirations, this has meant that many outreach programs designed to increase awareness of, and interest in, higher education for students in equity target groups were put on hold, with students most in need of exposure to university life via initiatives such as on-campus visits most likely to be adversely affected (O’Shea, Koshy & Drane, 2020). In addition, high school students from disadvantaged social backgrounds have also been more adversely affected by the move to online learning compared to their more advantaged peers (Sonnemann & Goss, 2020), leaving them less likely to have the academic results required for study at university.

Finally, the serious economic consequences of the pandemic are more likely to impact the educational aspirations of those from disadvantaged backgrounds than of their more advantaged peers (Montacute, 2020). This is because those from low SES groups require more certainty about the economic benefit of education, and therefore pay closer attention to labour market conditions (Montacute, 2020). Globally, according to one study, 40% of students are uncertain about their future, and 14% are fearful due to interruptions to their education and training (International Labour Organisation, 2020).

Our study

While much of the existing data concerning student aspirations and outcomes examines student circumstances at a single point in time, our study is in the relatively unique position of being able to track students over a substantial period of time: from compulsory schooling to their post-school trajectories. By enriching our existing dataset with more recent quantitative and qualitative data, we can tell a more detailed and informative story of how aspirations drive long-term outcomes for students from targeted equity groups and those who are FiF[1]. These data have the potential to provide valuable insights into the decision-making processes of students, especially in the light of recent events such as bushfire, flood and the COVID-19 pandemic. Understanding the factors that influence student aspirations over time can highlight more timely, effective and evidence-informed strategies for supporting students to not only choose to pursue higher education but to enrol in the right programs for them and be retained over time.

[1] This study considers five of the six official equity target groups. It does not include students with disability as the NSW Department of Education was unable to provide information on students’ disability status as part of the original Aspirations studies.

Research design

This project, *Aspirations, equity and higher education course choice: The path travelled*[2], was designed to investigate the long-term educational and occupational outcomes of students whose aspirations were recorded at school when they participated in the *Aspirations Longitudinal Study* (2012-2015) or the *Locating Aspirations Study* (2017). Our aim was to focus on participants from the following equity groups: Aboriginal and Torres Strait Islander students, students from low SES backgrounds, students from regional and remote Australia, and NESB, WINTA and FiF students. A four-step approach was utilised:

Step 1: New surveys were conducted. Past *Aspirations* participants were contacted and invited to participate in an online survey.

Step 2: New interview data were collected. A diverse sub-sample of survey participants were invited to participate in an interview.

Step 3: Survey and interview data were analysed to illuminate the different pathways participants had travelled since leaving school.

Step 4: Participant case studies were developed, selected on the basis of the analysis conducted in Step 2, to provide nuanced examples of pathways that students follow after school.

Method and Data

Existing Data

Our existing database on students' aspirations was developed in two prior studies: the *Aspirations Longitudinal Study*[3] (see, for example, Gore, Holmes, Smith, Lyell, et al., 2015; Gore, Holmes, Smith, Southgate, et al., 2015) and the *Locating Aspirations Study*[4].

The *Aspirations Longitudinal Study* involved school students from 64 NSW government schools. These schools were located east of the Great Dividing Range, from the northern side of Sydney to the Queensland border. Four cohorts of students were involved in the study over four years of their schooling (2012–2015), commencing when they were in Years 3, 5, 7, or 9, and concluding when they were in Years 6, 8, 10 or 12.

Student surveys were administered annually using SurveyMonkey. The main focus of the survey was post-school educational and occupational aspirations, as well as questions about students' background and home life. The primary and secondary student surveys differed slightly, with some questions modified to account for age. A total of 6,492 individual students completed the survey in one or more waves of the study, generating 10,543 student surveys overall. Of these students 4,818 had left school prior to 2021, making them eligible for inclusion in the current study.

During the period 2013–15, focus groups were also conducted in a sub-sample of 30 schools to gain a deeper understanding of students' aspirations. Students were purposively sampled in relation to SES, prior academic achievement and the prestige of their stated occupational aspirations, based on the answers they provided during the first year of the

[2] 'from this point forward the *Aspirations, equity and higher education course choice: The path travelled study* will be referred to as the *Path Travelled*.

[3] The full title of the study is *Educational and Career Aspirations in the Middle Years of Schooling: Understanding Complexity for Increased Equity*. The study is an Australian Research Council Linkage project jointly funded by the Australian Research Council and the NSW Department of Education.

[4] The full title of the study is *Locating Aspirations: Evidence to support participation in higher education of low SES students from regional and remote Australia*. The study was funded by the Australian Government Department of Education and Training Higher Education Participation and Partnerships Program within the National Priorities Pool scheme.

study, with 187 focus groups conducted with 553 students. A number of additional studies have also been conducted to specifically extend this interview sample, by interviewing more of the surveyed students (See Appendix 2 for a list of related publications), granting a total of 666 eligible interview participants. Student discussions focused on: their post-school plans; their job interests; who they discussed their future plans with; and their thoughts about university and/or Technical and Further Education (TAFE). In addition, focus groups were conducted with 90 parents/carers and 215 teachers (including career advisers and school principals) to gain their perspectives on students' aspirations.

The *Locating Aspirations Study* extended the Aspirations Longitudinal Study into 33 additional government schools situated in Local Government Areas across regional, remote and very remote areas of NSW during 2017. A total of 1,525 students across Years 3–12 completed the survey. Of these students, 275 had left school prior to 2021.

Focus groups were similarly conducted with students, some of their teachers, and parents/carers to gain a deeper understanding of the formation of post-school educational and occupational aspirations in these locations. In total, 173 focus groups and interviews were conducted in 26 schools with 144 students, 26 of whom have now completed school.

In total, there were 5,093 past survey participants who were eligible to participate in the current study and 692 interview participants.

New Data

The path travelled study involved reaching out to participants from our earlier *Aspirations* studies to investigate the paths these young people had followed.

Participant recruitment began by asking schools involved in the original *Aspirations* research to notify their school communities about our new study and desire to reconnect with participants who had since completed their schooling. Schools were asked to promote the study via social media and school newsletters, with a link to the online survey. We also posted an advertisement containing the survey link on our *Aspirations* Facebook page, which has gained 227 followers since the beginning of the *Aspirations* program of research, in addition to a targeted social media campaign to expand our reach. The advertisement was targeted to NSW residents aged between 18 and 25 across both Facebook and Instagram platforms. A total of 6,847 people engaged with the advertisement by clicking on the survey link or the post. The online survey contained a snowball strategy which asked participants to share the link with peers from their high school. However, these efforts only yielded a single survey response, demonstrating the difficulties of maintaining a 'longitudinal panel' (Neale, 2016, p. 120).

In order to recruit a greater number of participants, we adapted our recruitment strategy to include searching for participants via public social media accounts. We targeted those who had completed an interview as part of the research, managing to track down and directly message 596 of the 692 past interview participants. Participants were messaged twice, with no response after the second message taken as a desire not to participate. We also directly asked all those who were interviewed if they could pass the survey on to school friends who may have been involved. This strategy resulted in a total of 52 completed surveys.

The survey was conducted online, taking between 10 and 15 minutes. It contained questions concerning the post-school study and work activities of participants and factors that have affected their journeys thus far. On completing the survey, participants were invited to take part in an interview designed to understand more deeply the paths these young people followed post-school. Interviews were conducted via zoom, phone or in person and took between 30 and 60 minutes. Interviews contained similar questions to the survey, and focused on participants' educational and career outcomes, and the ways in which COVID-19, drought and bushfires had affected their plans, if at all. A total of 21 interviews were conducted. All interviewees had been interviewed as part of previous Aspirations studies.

Sample characteristics

Participants came from a diverse range of backgrounds (see Table 1). Those who completed the survey primarily attended schools situated in major cities (48.1%) or inner regional (44.2%) locations, with a small proportion attending schools situated in outer regional locations (7.7%). Most participants attended relatively disadvantaged schools, with the majority attending schools in the lowest two ICSEA[5] quartiles, Quartile 1 (23.1%) and Quartile 2 (55.8%). The majority of participants identified as female (62.7%), a small proportion identified as Indigenous (3.8%), and a small proportion indicated a NESB background (8.9%). The majority (76.7%) were the first in their family to attend university, as denoted by parental education.

Similar demographics were evident in the interview sample. The majority of participants attended schools situated in major cities (47.6%) or inner regional (38.1%) locations, with a small proportion attending schools situated in outer regional locations (14.3%). Most students attended relatively disadvantaged schools, with the majority attending schools in ICSEA Quartile 1 (47.6%) or Quartile 2 (38.1%). Similarly, the majority of participants identified as female (71.4%), a small proportion identified as Indigenous (10.0%), and a small proportion indicated a NESB background (15.0%). Many of these participants were also prospective first-in-family students (81.0%).

[5] ICSEA is a standardised scale used for measuring school-level advantage in Australia. It includes parent education and occupation, proportion of Indigenous students and school geographic location. It has a mean of 1000 and standard deviation of 100. ICSEA scores were categorised using cut-offs from the state quartile values in each year

Table 1. Sample demographics

CHARACTERISTIC	SURVEY SAMPLE *N* (%)	INTERVIEW SAMPLE *N* (%)
Overall sample size	52 (100.0)	21 (100.0)
School location[6]		
Major Cities	25 (48.1)	10 (47.6)
Inner Regional	23 (44.2)	8 (38.1)
Outer Regional	4 (7.7)	3 (14.3)
Remote/Very remote	0 (0.0)	0 (0.0)
School ICSEA		
Quartile 1	12 (23.1)	10 (47.6)
Quartile 2	29 (55.8)	8 (38.1)
Quartile 3	2 (3.8)	1 (4.8)
Quartile 4	9 (17.3)	2 (9.5)
Sex		
Male	19 (37.3)	6 (28.6)
Female	32 (62.7)	15 (71.4)
Indigenous status		
Aboriginal or Torres Strait Islander	2 (3.8)	2 (10.0)
Non-Indigenous	43 (95.6)	18 (90.0)
Language background		
Non-English Speaking Background (NESB)	4 (8.9)	3 (15.0)
English	41 (91.1)	17 (85.0)
First-in-family (FiF) status[7]		
Prospective first-in family-student	33 (76.7)	17 (81.0)
Parent/s attended university	10 (23.3)	4 (19.0)

Of note, the sample for this study was broadly representative of the larger Aspirations Longitudinal Study and Locating Aspirations study student sample. The demographic characteristics of the entire student sample for these studies is detailed in Appendix 3 for comparison.

Analysis

The new and existing survey and interview data were combined to form a longitudinal dataset, tracking students' aspirations from as early as primary school through to their eventual educational and career choices post-school. The survey data were analysed in SPSS using descriptive statistics, to gain an overall picture of the post-school education and career paths travelled by participants. Responses related to occupations were obtained through open-ended survey questions and were coded according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO), the national standard for classifying occupations based on all jobs in the Australian workforce.

The final survey question in the *Path Travelled* study asked participants to tell the story of the educational and career pathway they have taken since leaving school. These data were

[6] Determined by school postcode and categorised as major cities, inner regional, outer regional, remote, very remote as reported on the *MySchool* website.

[7] Participants were categorised as prospective FiF students if neither of their parents had attended university.

uploaded to the NVivo™ software program along with the combined interview/focus group data. The open-ended survey data were thematically coded to categorise different pathways taken by participants after school. Interview data were also thematically coded using inductive and deductive logic (Creswell, 2013) to determine key equity issues that impacted participants across their various pathways. Particular attention was given to the impact of COVID-19 and other natural disasters on participants during this analysis.

Drawing from the thematic analysis, participant case studies were selected to provide detailed exemplars of the various pathways taken by participants and to draw out key equity insights for higher education providers. In each case study, participant focus groups from when the students were at school were combined with their follow-up interviews. The analysis involved shaping the information provided by the participant at various time points into a case storyline (Clandinin, 2006). Each participant case study begins with a cover page that provides information about their school context as a means to frame the case study, with data obtained from the broader population of students in attendance at the school who participated in the original *Aspirations* surveys. Key *Aspirations* survey variables used in the cover pages are attached as Appendix 1.

Findings

The realisation of aspirations

When asked to indicate the extent to which their education and career aspirations had changed since leaving school (see Figure 1), the majority of the 52 survey participants indicated that their career aspirations (64.6%) and their educational aspirations (60.5%) had changed either “To a great extent” or “Somewhat”. However, a sizeable number of participants indicated that their Education (29.2%) and Career (20.8%) aspirations had changed “Not at all” or “Very little” (Education: 39.6%; Career: 33.3%).

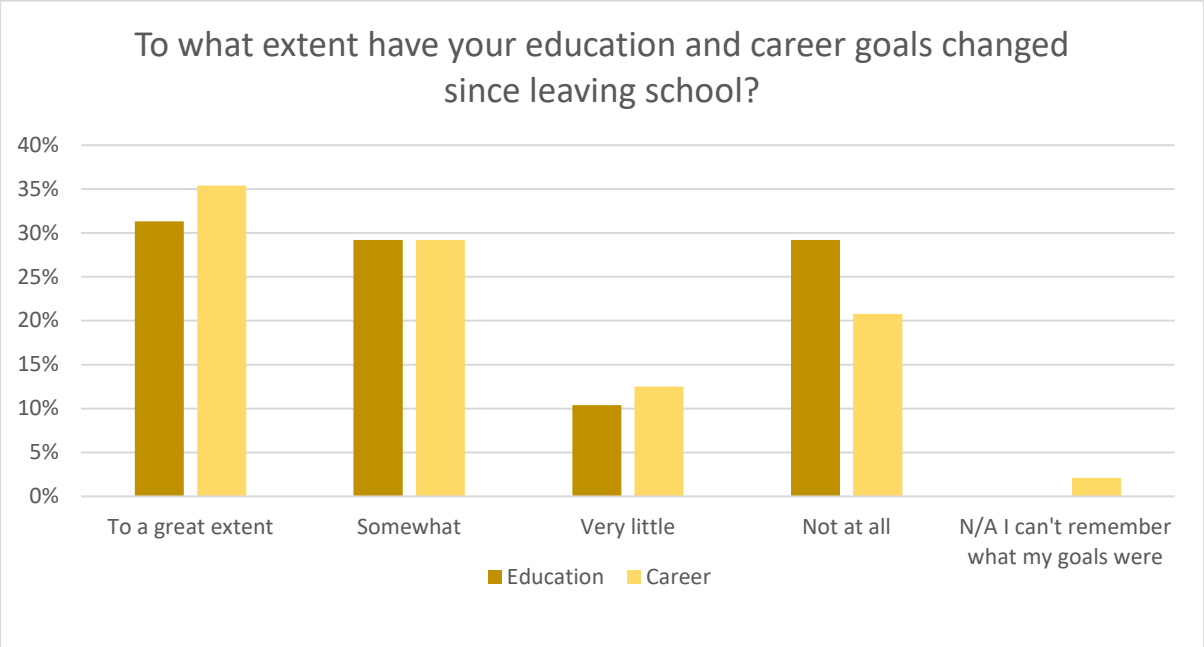


Figure 1. Extent to which aspirations have changed since leaving school

Occupational aspirations over time

A wide range of career aspirations were held by the *Path Travelled* participants while they were at school, with many naming more than one possible career. Around 116 careers were listed by the 52 participants when they were asked to indicate the job they would like to be doing in the future while they were still at school. In comparison, and demonstrating a higher level of certainty for many participants, only 49 different careers were named by the 52 participants in the follow-up survey when they were asked to indicate the type of work they would like to be doing in the future. Thus, participants in the follow-up were more likely to name one job that they were pursuing rather than a list of multiple possibilities, as was more commonly named while they were at school. Three participants in the follow-up survey did not name a specific career - stating “Meaningful work - making people's lives better”, “Unsure” and “Not a 9-5 job and something that changes regularly” – while four participants did not respond to the question, and four named more than one career, illustrating that there was still a degree of uncertainty for some participants.

Figure 2 lists the popular occupational aspirations among participants over time as well as their current occupations. Popular aspirations among this group of participants have changed markedly over time with the exceptions of ‘policing’ (joining the police force) and ‘school teaching’. ‘Teaching’ has remained the most popular aspiration, with eight of the participants currently expressing an aspiration to become a teacher and currently enrolled in a teaching degree.

While not depicted in the figure, there was a trend for participants to remain interested in allied, but often less prestigious, careers – for example, transitioning from veterinarian to veterinary nurse or registered nurse. However, there were some dramatic changes in the sample. One participant who was following his aspiration to become a chef changed his aspiration and course and enrolled in a pilot training program.

The occupations that the participants are currently working in generally represent 'transitional' occupations, particularly for those studying at TAFE or university. They are listed to provide an indication of the pathways being taken by these young people as they make early moves into the workforce. Note that not all participants were undertaking further study. Some participants had already met goals aligned with their aspirations, including two working as speech professionals and audiologists and two working as welfare support officers. Notably, none of the young people who took part in the study named welfare support work as an aspiration while they were at school, signalling the unexpected trajectories which have led to satisfactory careers for some. Perhaps concerningly, six of the participants, representing approximately 12% of the sample, were unemployed and seeking work at the time of the study.

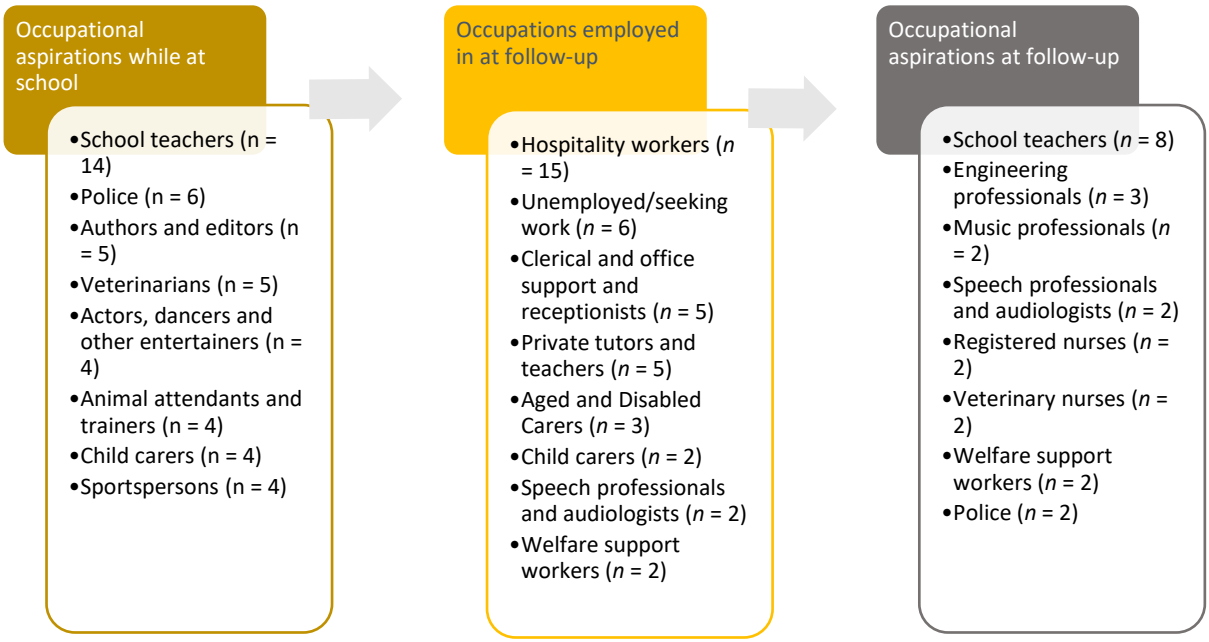


Figure 2. Popular occupational aspirations over time and popular occupational employment at follow-up

Educational aspirations over time

Figure 3 provides a visual depiction of the educational pathways taken by participants since leaving school. The thicker the tube the greater the proportion of participants who have taken that pathway. Participants' aspirations while they were at school can be seen on the left-hand side. The middle point depicts students' educational pathways in the initial years after leaving school and the third point depicts trajectories for those who have made another transition.

While at school, 2.2% indicated "Secondary school", 15.6% indicated "TAFE", and 64.4% indicated "University" as the highest level of education they would like to complete in the future, while 17.8% indicated that they were unsure. As can be seen in the diagram, large proportions of students followed educational pathways that were different from their school aspirations. For example, only 58% of those who wanted to attend university while they were at school did so in the years immediately after school and 6.5% of students had left university prior to completion of their studies. These changes are consistent with most

participants' views, depicted in Figure 3, that their education goals had changed since leaving school. Notably, more than half of the cohort enrolled in university (54.3%) after school, making this the largest cohort, while more students went to TAFE (23.9%) than had initially aspired to this pathway.

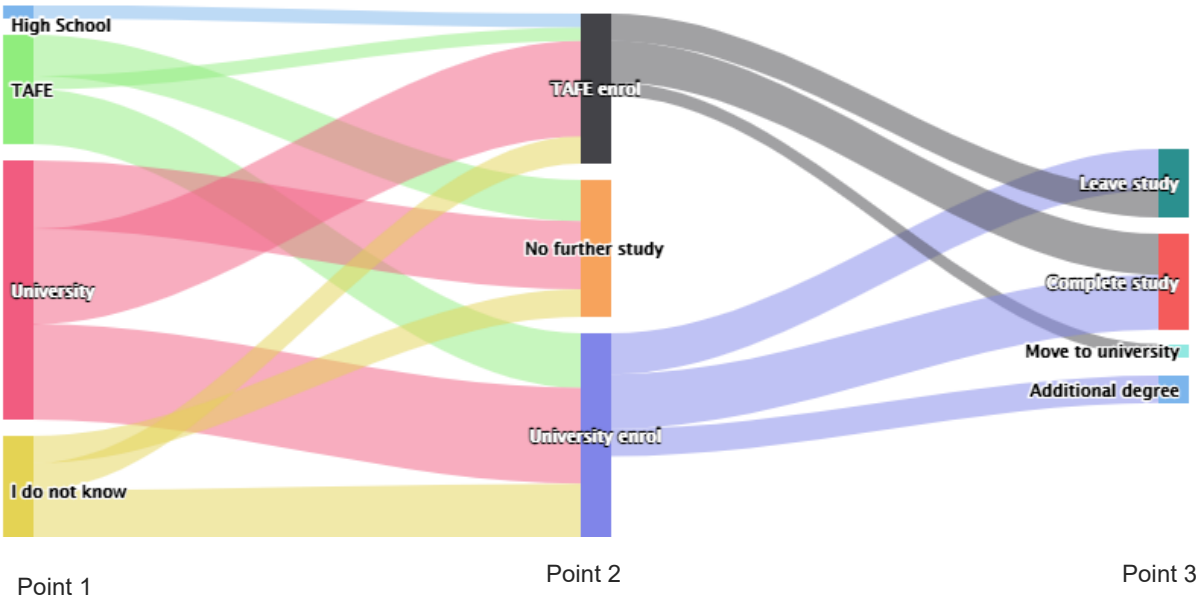


Figure 3. Educational aspirations and pathways

In the 2021 follow-up survey, participants were also asked to indicate their current educational aspirations for their future – or the highest level of education they would now like to complete. 10.4% of participants indicated "Secondary school" (signalling that they do not plan on doing any tertiary study), a notably higher proportion than the 2.2% of these participants when they were at school, 12.5% indicated a "TAFE certificate or diploma", 39.6% indicated a "Bachelor's degree", 16.7% indicated a "Master's degree", 4.2% indicated a "Doctorate" and 16.7% indicated that they were "Unsure". Altogether, 60.5% of participants are still pursing some form of university education as their highest level of education, a comparable figure to the 64.4% who were aspiring to higher education while at school.

Expectations for the future

On follow-up, participants were also asked to indicate whether they expected to achieve their current career and educational aspirations now that they had left school. The responses to this question indicated that most participants were feeling positive about their futures. As illustrated in Figure 4, most either strongly agreed (43.8%) or agreed (43.8%) that they would meet their future career goals. They were similarly positive about meeting their future educational aspirations, with 54% strongly agreeing that they would meet their goals and no participants disagreeing or strongly disagreeing with the statement.

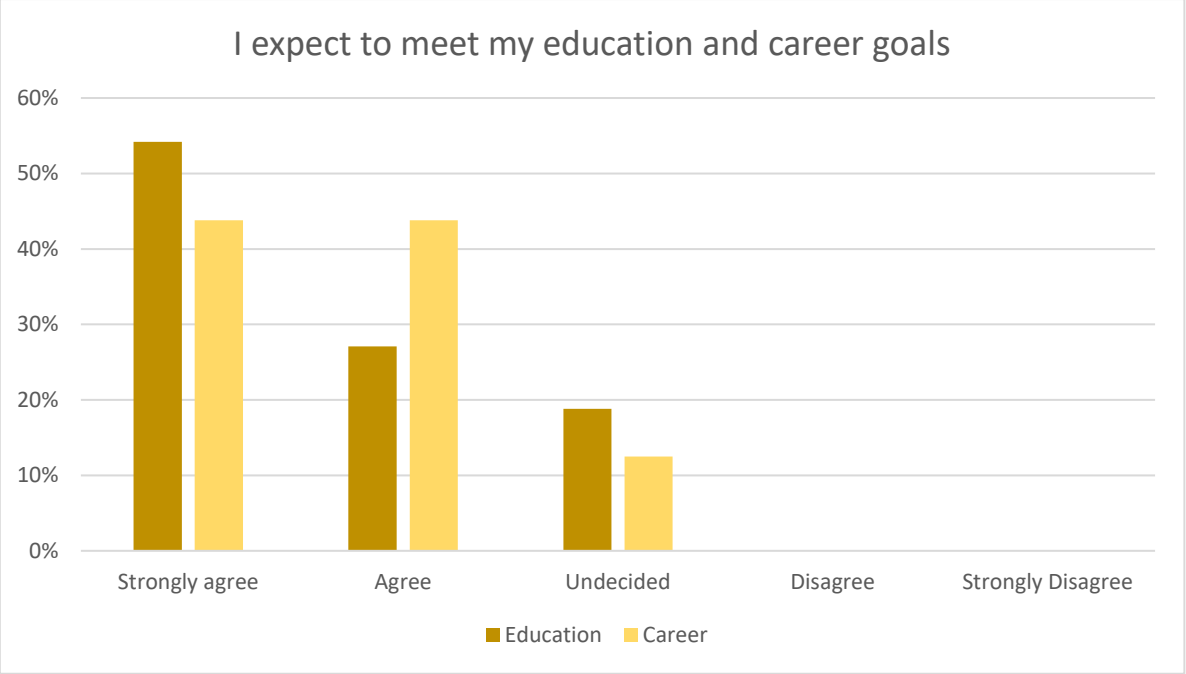


Figure 4. Occupational and educational expectations

Participants were also asked to indicate why they do/do not expect to meet their career and education goals in two additional open-ended questions. Those who felt uncertain about their education goals stated that resources (such as money and time) and mental health were the most likely barriers. For example, “it’s hard going from an ok wage to not much while studying” and “depression” were stated in response to this question. Those who were uncertain about meeting their career goals were primarily concerned about a lack of available jobs in the profession they hoped to pursue, with one participant, for example, responding with “lack of availability”.

Factors that mattered in realising aspirations

Factors that mattered quantitatively

In the 2021 survey, participants were asked to indicate how a range of factors influenced their career and educational pathways post-school. The responses to these questions are depicted in Figures 5 and 6. As can be seen, the factors that negatively influenced the most career pathways were “COVID-19” (16.7% very negatively and 28.6% negatively) and “Pressure from parents, friends or community to pursue a certain career” (8.9% very negatively and 17.8% negatively). In comparison, “Reliable and affordable access to the internet” (23.9% very positive and 41.3% positive) and “Knowledge of different careers” (18.8% very positively and 50.0% positive) had a positive influence on the most participants.

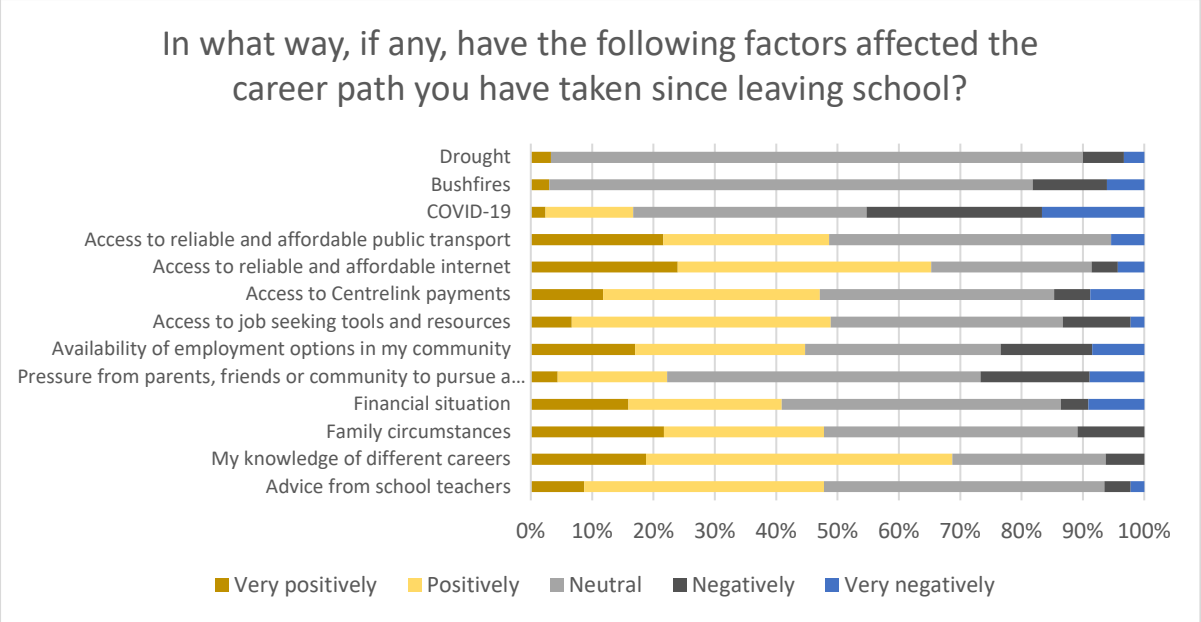


Figure 5. Factors influencing career paths

In relation to post-school education (Figure 6), distance (11.4% very negative and 18.2% negative), finance (4.3% very negative and 17.4% negative) and COVID-19 (13.2% very negative and 17.1% negative) had a negative effect on the most participants. In comparison, access to information and resources about university and TAFE (26.1% very positive and 47.8% positive), and encouragement from others to study (26.1% very positive and 43.8% positive) had a positive influence on the most participants.

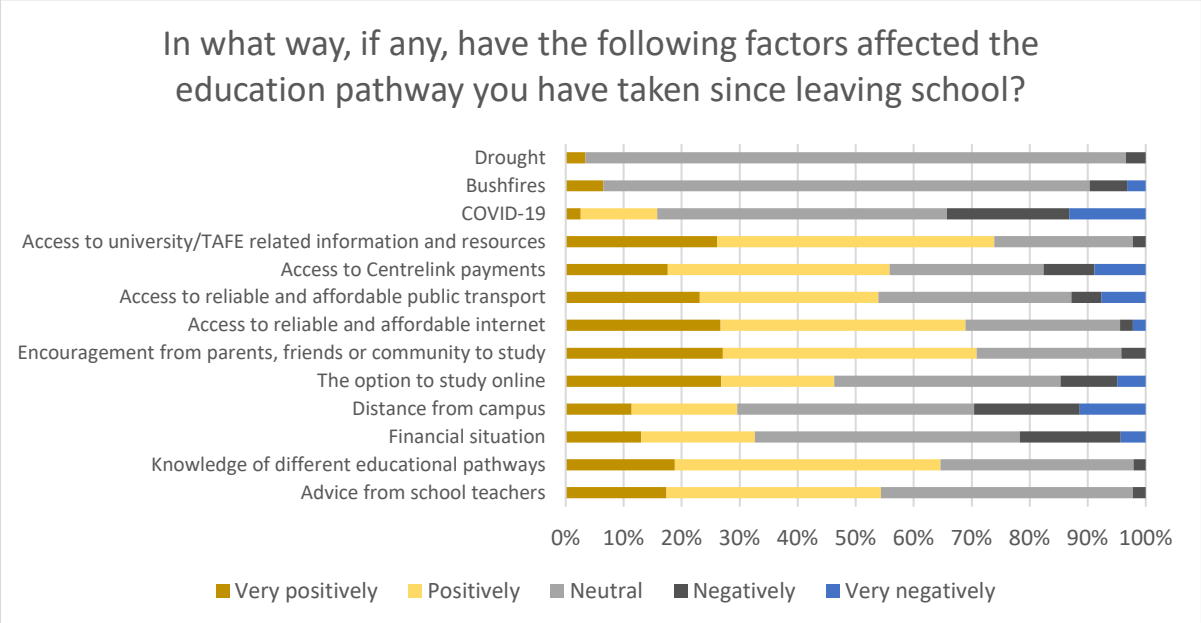


Figure 6. Factors influencing education paths

Notably, while COVID-19 was a factor that negatively impacted many participants, the majority of the 52 survey participants rated the influence of recent droughts and bushfires as neutral in terms of both their education and career pathways. This is likely due to the majority of the sample being located in a major city (48.1%) or an inner regional area (44.1%), rather than rural or remote locations which are more likely to experience the devastating consequences of drought and bushfires.

Factors that mattered qualitatively

To provide a more comprehensive overview of the factors that matter for career and educational pathways post-school, we examined the qualitative data to determine whether there were any factors that impacted pathways across the sample which we did not ask about in the survey. Three major factors emerged from this analysis: pressure to pursue university, mental health, and to a lesser extent, COVID-19. While we explicitly asked students in the survey about COVID-19 and pressure from others, we were surprised at the extent to which mental health arose as a major factor during the interviews. Furthermore, while we anticipated that participants might face pressure to pursue a certain career or to attend university, we did not anticipate the extent to which the pressure to attend university would shape feelings about the value of different post-school choices, or that it might influence mental health. We briefly explore these themes below.

Pressure to attend university

A common theme in the interviews, with both those who went to university and those who chose not to, was that there is immense pressure from schools for Higher School Certificate (HSC)[8] students to pursue university studies. For some participants, this aligned with their aspirations, so it was not concerning. For others, the pressure they felt had a negative impact on their mental health or made them feel that their own choices were not 'good enough'.

Many of the interviewees described a persistent school-held narrative in which university was the ultimate goal and other options were perceived to be inferior. For example, one participant told us that within his cohort:

> *I'd say I felt pressured as a group or, as like, as a generation […] I just think that [university] was just an overarching expectation.*
>
> (Lucky, currently working as a financial planner)

Many felt that in choosing a pathway other than university, they would be looked down upon:

> *It feels like university is a very heavily pushed thing in school, by teachers, whereas they see that if you're not going to uni, you might not become successful or whatever.*
>
> (Angus, chef)

In some cases, young people went to university simply because they felt they had no choice – even when they did not have a specific course they aspired to. Jeremy explained that going to university for the sake of it, or because it is expected of you, is not always the best path:

> *I've just done whatever I've been told. I'm now in uni and I am unsure on what I want to do. I strongly regret not taking a gap year.*
>
> (Jeremy, Computer Science student)

Some of the interviewees were keen to express a view that university is not for everyone and that some careers simply do not require a university qualification. Interviewees such as Angus expressed their frustration at not having their aspirations heard when they were at high school. Angus knew he wanted to become a chef, and told us:

[8] NSW school students who complete all requirements are awarded the High School Certificate (HSC) at the end of Year 12. The HSC is the standard, or traditional, pathway into university

They always pushed me towards university. Regardless of what my feelings were to be honest, I never felt truly supported by my careers adviser.

(Angus, chef)

For some, options other than university were not properly explored by their teachers or careers advisers:

I think they were always like, 'well ultimately it's your decision'. But there was always talk about uni and apply[ing] for uni and what unis to go to and what courses and ….

(Joanna, agricultural worker)

Others emphasised the importance of alternative pathways into university and worried that HSC students were under too much pressure to achieve direct entry to university. The overwhelming message from our participants was that their generation has been given the message that attending university is the only way to be successful. It was only after leaving school that many participants subsequently found there are other post-school options available that should have been explored in high school.

Mental health

Although neither the survey nor the interview asked specific questions about mental health, participants described many such experiences in the interviews and open response questions. Mental health challenges reported by participants ranged from short periods of intense stress or anxiety through to extended periods of depression. Some of our participants began to experience mental ill-health while still at school. Marissa (Education student) shared that during school she was "always very insecure" and had "a lot of self-worth issues". This developed into depression which has stayed with her during her time at university: "sometimes I just want to stay in bed, sometimes I won't go to class." Another participant shared that:

There's a lot to my story but, essentially, I have changed degrees thrice, have had 30 jobs in three years and have currently moved state following a mental crisis. I am doing so much better now and feel like I know myself. My goals feel much more grounded in my reality. My own mental health and boredom [have] been the biggest factors in my changes.

(Suzette, Psychology student)

Other participants developed mental health challenges while enrolled in a university or VET course. These participants sometimes required the help of formal mental health support services. Benjamin explained that being "burnt out from school" and not taking a gap year meant he "lost the plot" during his first year of civil engineering and had to take a break". Another participant, who dropped out of their TAFE studies in childcare, explains that: "I felt pretty lost because I didn't know what was ahead, and I was in a bit of a mental ditch" (Aubrey, babysitter).

For others, a negative experience triggered their mental health challenges. Sara gives one example:

I lost motivation in Semester 2 as I did my first practical placement, which I didn't enjoy very much. It was very confronting. I had a nurse tell me they were killing themselves for the job and I had more cons than pros in the career. I decided to take a leave of absence from uni. I think a lot of factors went into this, such as I had a lot of people close to me pass away. I struggled with uni and work-life balance. I worked causally but I would do 38 hours most weeks. I liked earning money as I am not entitled to anything from Centrelink. My friends all had full

time jobs and had weekends off, where[as] I worked every weekend which was hard. I then decided I would not continue with uni.

(Sara, medical receptionist)

Another participant reported choosing not to enrol in university at all after the death of a close friend. For several participants, mental health was the predominant factor that threw them off course in relation to their aspirations, forcing them to re-evaluate their education and career goals.

COVID-19

Participants reported a mixed impact of COVID-19 on their career and educational pathways. Several of those studying found that required units were unavailable during lockdown/s, causing them to be up to six months behind in their studies. Others lost employment and went "without pay for a little bit" (Aubree, Education student), until JobKeeper payments[9] were available, or had to change living arrangements due to finances. While some were able to cope with the support provided by JobKeeper, we are unsure how they are faring now that it has ended.

Learning online or the loss of income compounded the difficulties faced by those with pre-existing mental ill-health or financial pressures. Sunni (education student) noted that the experience of studying online "can be very lonely" while Zoe found COVID to be:

very distressing because I'd finally found a good place, a place where I felt healthy and good, and I was seeing the local psychologist, like to get a handle on my stuff, just make sure I was doing okay. Then the crisis hit and then all of a sudden, overnight, … I was on the couch with my mum when I found out that the university would be closing down.

(Zoe, Pharmacy student)

However, others, like Frank (Politics and International Relations student), reported that learning online was "beneficial" as it gave them more time for work or leisure.

Many of those not studying faced disruptions to their careers. For example, Angus, who was a chef in London when the pandemic began, was forced to quickly return home. This meant leaving behind a job in a prestigious restaurant: "in terms of aspirations, it has basically set me back by one year" (Angus, chef).

For those who had finished their studies and were trying to find work, the pandemic made the search for work challenging. Oriel found it particularly difficult to find employment:

So then COVID hit and I was kind of at a loss for a job for about six months. So I was just applying for pretty much anything and everything … It was really, really hard to go through. Like I say, sincerely, I would never wish anything like that upon anyone because it was really hard. It was just no income, no nothing at the age of 21 with starting a life with like paying bills and everything. It was just hard.

(Oriel, health administration)

Not being able to find employment led Oriel to undertake additional qualifications (Statement of Attainments in Medical Technology, Word Documents and Spreadsheets), eventually lead to finding employment. Being unemployed also motivated other participants to engage in further study, both to keep busy and also to improve their job prospects.

[9] JobKeeper was a Federal government subsidy for eligible businesses which enabled them to keep paying their staff during COVID-19 pandemic lockdowns in 2020. It finished in March 2021 and was replaced by other schemes.

Notably, while a wide array of COVID-related challenges appeared in the qualitative data, the quantitative data explored earlier indicated that the participants were still generally feeling positive about their futures (Figure 4).

Case studies

At the end of the survey, participants were asked to tell us their story of the path they had travelled, in relation to their education and occupation since leaving school, in an open-ended response. Participants provided us with a wide array of unique stories. These stories ranged from those who directly pursued their aspirations with little disruption:

> *After leaving high school I made the decision to go straight into university rather than taking a gap year. My aspirations over time have not really changed. I've always wanted to do software engineering/programming and I've been committed to achieving that. After graduating university, I went straight into a full-time job as a software engineer which I really enjoy. I aspire to gain more senior positions in software engineering in the future.*
>
> (Kenneth, software engineer).

To others who were still settling on a path:

> *It's been four or so years since I got expelled three months before finishing Year 12 which sent me into a panic to decide on a career choice. This led me into applying for the army which I was very set on doing until a few months in of doing tests and having interviews [when] I pulled out as I had a change of heart. I then went on to find work – I was at cafes, go kart raceways, bars etc, nothing fancy but needed to pay the bills as I moved out of home when I was 17. When I turned 20 (last year) I made the decision to move by myself to Sydney as there [were] more opportunities here. Unfortunately, I moved three days before NSW went into lockdown due to COVID. This had made it extremely hard to find work although I have good connections now everything has opened back up and have set goals for myself. So hopefully I see results leading towards my career goals soon.*
>
> (Rhiannon, currently unemployed due to COVID lockdown and not studying)

These open-ended responses were coded into key themes representing the different pathways undertaken by participants. The key pathway themes are detailed in Tables 2 and 3 below, representing university pathways (Table 2) and non-university pathways (Table 3).

Table 2. University pathways

UNIVERSITY-RELATED PATH	EXAMPLE
Stuck to the beaten path	Participants who pursued aspirations that align with their demographic status, for example, a middle-class male student enrolling in an engineering degree. These students typically faced few challenges.
Chose the path less travelled	Participants who pursued an aspiration that disrupted their demographic background. For example, FIF students enrolling in a university degree, rural students who moved to attend university, or women enrolling in an engineering degree.
A fork in the road	Participants who chose to change degrees, chose to opt out of university study after enrolling or chose not to enrol in university despite aspiring to go at one point during school. These students typically lost interest in their studies, became aware that they did not need a degree to meet their aspirations, were concerned about future career prospects in their original field, or found a new interest.
Thrown off the path	Participants whose pathways were interrupted by external or unexpected factors. These factors include a close death (friend or family member), severe mental ill-health, difficulty with university culture, and unexpected course failure. These participants often had to begin a new path against their wishes. Many of these participants could also be considered to have been taking 'the path less travelled'.

Table 3. Non-university pathways

OTHER PATH	EXAMPLE
Stuck to the path	Participants who were travelling a path towards fulfilling their non-university aspiration. This included a chef who had worked in top-rated restaurants and internationally prior to COVID and who now works in top restaurants in Australia.
A fork in the road	Participants who were on a pathway pursuing their non-university aspirations but chose to change direction. These participants often found a new interest, chose to pursue an unexpected opportunity, or lost interest in their original aspiration.
Thrown off the path	Participants whose pathways were interrupted by external or unexpected factors. This includes a close death (friend or family member), severe mental ill-health, financial barriers, and unexpected course failure. These participants often had to begin a new path against their wishes. Many of these participants could also be considered to have been taking the path less travelled being, for example, first in their family to enrol in any form of tertiary education.
Still seeking a path	Participants who remain unsure about their future. These participants have typically moved in and out of jobs or in and out of further education without being seriously committed to a particular endeavour and having faced periods of considerable insecurity.

To provide a more detailed account of who realises their aspirations, for what higher education courses and why, we selected seven participant case studies from the interview data to represent the broader categories outlined above. Given the project's particular focus on higher education, we focus on the four university pathways described in Table 2. The following participant case studies were chosen, and are presented in detail in the major section that follows:

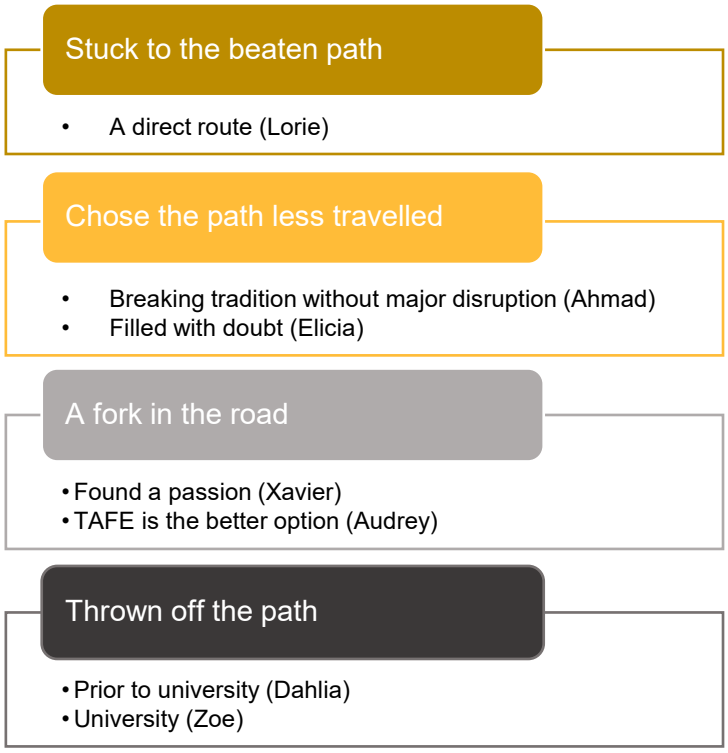


Figure 7. Pathways and related case studies

The case studies were purposefully selected to illustrate the heterogeneity within and between the pathways. For example, we chose only one participant to represent those who 'stuck to the beaten path' (Lorie) given that this group was rather homogeneous – they had navigated to their chosen destination with relative privilege and ease. Conversely, students from equity groups faced greater challenges in navigating towards their aspirations. These challenges were varied, hence other categories contain two case studies to reflect the greater diversity within them. Each case study begins with an overview of the original aspirations research from that individual's school and peer group to provide context for their own journey. The infographics include demographic data and information about the education and career aspirations of the student's peer group. As the case studies show, many of our participants were not typical of their school population and chose pathways 'less travelled' in their communities, as might be expected from students who are from equity target groups.

Lorie: Stuck to the beaten path, a direct route

Lorie attended an advantaged inner-Sydney school and is not a member of any of the targeted equity groups. Lorie's advantaged social position typifies those for whom attendance at university, and particularly Go8 universities and 'high' status degrees, is a 'beaten path'.

Lorie's school profile (Large sized secondary school, 437 surveys from 223 students10)

Major City
ASGS Locality

1150
School ICSEA

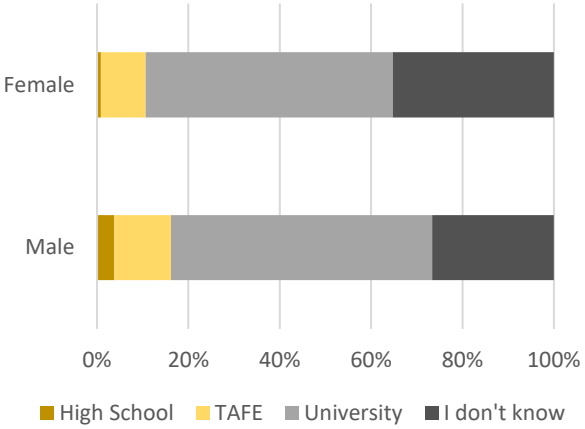
23.6%
Percent of surveyed students who have a language background other than English

0.5%
Percent of surveyed students who identify as Indigenous

32.2%
Percent of surveyed students who are prospective FIF students

4.2%
Percent of surveyed students from SES quartile 1 (lowest)

Educational Aspirations among surveyed students

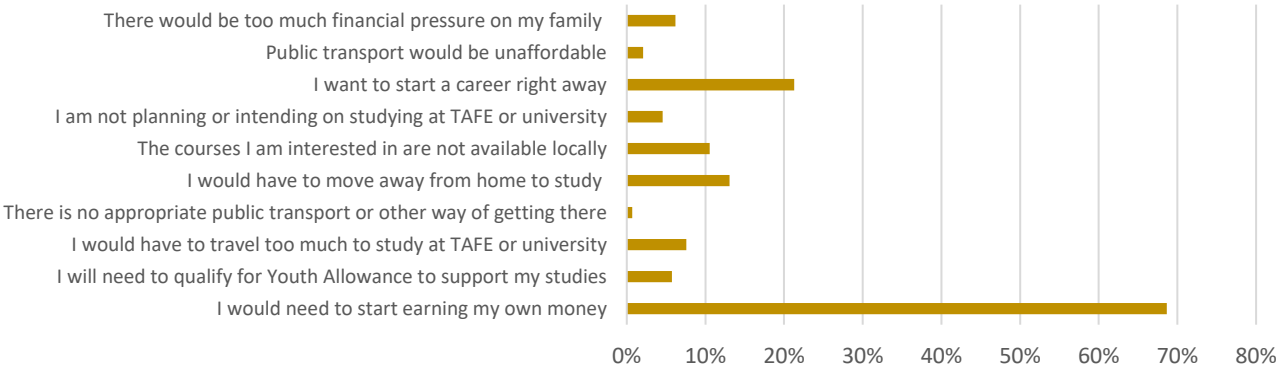


Top 5 Occupational Aspirations among surveyed students

Males
Sportspersons
Multimedia Specialists and Web Developers
Other Engineering Professionals
Chefs
Actors, Dancers and Other Entertainers

Females
Fashion, Industrial and Jewellery Designers
Actors, Dancers and Other Entertainers
Authors, and Book and Script Editors
Psychologists
Life Scientists

Perceived challenges to university or TAFE study



[10] Surveys were conducted at multiple timepoints during 2012-2015 for the *Aspirations Longitudinal Study*.

Sights firmly set on university

Lorie was first interviewed in 2014 as a Year 11 student enrolled at a large secondary school in Sydney. The school is known for its focus on the creative arts, offering partially selective enrolment through an audition, portfolio, or exam. While Lorie did not mention if she was a local or selective enrolment, she spent most of her interview speaking about her passion for design, an interest that incorporated textiles, fashion design, and technology. With her mind firmly set on a career path in design – "I'm definitely going to do something in design" – she articulated a clear vision for her future, naming a particular degree and institution to study design after school:

> *I want to do Integrated Product Design at UTS… [it's] solving problems. Like you're making products to make tasks easier so you enhance the quality of life. And I want to travel overseas and design different products for different companies. And you just make things easier for everybody… I think at UTS you can do a thing where I think you have to choose a faculty, but you don't have to choose a major until your second year, so you can choose a broad range of [units].*

Already knowledgeable about different facets of her chosen degree, Lorie stated that she had "always" been focused on university. Indeed, while she identified that design could be studied at TAFE, she perceived a clear hierarchy between vocational education and higher education in society that shaped her desired educational pathway:

> *I've thought about Enmore [Design Centre] which has good design things. But like Guy [fellow student] said, university qualifies better than TAFE. So, if [you're going for] a job – I don't know – if you go to university and someone else has TAFE, they might choose university over TAFE.*

With her sights firmly set on university, this pathway is not only a long-held goal, but one that is axiomatic; the best and only avenue through which to pursue her interest in design.

The key decision: Which university and which degree?

When we next spoke to Lorie seven years later, she had, in fact, followed this exact route. Immediately after finishing Year 12, she enrolled in a double degree, Bachelor of Design in Product Design/Bachelor of Creative Intelligence and Innovation, at the University of Technology Sydney (UTS). Reflecting on the decision-making leading to this choice, it is clear that her main decision was *which* university to attend, with two possible institutions in mind. Here, Lorie talks about what ultimately led her to apply to UTS, impressed by what was on offer at an Open Day and feeling like the double degree was the right fit for her talents and dispositions:

> *I started going to uni open days from Year 10 'cos I'm a keen beaver. UTS was always a standout for me, even though I think at one point in Year 11 I was looking at UNSW because I wanted to do a double degree, something around design and business because I think they sit really well together. But, even when I was kind of looking at UNSW, I was more focused on UTS [which] was still like completely blowing me out of the park and very impressive. And really that Creative Intelligence and Innovation degree kind of took it over the line when I remember, you know, they were explaining what it was at one of the Open Days and it was like, 'if you're curious and are really good at problem solving and like to make things and come up with good ideas'… and they just listed about 15 things. And my Mum just turns to me and she's like, 'you're all of those!'*

Lorie's decision to enrol in UTS was also bolstered by the views of one of her teachers. During the crucial post-school decision-making period, these views weighed on her mind as she thought about the perceived 'feel' of each institution:

> *When I was looking at UNSW versus UTS, my Design & Technology teacher was like, 'look I went to UNSW. Yes, it's industrial design solid, but UTS is the next thing. They're bold, they're young, the technology that they're [using is] in that new world age of unis rather than that kind of old school vibe'. That definitely stuck with me when I was kind of on the fence about those.*

Clearly, Lorie took on board a great deal of information as she made the decision about which institution to enrol in and which degree to pursue.

The right kind of familial resources

Lorie was also well-supported in her chosen university pathway by her parents who had both been to university themselves. In fact, Lorie commented that many of her extended family had a university qualification, with higher education ingrained within her family biography to such an extent she never felt the need to seek out advice about university:

> *My mum was the first to go to university in her family and so was my dad. They raved about it. Obviously, that was a long time ago. But a good half my family have gone [to university]. I don't think I sought out that advice in terms of whether it was for me or not, because I think I always knew that would be my place.*

Lorie subsequently felt like she had all the resources to help her get to where she wanted. Not only did her parents encourage her academically, but they possessed all the right kind of cultural 'know how' to interpret information and make appropriate judgements to suit Lorie's desired goals:

> *[My parents] have always been 'you can do whatever you want'. And they've always encouraged us to do well in school and with what we're doing. And I was someone who loved school. And we always had big family discussions about this stuff. They were willing to help guide us in the right way that we wanted. Like my dad has a market research background so he knew how to ask the right questions. But a lot of my peers had no idea. And career advisers and things like that, they're just not helpful at all… A career adviser doesn't necessarily know you, so they're not necessarily suggesting the right options, whereas someone like my dad is really good at interrogating information.*

Indeed, Lorie's father was able to help her choose which degree to ultimately pursue, able to understand and translate university jargon:

> *I was choosing between integrated product design and visual communication. Visual communication is more graphic design, but I really like both so that was a bit difficult. But my dad ended up looking at the two subject descriptions and then identifying it into like a sentence. And that made it really clear that the product design is a lot broader and focused on making [products] which I like.*

While Lorie's parents were highly supportive and encouraging, what stands out here is the additional direction they provided, both implicit and explicit, which guided her towards higher education. University had long been felt as "her place" and as she got closer to actually applying, her dad was able to provide invaluable assistance by asking the right kinds of questions and decoding information so Lorie was able to go down a path that was right for her.

Set up for the future

When we interviewed Lorie in 2021, she had completed her double degree at UTS within the recommended timeframe and was now working full-time at a large, multi-site business

technology company in Sydney. She had achieved her long-held goal to work in design and was enjoying the challenges of this work:

> *I'm essentially a human-centred designer so I do a lot of implementation and a lot of problem-solving design and research different kinds of consulting projects for government and commercial clients as well. My job is essentially to ensure that the end user who will be actually using the platform, or whatever we're doing, that they're kind of at the forefront of the solution. So we have an agile delivery team – so they'll be like developers, scrum masters, project managers, and business analysts. And everyone has their priority and we work together in a collaborative way to create an effective solution... It's kinda fun, very challenging and full on, but I like it.*

Lorie fortunately secured this job as a direct result of her university degree. She commented that the degree had been very "real world" with many opportunities to connect with industry partners, consequently learning both "soft skills" and relevant disciplinary knowledge. In her fourth year of the degree in particular, she completed a 12-week project with her current employer, who immediately offered her part-time work while completing her studies, which eventually led to her full-time role:

> *We basically did 'creative intelligence' for the whole fourth year, where there's a subject called Industry Innovation Project where you essentially get a brief from a real-world company and collaborate with them on a solution… There was me, a business student and another business student, a comms student and a science student I think… Essentially, we had a really great project with them, very successful. And then they created a human centred design team in Melbourne, and then they created a new human centred design team in Sydney and I got called back being like, 'we have a new team, do you want to come in?' and I just kind of started part time with my current boss and then it moved into full time… They liked me and I already liked the company and what they stood for.*

Work, interrupted

At present, Lorie feels that the only disruption to her career goals has been COVID-19, which interrupted her plans to work overseas. While she is happy in her current job, she had hoped to pursue overseas opportunities and expand her employment options:

> *I definitely want to work and live overseas but that's probably been pushed back a bit because of COVID things… Like the US has a lot of opportunities that I'd love to explore. And with Europe, I'm very aware that if you're under 30 as an Australian resident, you can go to London on a work visa for two years really easily. So that's definitely something I've highly highly considered. And most people who are close to me know that that's definitely forefront of my mind… Sydney is fine for now.*

Lorie's pathway into university – and subsequently after university – has been fairly linear and expected. While her pathway could be considered 'high status' in a broad sense, it was a 'normal' pathway for someone of her social position. She had access to all the right kinds of familial resources, support, information, and opportunities. However, COVID-19 has put a pause on her future career plans, currently confined to work in Australia which is "fine for now".

Ahmad: The path less travelled, breaking tradition without major disruption

Ahmad attended a relatively disadvantaged school and is from a culturally and linguistically diverse (CALD) background (CALD is analogous to NESB). Despite an initial lack of understanding of the university system, he has forged a path at university in architecture with relatively few disruptions. Ahmad's case study demonstrates how hard work and familial resources can help one take the 'path less travelled'.

Ahmad's school profile (Medium sized secondary school, 725 surveys from 369 students)

Major Cities
ASGS Locality

8.2%
Percent of surveyed students who identify as Indigenous

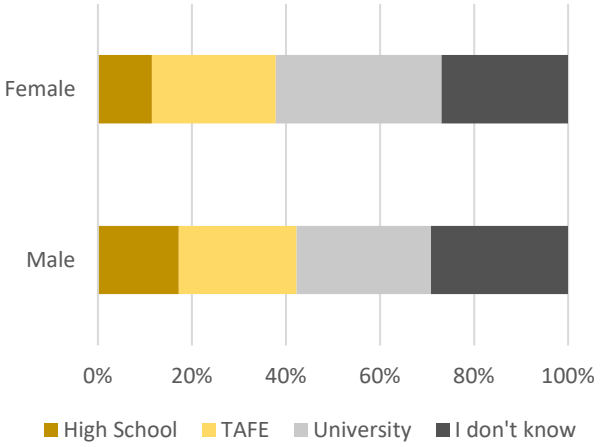
950
School ICSEA

84.7%
Percent of surveyed students who are prospective FIF students

4.8%
Percent of surveyed students who have a language background other than English

27.9%
Percent of surveyed students from SES quartile 1

Educational Aspirations

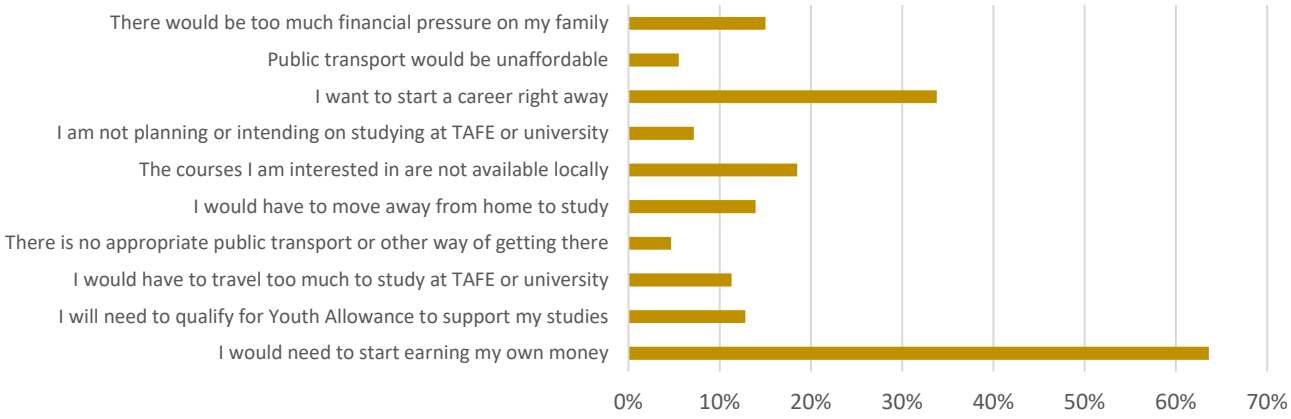


Top 5 Occupational Aspirations

Males
Police
Sportspersons
Defence Force Members - Other Ranks
Motor Mechanics
Multimedia Specialists and Web Developers

Females
Animal Attendants and Trainers
Veterinarians
School Teachers
Actors, Dancers and Other Entertainers
Child Carers

Percieved challenges to university or TAFE study



Motivated from a young age

Ahmad was born in Pakistan and spent his early years in the United States, before moving back to Pakistan at age seven. When he was 12, Ahmad's family moved to Australia where his mother begun working as a nurse and his father a small business owner. Ahmad did well academically at his metropolitan high school and "always thought [he] would study at university", despite only just over a quarter of his male peers having aspirations for university as evident in the school profile.

Ahmad hoped to pursue a professional career from an early age. When we first spoke to him, in Year 9, he wanted to be a surgeon:

> *At the moment like, I don't know, be a surgeon or something because my Dad wanted to be one, but we came from overseas so there weren't that many opportunities. … so yeah, I want to be a surgeon and go around third world countries like Africa and stuff, and help poor kids and stuff.*

He knew, however, that this pathway would mean hard work: "I have to study really – be good in science, biology and chemistry and go to uni". He also spoke of the importance of getting a part time job so that he would have some money to support himself once he was at university.

Forging his own path

By Year 10, Ahmad had moved his focus to architecture, shifting away from his familial inspiration. He commented that there were too many doctors and explained that, instead, he had been investigating the possibility of studying architecture at university.

At home, Ahmad's mother, who had attended university in Pakistan, encouraged him to do his best. He knew no architects or anyone who was studying architecture and thus had no source of advice. Indeed, as he told us, while "engineering is kind of common in the South Asian community," architecture is not, hence he "didn't know a lot about it". He based his career choice on his enjoyment of art and maths. He knew he wanted "a decent sort of career" but was not interested in anything like accounting that was too long and tedious.

At school, Ahmad faced challenges in accessing information about architecture. In our follow-up interview he had little recollection of advice that he might have received from teachers or a career counsellor. In fact, in Year 9 Ahmad observed that:

> *Most of the teachers are really old, [but] there's like heaps of new careers. … In their time IT wasn't really a big thing, like there weren't that many people in IT careers and stuff, … but in our times it's like everything's spread out, so you can do anything you want. There's more opportunities, but [the teachers] don't understand it that well.*

He appeared to have little confidence that his teachers were authoritative sources of information about contemporary careers. Combined with having parents who studied overseas, Ahmad had limited access to the 'map' of university access and success.

With little background knowledge about architecture, Ahmad relied solely on University Admissions Centre (UAC) Guide to plan for his future. Ahmad balanced his subject selections for Years 11 and 12 between subjects the ATAR[11] guide suggested would be necessary, such as maths, and those he enjoyed – "I always enjoy doing art. That was probably one of my favourite hobbies".

[11] The Australian Tertiary Admissions Rank (ATAR) is a competitive ranking assigned to eligible students at the end of their Year 12 studies. It is one of the major measured used by universities in Australia to admit undergraduate students.

University challenges

With hard work, Ahmad was successful in receiving an offer to study Architecture at UTS immediately after Year 12. However, particular challenges emerged for Ahmad during his undergraduate studies. At the beginning of his first year, he lived at home and travelled to and from university by train – the accessibility via public transport was one reason he had chosen his university. Although this saved him money on living expenses, he said it became "a bit of a struggle" because the travel time of over an hour each way "ate into his study time". To alleviate this problem, he moved closer to the university and got a job during his second year which meant that he had some money and life was easier. He began to enjoy his study more and his "heart settled down a bit more when I start[ed] doing better in the course".

At the end of his second year, Ahmad took advantage of an opportunity to study in Europe for eight weeks. Unfortunately, on his return to Australia at the beginning of 2020 he was left with no choice but to relocate back home. Due to the COVID-19 lockdown, there was no work in Sydney and he could not afford to stay there. Like many students, Ahmad had juggled study and work to have some independence from his family and maintain a lifestyle that he enjoyed, but COVID-19 impacted his capacity to do this.

Ahmad was also shocked by some of the details involved in studying architecture. Ahmad did not realise that to practice as an architect he would have to complete a master's degree once he had completed his undergraduate studies. He admitted in his follow-up interview that the length of the degree program had also been a reason for him not pursuing medicine and now he was confronted with a similar timeline in architecture.

Ahmad shared some ideas about how his high school might have served him better in terms of providing support and advice about going to university. He understood the difficulty of meeting the needs of a diverse range of students and acknowledged that not many students actually ended up pursuing university. However, he believes that for popular courses "bringing in a student, or some tutors from the university" to talk about their experiences, would be helpful. He offers:

> *I would have been happy if they asked me in the first year to come down and talk to some of the students. I think they should do stuff like that, I think, more of a first-hand experience than just looking at the book and [seeing that] you need a 96 ATAR.*

Ahmad has experienced first-hand the limitations of relying solely on the university admissions guide and would have been far better prepared for university had he had the opportunity to discuss his course with someone who had direct experience.

Motivated to help others

Ahmad seems at least partially motivated by his life experience. He describes how living in Pakistan and observing poverty every day in the streets between the ages of seven and 12 shaped his worldview. Indeed, he told us that, "I always thought if I could when I get older, I'll try to help people out as much as I can. And that's sort of why I wanted to do medicine in a way."

However, he believed that as a doctor he could only "help one person out at a time". Alternatively, he believed that if he could "design a good building, or a good space [this] would help hundreds of people out". He spoke at length about his interest in designing better social housing than that which is currently built, where spending is focused on quantity rather than quality. Instead, he believes there "has to be an aspect of humanity, to want to make it a good place for [residents]" and a place which is "cherished". He understands that living environments can impact choices and life journeys and sees good housing as providing a space which "enhances you to do better, to study", so that you might become empowered to be independent.

Ahmad has considered his future and where he might find new opportunities. He knows that once he graduates he will need to gain industry experience. He's drawn to the idea of returning to the area where he attended high school because he sees opportunity for growth there in both domestic and commercial development. He expresses a concern about the impact of COVID-19 on potential clients' budgets and also the way overseas factory closures have impacted the volume and cost of materials that are currently being imported to Australia. Ultimately, he would "try to start [his] own firm", hopeful that he can begin to work for himself as soon as possible.

Considering the unknown path that he chose, Ahmad's journey has been relatively smooth. His aspiration to become an architect, which he has held since Year 10, has not diminished and he has already embarked on his Master's in Architecture.

Elicia: The path less travelled, filled with doubt

Elicia attended a high school located in a low SES metropolitan area. Elicia was part of a minority of students at her school whose parents had higher education qualifications. While Elicia's aspiration for engineering is a path less travelled for women and other students at her school more generally, it is a well-travelled path for her family. Elicia's story illustrates the ways that familial resources can be key to the capacity to aspire to a non-traditional field of study at university.

Elicia's school profile (Medium sized secondary school, 573 surveys from 292 students)

Major Cities
ASGS Locality

930
School ICSEA

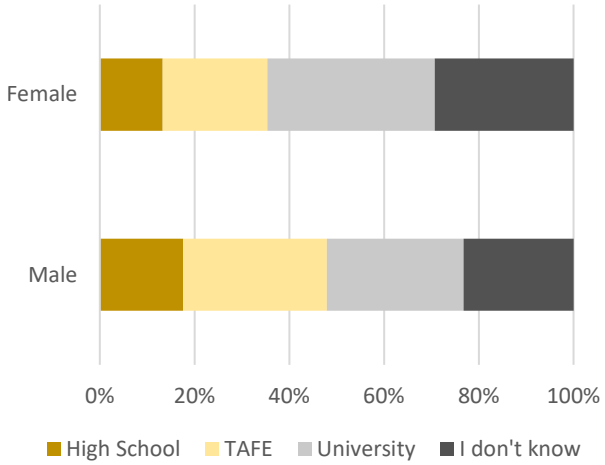
1.0%
Percent of surveyed students who have a language background other than English

6.6%
Percent of surveyed students who identify as Indigenous

93.0%
Percent of surveyed students who are prospective FIF students

32.7%
Percent of surveyed students from SES quartile 1

Educational Aspirations

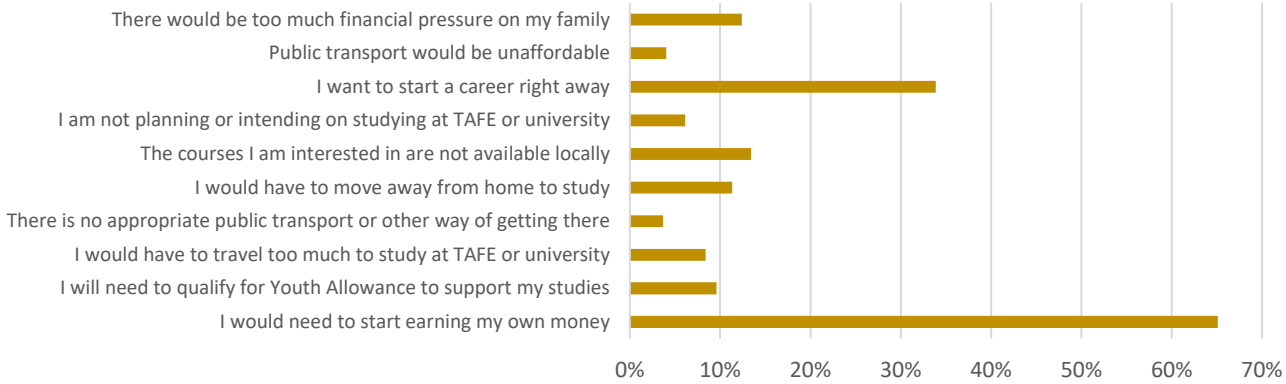


Top 5 Occupational Aspirations

Males
Sportspersons
Motor Mechanics
Multimedia Specialists and Web Developers
Defence Force Members - Other Ranks
Other Engineering Professionals

Females
Veterinarians
School Teachers
Animal Attendants and Trainers
Hairdressers
Photographers

Percieved Challenges to University or TAFE Study



The path to STEM

When we first interviewed Elicia in Year 12 she was uncertain about her career aspirations, feeling overwhelmed by the array of options available. However, she explained that from an early age she wanted to do something related to STEM, primarily because of her "maths brain". Elicia was always encouraged to achieve academically by her parents and believed herself to be "wired for maths," spending more time on mathematics homework than other subjects because she enjoyed it. Her career interests were initially drawn to STEM teaching, a notably 'feminine' occupation within STEM. In her own words: "when I was younger, I wanted to be a teacher, a maths teacher or something."

However, during Year 12, she admitted that she felt pressure to become an engineer:

> *My mum wants me to be an engineer, but I don't really want to be an engineer. But I haven't really thought about it. I know I want to go to university. I was thinking about doing something in chemistry but I'm unsure.*

She reiterated several times in the interview that, despite being unhappy with engineering as a career pathway, she ultimately felt compelled to become an engineer because this is what her father does: "I just feel like I have a lot of pressure on me to fit the boots of my dad". So while engineering is not a path often travelled for women like Elicia, it is a familiar path for her family. Indeed, when asked where she looked for information to get some clarity about her options, she pointed out that career advisers at her school "weren't that helpful". In Elicia's case, her parents exerted the greatest influence on her decision-making.

Elicia reflected on this point in her follow-up interview, focusing on the fact that she had very little insight into what different engineering careers actually entail, even her own father's:

> *Even though he's a chemical engineer, I never really knew what [he] did. I had to actually figure that out myself and now I'm learning stuff and he's like, "Yeah, I do that at work. I do this and this", and I'm like, "Okay, that makes sense". So I'm understanding a lot more now, but when I was 18 I was like, I don't know. Or even before that I was like, I don't even know what you do. Do you blow up things?*

Despite initially vehemently asserting that she did not want to be an engineer, or have anything to do with the coal industry because of the environmental impacts, Elicia indeed followed that path and is currently studying a double degree in engineering and science at the University of Newcastle (UON). When we asked in her follow-up interview why she changed her mind about working in the coal industry, she said:

> *I think a lot of it has to do with…I don't even know, hey? The opportunity came up which was really good …. The people that I've met, most of them are quite nice and very clever and a lot of the processes in there are really interesting. So somehow, I'm there. … I know obviously the negatives of coal and stuff like that, but there are benefits, but a lot of people aren't seeing that as well, like that we get most of our electricity from coal and stuff and a lot of the trading market and stuff like that has to do with our exports of coal and other things.*

Elicia is unable to put into words why exactly she changed her mind. However, she is enjoying her studies and seems to have found that it is in her conversations with female academics where her greatest learning occurs: "They're [the lecturers are] amazing. They're so good and especially Eartha who is one of the Heads in Chemistry, she's amazing. She makes you feel like you're having a conversation and that's how I learn."

A detour

However, Elicia was not always happy in her university studies. She entered straight into her engineering degree after school, likely as a result of her family pressuring her to do so. After her first year she decided to take a break:

> *[I] didn't have too much confidence in it so I was like, 'no I can't do it, shouldn't be here', sort of thing. And then so I had a gap year and I went travelling, so I did that in 2019. I went travelling and it was really good, built my confidence up a bit … I think I needed that year off, a break, [to] kind of figure out what I wanted to do. I still wanted to do something STEM related, so I thought I might just take a step back.*

It is clear that Elicia continued to face uncertainty about engineering well into her degree. However, after her gap year she came back to Australia with renewed energy: "When I was away from it, I missed it. So, I came back … a bit more confident, a bit more experienced, a little bit more mature. So now, I'm where I need to be."

Her experience overseas seems to have shaped her confidence and maturity such that she's now blossoming as a learner and has found her true passion:

> *I really loved chemistry, but I wanted to know a bit more … When I was 18, I was like, don't like that, sort of thing [but] chemical engineering is different and has a lot of obviously chemistry applied sort of content… I really liked that and then now I'm here and I'm doing chemical engineering.*

Women in non-traditional areas of study

In her first interview as a high school student, Elicia didn't show any signs of feeling that the path to STEM was restricted for women. In fact, all her comments are about inclusivity and respect from teachers and male peers in this regard. It is when she reflects on her first year at university that we see a first glimpse as to why she may have decided to take a year off from her studies:

> *I grew up with a lot of boys, but they were very different. They were quite fun and I feel like I grew up around some nerdy boys but they were really nice, and also some very sporty boys that had a lot of banter …. And then, I walked into my first maths lesson and I had to sit with this group of boys and I was just like really nervous, … and they were all like, 'I did four unit math, I did this, I did that. What did you do?' I was like, 'You know, I did three unit math', and they're like, 'You'll struggle with this'. That kind of attitude, and I was like, why do you hate people? I think, why do you need to be like that? Why do you need to put other people down? You don't even know me, why do you have an opinion like that? So that being one of my first experience of maths I was like, 'this is not fun, this is not what school was like.' I had really encouraging teachers and good support. But I was like, 'this is not where I want to be.'*

Having female peers made a big difference when coming back to university, as did having tutors who were passionate about teaching:

> *It was really fun because we had a different cohort and there was a few other girls there. There was a girl that I used to play soccer against, I know a lot of people from soccer, and there's another girl that was very smart and just really lovely.*

Her lecturers and tutors also made a difference in her learning and sense of belonging but she recognises not everyone is on the same page:

> *[Chemistry lecturers are] amazing, a lot of them. Even the lab demonstrators, I feel like the chemistry faculty are just really good and are people-people … I think a lot of the guys that do it are a lot more accepting of women being in science. It's obviously getting better, but there's still some people that are very, I don't know, behind…*

Her general outlook on the profession is positive though and, despite the challenges faced, she stands by her choices and will continue on this path. She concluded her follow-up interview by saying, "I think everything happens for a reason, I'm a big believer in that, so that's why I wouldn't change what I've done."

Xavier: A fork in the road, found a passion at university

Xavier attended a small central (K-12) school in a socio-educationally disadvantaged region in northern NSW. Most of the students at the school are prospective first-in-family students from low SES backgrounds. Xavier's case study highlights the challenges associated with forming and realising aspirations with little knowledge about what careers are available, and the ways in which serendipitous events can lead to new destinations.

Xavier's school profile (Small sized central school, 27 surveys from 24 students)

Outer Regional
ASGS Locality

895
School ICSEA

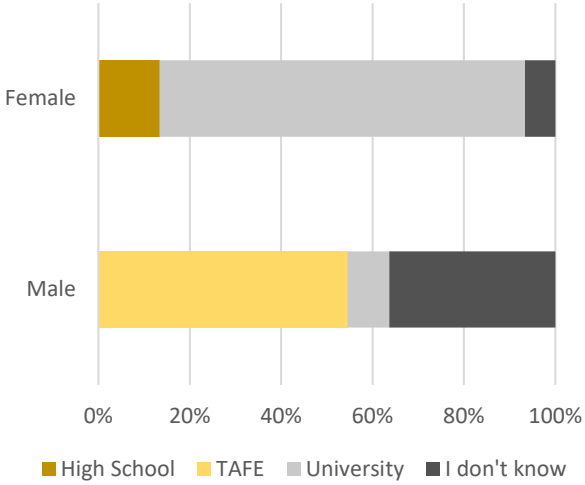
0.0%
Percent of surveyed students who have a language background other than English

8.3%
Percent of surveyed students who identify as Indigenous

91.3%
Percent of surveyed students who are prospective FIF students

61.9%
Percent of surveyed students from SES quartile 1

Educational Aspirations

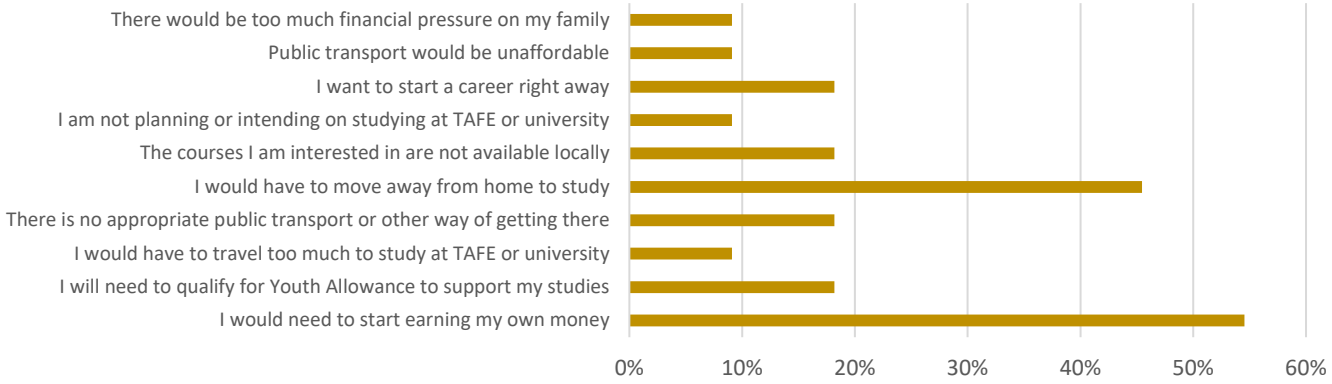


Top 5 Occupational Aspirations among surveyed students

Males
Actors, Dancers and Other Entertainers
School Teachers
Music Professionals
Visual Arts and Crafts Professionals
Motor Mechanics

Females
Actors, Dancers and Other Entertainers
Visual Arts and Crafts Professionals
Artistic Directors, and Media Producers and Presenters
Fashion, Industrial and Jewellery Designers
Animal Attendants and Trainers

Percieved challenges to university or TAFE study for secondary students



Aspiring to *a* 'good job'

We first interviewed Xavier during 2014 and 2015 when he was in Years 11 and 12. He expressed considerable uncertainty about his career aspirations, mentioning the possibility of becoming a teacher, photographer or doing "something to do with business". Xavier's exploration of these different careers was challenged by TAFE campuses being more than 90 minutes from his home and the restricted number of elective subjects available at his school due to the small population.

In his follow-up interview, Xavier discussed how his main concern during Years 11 and 12 was to have "an alright job… that would have been secure and stuff*".* This pragmatic desire reflected the social and economic arrangements of Xavier's community, where many adults, including his parents, faced periods of unemployment and sizeable numbers of students did not regularly attend school. Given the limited economic capital available to Xavier, it is perhaps not surprising that he emphasised finding a good job, as defined by economic security, rather than developing his interests.

Xavier faced considerable challenges in conceptualising how to achieve a secure job. The major source of advice he received was from his parents, who told him to 'do well in school'. As Xavier put it: "you're supposed to do well in school and then it'll open up [doors]*".* This level of access to knowledge surrounding university and different careers provides a stark contrast to Lorie and demonstrates a very different 'capacity to aspire'.

Taking up this advice, Xavier was certain that he wanted to go to university by the time we interviewed him in Year 12, stating that at university he would "just do heaps of work and then get a good job at the end"*.* This goal was in stark contrast from his peers, given that Xavier was one of only a few male students at his school to aspire to university. However, Xavier was still unsure as to what job he was specifically aiming for. Rather than focusing his efforts on selecting a specific career, Xavier used his time in school to "set himself up well" for a range of possible future studies by working hard to achieve good grades.

A 'good job' isn't enough

Focusing on what could be an "alright" and "secure" job, Xavier eventually applied to enter a science teaching degree. Teaching has offered a pathway into the middle-class for many working-class Australians, perhaps due to its visibility as a secure job in these communities. Thus, while Xavier expressed more of an interest in science itself, it is unsurprising that he settled on teaching.

Xavier enrolled at the regionally located university, which he chose for practical reasons: "I think it was just that I could apply for education through early entry here." This choice reflects Xavier's desire to ensure future stability, with early entry removing the risks associated with traditional entry to higher education.

On entering university, however, Xavier began "drinking a lot and using a bit of drugs." He notes that the culture of the college he was staying in promoted this behaviour; a disadvantage of needing to move away from home. As a result, it took him three years to realise that the potential security offered by teaching wasn't enough for him:

> *I went on a placement for teaching and didn't enjoy it. I was like I couldn't deal with teaching teenagers. They're just too much.*

It was not until Xavier was actually in a classroom that he realised teaching was not for him. However, this experience spurred him towards finding his true passion.

A new destination

A few weeks after completing his placement, Xavier reflected on what he “seriously enjoyed doing” and decided to switch to a Bachelor of Science. The practicum served as a major catalyst for Xavier, leading to widespread change when he “moved out of college and then finished my Bachelor of Science.”

Xavier is currently completing his honours year, working as a Research Assistant and hopes to go on to complete a PhD in science. Representing a transformation in Xavier’s aspirations, he shares:

> *If this year goes well, hopefully I'd finish a PhD [within five years]. Yeah. And maybe working as a post-doc at a university somewhere, yeah. And maybe working for a company of some sort or doing a Masters, I'm not sure… I hear bad things about funding cuts too, I don’t know, like ARC and stuff like that which doesn't really make you feel that confident about what you're doing, do you know what I mean?*

This new science pathway has none of the security that Xavier considered to be the defining feature of a ‘good job’ when he was at school, but all of the enjoyment that was not in teaching: “I enjoy being in the lab. I like NMR spectroscopy.” However, he still has doubts about this career: *“*It's only early days, right now.”

Looking back, Xavier admits that he was always interested in science and expresses dismay at being asked why he never mentioned it as a possible career while at school:

> *I'm actually surprised because I think it is like one of the subjects that I did enjoy the most at school. Right, even if I didn’t really admit it at the time, it was something where I was always I guess asking questions and yeah. I don't know, keen to do cool stuff I guess.*

Xavier’s need to focus his resources on how he could achieve a level of stability that is uncommon in his hometown possibly led to him discounting his own interests.

The supports that made it possible

The risks in pursuing a career with limited stability are much greater for those who do not have economic capital to support them if the risk does not ‘pay off’. For Xavier, just leaving his town to pursue university was risky and he has required ample support along the way given the costs involved:

> *I can get Centrelink which is obviously good, but I still need a bit of extra money here and there, which my parents can kind of help out [with]. … At the moment, it's a bit better now because Mum’s working. Compared to back then, like if I need a bit of help with something it's less of a drama, whereas when I first moved, my parents weren't working. It was a bit of a struggle there but I was still able to get a car and stuff eventually, which is good.*

Government income support has been essential for Xavier to be able to afford university. Notably, his decision to embrace his interests coincides with small improvements in his financial situation; owning a car and being able to rely on his parents if he needs a small amount of money every now and again.

Supports provided by the university itself have also been essential for Xavier, particularly during recent national disasters:

> *The bushfires affected me personally as well because of where I was from – where my parents' residence is – it was near the bushfires, yeah. I had exams on*

> *at that time, so it was a pretty stressful thing like I had to, I think I got an extension on a few assessments and things like that because of it.*

The flexibility of the university in relation to assessment submission and its acknowledgment of the traumas faced by students during the last few years ensured Xavier could still pass his units, even if under stressful conditions.

However, universities are currently undergoing cost cutting measures due to the impact of COVID-19 on their budgets and vital services that have enabled Xavier to remain in his studies are at risk:

> *I have ADHD as well. So that was a bit of trouble in school because I wasn't really like formally diagnosed, it was just something. Yeah it's just I really need to start fixing up my routine and that sort of thing…Yes, so I did have a counsellor, but there was like a revamp of the university counselling system here, so she recommended that I find a counsellor in town, because she might not be there in a few months. So I did and the person I have found in town probably isn't really as good, so I think I might call or go back to the service here at the university and ask if my old counsellor is still there and see what happens.*

Like many of those who participated in the study, Xavier has experienced mental health challenges which have required him to seek out the support of licenced professionals. At a time where mental health challenges are increasing, universities like Xavier's are cutting services. Support services for students may need to be a priority for universities if the wish to better provide for, and keep, their students.

Audrey: A fork in the road, when TAFE is a better option

Audrey attended a low socio-economic high school in an inner regional community on the NSW coastal fringe. From a relatively disadvantaged background, Audrey aspired to a university education and to a career working with animals, holding a particular interest in zoology. This case study illustrates how students can gain knowledge through life experiences that lead to beneficial pathways other than university despite initially feeling pressure to go to university.

Audrey's school profile (Medium sized secondary school, 273 surveys from 226 students)

Inner Regional
ASGS Locality

970
School ICSEA

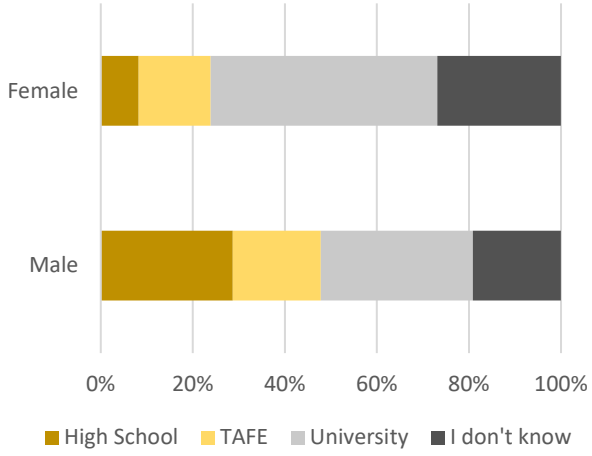
0.9%
Percent of surveyed students who have a language background other than English

5.6%
Percent of surveyed students who identify as Indigenous

83.2%
Percent of surveyed students who are prospective FIF students

24.9%
Percent of surveyed students from SES quartile 1

Educational Aspirations

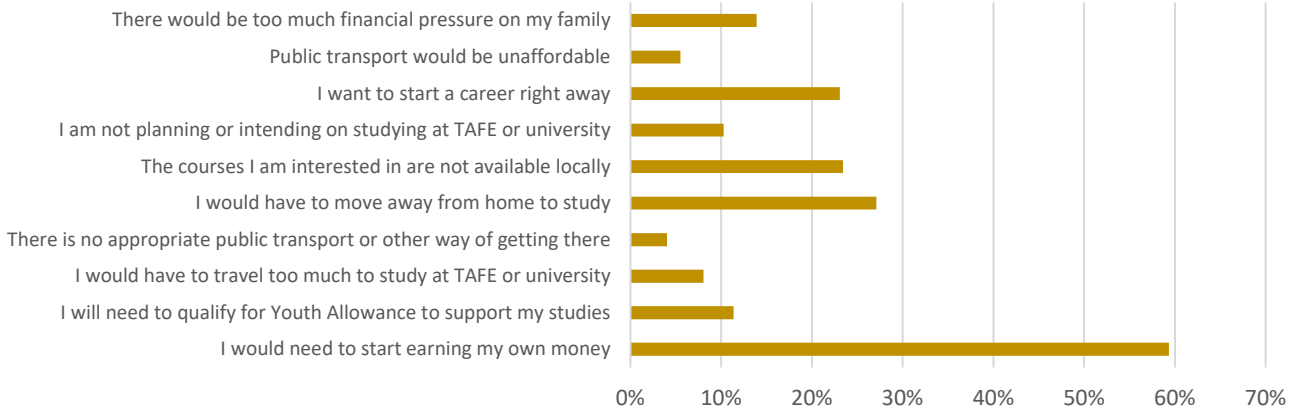


Top 5 Occupational Aspirations

Males
Sportspersons
Defence Force Members - Other Ranks
Actors, Dancers and Other Entertainers
Motor Mechanics
Music Professionals

Females
Veterinarians
Beauty Therapists
School Teachers
Life Scientists
Police

Percieved Challenges to University or TAFE Study



A certain pathway

We first met Audrey in 2014 as an enthusiastic Year 11 student with a passion for animals, "I've always had a real passion for animals… So, I really want to work with elephants. That's like a dream goal. But I'll be happy with anything though". With a clear career goal in mind, Audrey described herself as "stubborn and determined" to follow her chosen pathway. Despite not having the support of her parents, who "don't really understand" and who tell her "you won't get paid a lot", she explains, "as long as I'm doing what I like, I'd rather go to work and love being there but not get paid as great, than sitting in an office getting paid heaps of money but hating my job."

With clear plans and a certain path, Audrey was taking steps towards her goal by completing a VET in Schools[12] course:

> *I'm doing TAFE as well as Year 11 and I'm doing animal studies. So, with that we'll get to do work experience at the zoo and stuff… It goes all the way to Year 12 and we get a Certificate II and III in Animal Studies. So, from that you can do, like Captive Animals with TAFE or do it the other way and do, like, vet nursing.*

Like Lorie who had her sights set firmly on a career, Audrey had a clear vision of her future and was knowledgeable about the pathway into her chosen career. She had taken the time to understand alternative options and had elected to pursue a degree at university:

> *But I want to go to uni and do, zoology or, depending on my ATAR, possibly veterinary science… I've decided I want to - I've got, like, the courses I want to do at uni and I've been doing TAFE… and there was a few things that interested me in the TAFE thing as well. I could do courses through that which would help.*

Audrey weighed up her options and concluded that university was the option most likely to ensure success, given its higher status than TAFE:

> *Personally, I've just always pictured uni, like, I don't know, being more successful. If you do uni then you'll be more successful afterwards compared to if you just did TAFE or apprenticeship or something. It depends on what you want to do really… Technically for the zoo-keeping I don't need to go to university, I can do the TAFE course with captive animals and that. But if I want to get a higher ranking in the zoo-keeping kind of thing then it's better to go to university because then I can do zoology and stuff.*

For Audrey, university was a way to ensure success in her chosen career. While seen as the best avenue to pursue her interests in animals, however, it was not the only pathway available.

A better alternative

We next spoke to Audrey in mid-2021, seven years after our first interview. We found that Audrey had indeed followed her passion and has a career working with animals. However, she hasn't followed her predicted path into university. During Year 11, Audrey was able to complete a school work experience placement at Greenie Zoo:

> *In Year 11…I did do placement work experience at Greenie Zoo. So it was there that I talked to the keepers and found out what they had done to get into that field. So that's where I learnt the Captive Animal course was really all you needed. At the time when I did the interview, I thought it was zoology that I'd have to do but it turned out, after speaking to those keepers at that work experience, that zoology is more of a research-based career whereas it was*

[12] Vocational Education and Training (VET) in Schools allows students in Years 9-12 to study a VET course which is then dual accredited. This means the student receives recognition toward their school qualification as well as their VET qualification.

actually animal science that I would have had to go into if I wanted to work in a zoo. But it wasn't really a necessary thing for what I wanted to do.

It was at this placement that Audrey was able to draw on the knowledge of others to understand that she didn't have to go to university to achieve her career goals. Like many other students in our study, Audrey had felt pressured to study at university. However, it wasn't until we spoke to her again in 2021 that she was able to speak more clearly about this expectation:

I think at school there's just a lot of pressure on you that you have to go to uni. They put a lot of pressure like, 'You won't do anything unless you go to uni.' So that's why I was like, 'I've got to do this animal science course if I want to make it.' But yeah, I finished school in 2015 and still haven't done a uni course. It certainly is great for people that need that to go and do what they want to do but yeah, it definitely isn't – if you don't go to uni, it's not the end of the world.

With her plans to go to university abandoned, Audrey commenced working at a boarding kennel immediately following her graduation from high school and eventually completed the Captive Animals TAFE course that she had first spoken of her in 2014 interview:

I started a TAFE course on captive animals, a TAFE course in a Certificate III in Captive Animals. During that time, I did a placement at Riverview Zoo. That was an 18-month course. So yeah, I did the 18 months there but then I guess after I finished, I realised it wasn't exactly everything I thought it would be. There was a lot less animal handling and a lot more just park maintenance.

Even with prior access to the right kind of knowledge about careers and education, Audrey's expectations for her career did not meet with reality. Recognising that her preference was to take a 'hands on' approach with animals, Audrey adjusted her career plans:

I had a friend that was doing vet nursing the next year and I had become interested in that sort of field of work. So, then I decided the year after to do a vet nurse course. That would have been – I graduated in 2015, did the Captive Animals in 2016, finished in 2017 and in 2018 I did a 12-month vet nursing course which was a TAFE one which was the Cert IV in Vet Nursing…Then through that, I had to do placement as well. So I did that at Woodvale Vets one day a week. Then at the end of that, the following year about three months after I graduated, I got offered a job there as well and I've been working there since.

For Audrey, completing a TAFE course that was suitable for her career plans reaffirmed her desire for a practical role working with animals.

Future opportunities

While Audrey "quite enjoys" vet nursing, she still has the same passion for exotic animals she held as a high school student and has continued her education in this area:

I definitely like [vet nursing] more than the zookeeping at the moment. I think maybe one day down the track, I might be interested in doing vet nursing in a zoo hospital, like Taronga or Australia Zoo. I am still interested in the exotic animals. I have done recently another course actually which was [through] Taronga and it was nursing of wildlife, nursing of native animals. That was a six-month course that I did.

After successfully completing her course at Taronga Zoo and her two previous TAFE courses (Captive Animals and Vet Nursing), Audrey has also considered the option of studying at university:

Maybe if I had decided earlier on, like out of school that a vet career was what I wanted to do, maybe then I would have pursued it. But I guess after working in

the clinics and seeing the amount of pressure that's put on the vet, I'm kind of happy being a nurse. Maybe the only other thing I would consider if I were to go to uni would be to do a veterinary technician, which is sort of a step up from a nurse but not quite a vet… But overall, I sort of end up doing the same job as them anyway. I don't think I'd become a vet but maybe I'd do a vet tech degree… The vet tech has a bit more in-depth knowledge of things and they can perform dental extractions and surgery stitch-ups. But overall, where I currently work, I tend to do a lot of those things anyway. I think you'd get a bit of a pay increase but then you've also got to pay off uni so…

Audrey continues to weigh up her options with regard to a university education and, as she has done in the past, ultimately finds that the university pathway does not add significantly more value to her career.

While Audrey's pathway was not what she envisaged when we first spoke to her in 2014, she has been able to draw on knowledge gained through life experience that has led her on pathways beyond university, reflecting her 'determination to build a successful career working with animals.

Dahlia: Thrown off the path, prior to university

Dahlia went to a moderately disadvantaged school in a regional town in northern NSW. As a middle-class Indigenous Australian, Dahlia is part of a relatively 'hidden' population not usually represented in media and popular commentary (Patfield et al., 2019). This follow-up case study illustrates how obstacles can throw individuals like Dahlia off course prior to entering university and force them to begin another journey.

Dahlia's school profile (Medium sized secondary school, 540 surveys from 399 students)

Inner regional
ASGS Locality

7.6%
Percent of surveyed students who identify as Indigenous

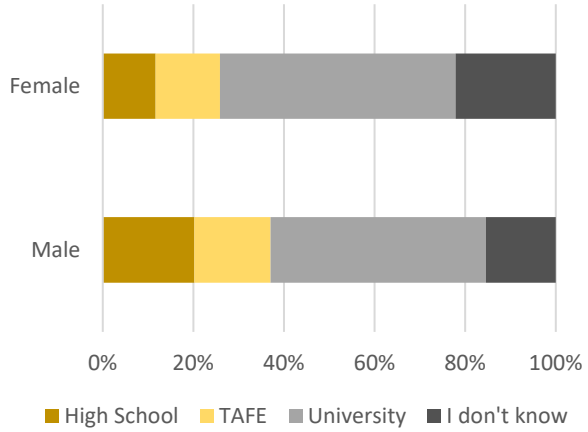
940
School ICSEA

79.6%
Percent of surveyed students who are prospective FIF students

1.3%
Percent of surveyed students who have a language background other than English

23.3%
Percent of surveyed students from SES quartile 1

Educational Aspirations among surveyed students

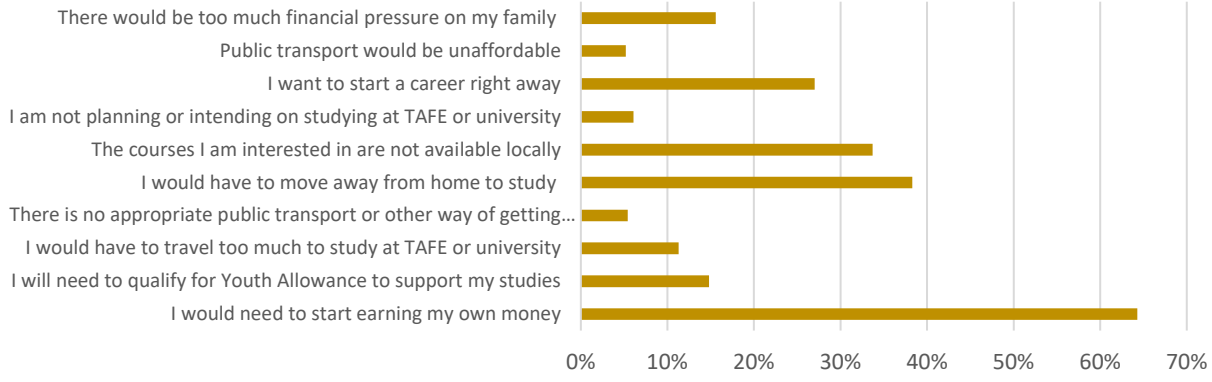


Top 5 Occupational Aspirations among surveyed students

Males
Sportspersons
Defence Force Members - Other Ranks
Other Engineering Professionals
Police
School Teachers

Females
School Teachers
Actors, Dancers and Other Entertainers
Veterinarians
Animal Attendants and Trainers
Photographers

Percieved challenges to university or TAFE study



A passion for culture and social justice

We first met Dahlia, a young Indigenous woman, when she was enrolled in Year 11 at her local secondary school. When interviewed, she aspired to become a criminal psychologist, wanting to play a part in systemic change. Passionate about social justice and creating a different kind of future for Indigenous Australians, she already had a clear understanding of how she would go about achieving this goal and what this future would look like:

> *I want to go to Brisbane and go to Griffith University, and I want to do a double degree in criminology and psychology, so I can become a criminal psychologist, and then I want to specialise in Indigenous people. With the information from uni I want to take it and go into gaols and interview lots of different Indigenous people and see why they're in there and see their background and if it's to do with their past. Then I want to make a massive poll out of it and hopefully take it further and get something done about it, so the criminal justice system can be fair on Indigenous people… I do Aboriginal Studies for Year 11 and 12 HSC and we were doing polls and stuff, and Indigenous people make up 3% of the Australian population, but in gaols they make up about, I think it's 50% to 60%.*

Dahlia's high level of commitment to change was clear as she spoke about the continued marginalisation of Indigenous ways of knowing and being in Australia:

> *I want to make a big change in the justice system so that we get the help that we need when it comes to things like that. Because I think a lot of non-Indigenous psychologists, they don't understand how Indigenous minds work. Like, you know, we don't hold the same values that White people do. We hold kinship, spirituality, like the land, that's all important to us on a different scale to what White people hold it. So yeah, I think I could connect with them more as well and give them the support they need. So that's why I want to do that.*

At only 17 years of age, Dahlia imagined herself as powerful, recognising her value within unequal, racialised social systems. She largely portrayed her future in collective terms, intimately entwined with her culture and identity as an Indigenous Australian.

The pressure of high expectations

When we next spoke to Dahlia some four years later, she clearly remembered her aspiration to become a criminal psychologist, "I was so set in my ways up until I was like 17 I reckon… I was so set. That was what I was going to do, there was nothing stopping me". However, Year 12 eventuated as a critical turning point in her life and she withdrew from secondary school prior to completing her HSC. During this year, Dahlia experienced severe mental ill-health and made an attempt to end her life. She describes this period as "very dark" and a "shitty experience". Upon reflection, she feels she "went down the wrong path" by starting a relationship with someone who was experiencing their own mental ill-health at the time. Ultimately, however, the major catalyst for her health was the mounting pressure of the HSC:

> *I just think I burnt out. I just crashed and burned. It was getting on that bad path, but it felt like it was coming for a while before I even [started the relationship]. It was just a burn out, I was just so overwhelmed. I felt like I was so pressured to do the best and I felt like I wasn't the best. I shouldn't have been getting this pressure because I'm actually not that good, and then I'd get anxiety about not being as good as everyone thinks I am.*

The pressure Dahlia describes was explicitly manifest in the high expectations of her teachers. As a high-achieving student, they verbalised their own ambitions for her to "be the best" and hoped she would receive a high mark in the HSC, placing emphasis on this credential as the major conduit for students' post-school futures:

> *I had one teacher in particular, he was my Aboriginal Studies and my Ancient History teacher, and I was the top in all of his classes. And I don't know, he'd just constantly be on me about, 'Got to be the best. Got to do this, got to get the highest HSC'. I just felt almost too pressured and I'd get anxiety going into his classes. Like he was a great teacher, in saying all that, he was a fantastic teacher, really good at his job and teaching the subject, but it was a bit too much.*

Dahlia also experienced immense pressure from her parents, who similarly wanted her to be "the best" and "the greatest". This feeling was compounded by the fact that her older brother had already proved himself a success at school:

> *My parents just always had this expectation that I was meant to be the greatest and the best because my brother was really good at school, and then I came along and was like, bam, here I am. This sounds so up myself, but this is just the truth. I was doing really good and they just expected the best I guess. They were really supportive in the way that they just wanted the best for me, but it did get a bit too much. Mum was probably more devastated than me when I didn't finish [secondary school]. She still now when she talks about it gets a little bit choked up and a bit funny about it. She took it more to heart than I did, not finishing school.*

It is clear that Dahlia recognises that both her teachers and parents were still helpful and supportive during this time. Unfortunately, however, the pressure to perform in the high-stakes HSC was just too great, disrupting her planned post-school trajectory.

Racialised microaggressions in the classroom

Compounding the weight of the HSC, Dahlia had long experienced microaggressions during her schooling. As a high achieving Indigenous woman, these racialised microaggressions took the form of prejudice and negative stereotyping, often manifest in insults and verbal insensitivities from her classmates:

> *Because I was in the top class for my whole high school, when people found out I was Aboriginal they seemed really surprised. I'd be like, 'Yeah, I'm Aboriginal' and they'd be like, 'What?' As if, 'What are you doing in here?' you know what I mean… that I didn't belong in the smart class.*

This notion of being "found out" still played on Dahlia's mind long after finishing school. Here, she reflects on a particular point in schooling when she became the only Indigenous student in the "top class", subsequently revealing her identity to her peers:

> *There was me and another boy in the same class and we were both Indigenous and we were the only two in the top class. And then he dropped out a couple of months in but no one knew I was [Indigenous]. When I said I was, it was like, 'oh but you're in the top class?'… Just little things like that and just the way people would react to me being in there and when they'd find out I was, it was almost as if, I can't leave her in here.*

Dahlia's comments illustrate just how psychologically taxing it was for her to be academically successful at school, with people constantly questioning her achievement and, thus, her position in the "top class". Carrying this heavy burden for years, she was made to feel excluded from a system that has long excluded Indigenous Australians.

Reigniting a long-held passion

Immediately after withdrawing from Year 12, Dahlia took up a series of retail and hospitality positions in her local community. She had already been working part-time in retail throughout secondary school so was familiar with this kind of employment as a means to 'get through' the period where she "really didn't know what [she] wanted to do anymore" and "had no

direction with life". Somewhat serendipitously, however, she came across an advertisement for an Aboriginal traineeship at a local Indigenous preschool, which ultimately reignited her passion to work with Indigenous Australians:

> *I'd seen a traineeship pop up online, an Aboriginal traineeship. It was actually funnily enough in admin at Banksia Preschool, but then when I first went there for the interview and everything and after getting the job, they turned around and were like, "You actually seem really passionate about children. Do you want to have a traineeship with the kids instead? We'll hire someone else in the admin". I was like, "Yeah, why not? I'll give it a go". And then four years later, it's the biggest passion I've ever had. That's what I want to do with my life, is work with Goori kids.*

While Dahlia's original career aspiration may have therefore shifted, her core goal of systemic change clearly remains:

> *There's such a push now for formal schooling to start early. But those first five years, just being able to be a kid and enjoy your childhood is just so important. I really want to give our Goori kids a chance to do that… I'm very passionate about culture so I do a lot of language and songs and dance in my practice so that these kids have culture in their lives and feel connected before they start school.*

Dahlia's enthusiasm and articulate commitment to change are reminiscent of her original interview as a Year 11 student. Her culture and identity as an Indigenous Australian are not only central to who she is, but central to her employment and life ambitions.

A new pathway into university

After successfully completing her traineeship and gaining a Certificate III in Early Childhood Education and Care, Dahlia is now studying a combined degree of early childhood and primary teaching at university. She continues to work at Banksia Preschool while studying university online, with her studies supported by a government scholarship. She describes coming across the scholarship by chance, however it was being awarded the scholarship that provided the impetus for enrolling. She speaks about her transition into university with a great deal of positivity:

> *I had to do a pathway. What was it called? I don't know, there was a specific thing. But it was like one trimester of a different thing and that was the equivalent to getting a HSC… I did four units and two of those units were actually ones I would've done in my course anyway, so I got RPL [Recognition of Prior Learning] for them. So it was so fine, it was so easy to do. I went up there, had a literacy and maths test I think which was a Year 9 level sort of test, then did a trimester and was in the course I wanted… There's so many other ways to get into uni.*

While Dahlia's pathway into university may not have been what she originally envisaged as a Year 11 student, she was happily juggling her work and online university study when we interviewed her in 2021. Her view that "there's so many other ways to get into uni" is a profound contrast to the stress and anxiety she experienced during Year 12, where so much emphasis was placed on the HSC as the 'be all and end all'. She is now almost halfway through her degree and feels that at Banksia Preschool she has found where she belongs; "It's like Banksia is my place." She does not regret her past experiences and feels they have helped her to get where she is today.

Zoe: Thrown off the path, at university

Zoe grew up in a regional town in northern NSW and attended her local public high school. Zoe's case study illustrates the challenges of settling into a university with a 'social life' that is built around very different social, cultural and economic arrangements to those of her local community. Despite being thrown off the pathway associated with her initial aspirations, Zoe demonstrates resilience and begins another path.

Zoe's school profile (Medium sized secondary school, 540 surveys from 399 students)

Inner regional
ASGS Locality

940
School ICSEA

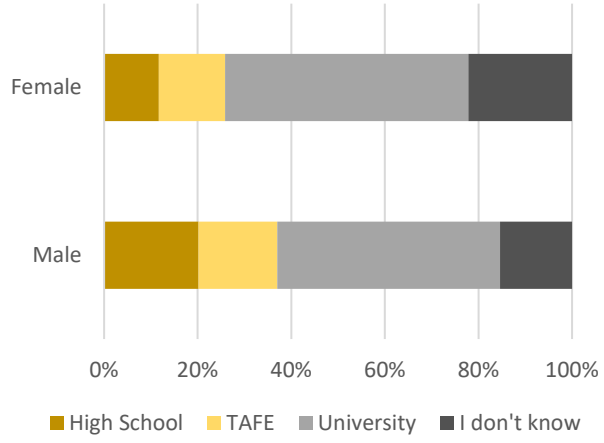
1.3%
Percent of surveyed students who have a language background other than English

7.6%
Percent of surveyed students who identify as Indigenous

79.6%
Percent of surveyed students who are prospective FIF students

23.3%
Percent of surveyed students from SES quartile 1

Educational Aspirations among surveyed students

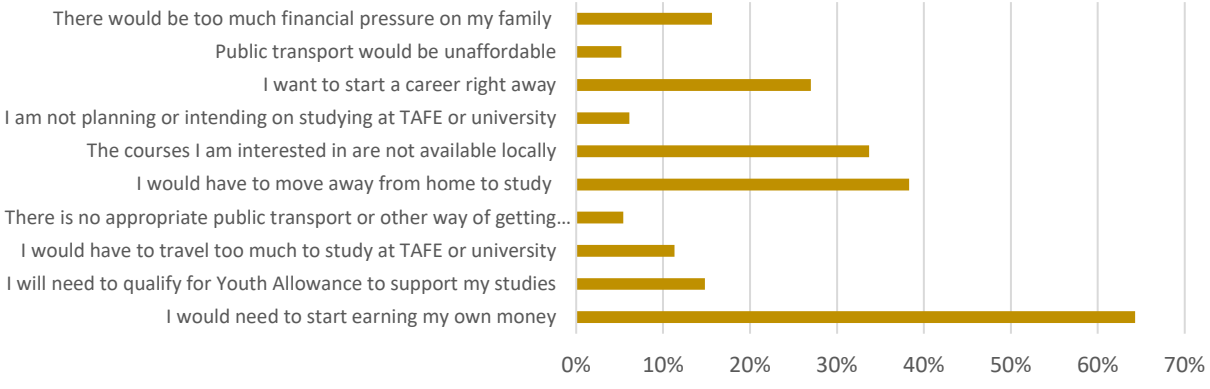


Top 5 Occupational Aspirations among surveyed students

Males
Sportspersons
Defence Force Members - Other Ranks
Other Engineering Professionals
Police
School Teachers

Females
School Teachers
Actors, Dancers and Other Entertainers
Veterinarians
Animal Attendants and Trainers
Photographers

Percieved challenges to university or TAFE study



Challenging beginnings

We first interviewed Zoe in 2014 when she was in Year 9. At this stage, she expressed her long-term interest in studying archaeology. However, she also felt that “there's not much you can do with archaeology,” doubts which were likely prompted by her parents. She reported them questioning whether she would be able to find a job in archaeology and told her instead that they would like her to become a doctor.

Zoe experienced great pressure from her family, eventually leading to a desire to “get away.” Zoe explained that “I didn't have the greatest home life with my dad.” Her father, who is from a very poor family, had experienced homelessness, has dyslexia, and had been told at school that he was stupid and had missed out on the opportunity to go to university. As a result, he was very keen for Zoe to go to university, so much so that she was “worried he would kick me out if I didn't go to uni immediately.”

Achieving the results required for university under the pressure of her father was a challenge for Zoe, particularly given her schooling situation. Zoe reports that while her teachers were “very supportive of our aspirations”, her “careers adviser was terrible.” She describes her school environment as not always conducive to achieving great results: “It’s just really disheartening to see everyone around you really suffering and dropping off like flies and everyone sort of flat.” In her follow-up interview, Zoe observed that “so many kids had dreams of going to university” but only about 20 of 170 students in her year group achieved that goal.

As a result of her circumstances, Zoe suffered from depression and anxiety and was formally diagnosed in Year 11. During Year 12, Zoe decided that she wanted to go to a university where she “was guaranteed that I wasn't going to run into anyone from school.” She hoped that going away to university after her HSC would “fix all [her] problems.”

Escape from home

Motivated by her challenging situation, Zoe was able to overcome the odds and was accepted into an Archaeology degree at Macquarie University, a ten-hour train ride away in Sydney. However, her hopes that getting away from home would solve her mental ill-health proved to be “very wrong”. Although Macquarie is not a Go8 university, many of her student cohort had been to private schools and placed a lot of importance on the ATAR they had achieved. Zoe felt out of place because, as she told us of her own school, “even the brightest kid didn't get over an 80”. Many of her fellow university students still lived at home, leaving them better off financially. In contrast, being from a rural town meant that students like Zoe were obliged to leave home to attend university.

Complicating this situation, Zoe felt “survivors’ guilt” and questioned “why do I deserve to be here and all these lovely people [from school] didn't get to go?” Although the “city was so cool and it was really nice coming from a rural area to just like see all these different things and different people,” she found she had no support system and “it just got too much, I got too sick”:

> *The university itself, it was really hard to get track of support and, even though I was seeing a university counsellor, I got like 20 minutes and my counsellor was a student and it was once a month. And [I] just couldn't handle being away from home with all those stresses and so little support.*

Although she enjoyed her archaeology studies, her mental health continued to deteriorate and during the second semester of her first year she “fell apart.” She describes how the situation “eventually got so bad that I withdrew from all my units and I was just lying on my bed.” Reluctantly, Zoe returned home where she tried to complete the semester externally. However, she reports that living with her parents was “not a good environment” and she ”couldn't concentrate and hated it and was very upset all the time”. She “started on some

new antidepressants, but just couldn't cope with it, so dropped out." The next year her parents gave her what she describes as "an ultimatum" – either she went back to uni or found a full-time job. She ended up spending a year at home working for her father in his business.

Another chance

After a difficult year at home, Zoe knew she wanted to return to university. However, she explains that:

> *I didn't know what I wanted to do at that point. I knew I wanted to do something science and biology related and chemistry related because I've always really enjoyed those, and they're quite easy, even when I'm having like a bad time. They're by logic, so they're a little bit easier. So what I did is, I didn't even know if they'd take me because my transcript was so bad, so I applied to the University of New England [UNE] because a lot of my cousins have gone to the UNE… I knew there would be some people from my hometown there and I just needed the support you know. So I applied there and I got in on a Bachelor of Scientific Studies early entry and I just jumped at that cos I didn't think I was going to get anything else.*

However, Zoe was able to transfer to Biomedical Science before the year began. She explained that she thought Biomedical Science would be a "good base" and that perhaps she could become a Pathology Assistant, something that her Aunt had done and "really enjoyed". Unlike archaeology, Biomedical Science had a tangible and relatable outcome for Zoe.

Zoe immediately found UNE, located rurally, to be a "much better environment. Everyone was so friendly and welcoming." UNE was "filled with rural students, which is good. I actually relate more to the people here." She found that because most students at UNE had moved away from home, they were all in the same boat and she felt more supported. She also began seeing a psychologist, who provided valuable support.

Unfortunately, Zoe was only six weeks into her first semester when the COVID-19 pandemic struck and she had to return home: "I'd finally managed to escape and got a good place and then I was home again. So I was pretty pissed about that." Despite being at home, Zoe stayed in touch with her new friends on Zoom: "still having like regular interaction with people, and it was good. It was a really good thing." She enjoyed her classes (which had been switched to an online format) and she received good results.

In the second semester, Zoe was able to return to campus. She took an elective she found inspiring, one that focused on medicine formulation:

> *It was the best subject I'd ever done! I enjoyed it the most. I thought it was fantastic, and I'd never really thought about being a pharmacist before. But when I thought about it, pharmacists have been pretty much there for me my entire life and they've always been like a helpful and a calming force. The subject was just so fascinating and it's something that involves helping people. Honestly doing archaeology, it made me feel terrible because I wasn't helping anyone by doing it. I felt useless, you know, fun, but ultimately like what am I contributing here? But pharmacy, I love it!*

This experience led Zoe to commit to pharmacy as her future career aspiration and to apply to change degrees again. Zoe also proceeded to find work at a local pharmacy. She commented that it is a job where she is learning about her future career and can also *"*help people find stuff and recommend things and it's, it's just a nice job you know. They're really sweet.*"*

Zoe is currently doing well and progressing towards her aspiration to become a pharmacist. She has found a meaningful degree, is participating in a university musical, and is seeing a good psychologist – all of which contribute to her living in a more “healthy environment.”

Zoe doesn’t regret the winding path she has taken to reach her current situation:

> *I think ultimately studying archaeology was a beneficial experience for me. There's nothing, no way, nothing I could tell myself that would stop me from doing what I wanted. And I, it's a good experience for me to go to Sydney and experience, like a really a different world… I don't think I'd change it that much.*

Like many of our interviewees, the bumpy path she has taken has helped Zoe to focus on what she really wants. As for the future, Zoe sees herself owning a house in a rural town where she can work as a pharmacist and support the local community.

Discussion

Our study took a unique approach to understanding ongoing inequities in access to and participation in higher education. We traced the journeys of participants over many years, surveying and interviewing a smaller number of students during their school years and then following-up with them after their schooling was complete. Although we initially faced some difficulties in reaching out to participants from our previous *Aspirations* studies, we were able to gather data through 52 surveys and 21 interviews. This rich dataset allowed us to tell the stories of participants over time, many of whom are from equity groups, and to provide insights into the challenges they have faced and the paths they have taken. The interviews, in particular, reveal the tenacity and determination that many young people demonstrate in the face of challenges in planning their futures and achieving their goals. The stories we heard are far from the "poverty of aspiration" assumed by some to be the major barrier to equity in higher education (Zipin et al., 2015, p. 229). In fact, as other studies have found, the "determination and persistence" shown by many students from disadvantaged social backgrounds is "remarkable" (McKay & Devlin, 2016, p. 354).

We found that young people follow a wide range of paths after school, including:

- those who pursue their aspirations with minimal disruption;
- those who are forced to abandon their aspirations due to severe disruption; and
- those who are still seeking a path several years post-school.

Participants who nominated particular aspirations while at school often remained interested in allied aspirations, with interest in teaching remaining most stable. It was common for participants to shift into related career fields, often pursuing 'less prestigious' aspirations. Others had transferred into entirely different fields.

More than two thirds of participants indicated that their education (71%) and career (79%) aspirations had changed to some extent since leaving school. This included a large group who aspired to go to university, but have not, at this stage, achieved this goal. While some did not continue to study after school, others went to TAFE instead of university. Our data reflect a similar pattern to that reported more than twenty years ago by James (2000) in his study of student attitudes and aspirations towards post-secondary education and work: in short, fewer students who planned to go to university will end up at university and more will go to TAFE than planned to. However, we also found a rather large cohort of students who were unsure about their aspirations while they were at school but ended up at university. This made university the most popular pathway for this group of participants (53%). However, not all participants saw it through to the end, with 6% already leaving their degree prematurely.

This study brings to light the ever-evolving nature of aspirations, highlighting the importance of studying aspirations longitudinally rather than at a single point in time. The stories of change contained in this report are a reminder of the complexity of pathways young people take from their school years into tertiary education or employment, and the myriad ways they are influenced in the choices they make over time. Aspirations held at a young age grow and develop due to personal preference and structural forces; in some cases, structural hurdles influence what is recognised as possible, which profoundly shapes aspirations.

Resilient practicality versus choice

A stark contrast emerged between those students taking the 'path well-travelled' to university and those taking the 'path less travelled'. For the most advantaged of our participants, the journey to university was usually relatively straightforward. They had a strong 'capacity to aspire' with the support of parents and teachers, the academic achievement to enter the course to which they aspired and were financially secure. These students were in a

position to read, and often influence, the ‘map’ to enter university and even the workforce. Lorie’s case study provides a key example, with Lorie focusing on factors such as personal suitability, institutional prestige, and career prospects in making her university and degree choice. In comparison, students from targeted equity groups generally lacked such clear navigational insights and faced greater social and economic obstacles to accessing university.

Unlike Lorie, the ‘choice’ portrayed by many of the case study participants was not about *which* university would suit them best or *which* degree would provide them with the most competitive edge for the career market. Instead, their choice was about whether they could make university work at all. Echoing Reay et al.’s (2001) work in the UK, we found that the “choice-making of the middle-class and working-class students [is] very different and the higher educations they […] anticipate are different” (p. 871). Practicalities were the driving force behind many of the course and university-related decisions made by students from targeted equity groups. As shown in the case studies, decisions surrounding which course or university to apply to revolved around location, affective dimensions, scholarships, and early entry schemes, while a mixture of practicalities and early interest or passion came into play when choosing their field of study.

Reflecting the “thinner, weaker sense of the pathways from concrete wants to intermediate contexts to general norms and back again” (Appadurai, 2004, p. 69), the students from equity target groups often narrowly focused on meeting their most immediate and practical needs when making university decisions and they could not anticipate where they might end up in the longer term. Some, such as Xavier, allowed themselves little opportunity to consider which course they would study and instead focused their efforts on just getting ‘in’ and being on a path towards any kind of secure career in the hope of job security. In attempting to navigate a “play without a script” (Bok, 2010, p. 163), almost all of the participants were met with unexpected obstacles. These obstacles were social, economic, and systemic in nature. Zoe, for example, was desperate to ‘escape’ her situation and enrolled at a metropolitan university far from home to do so. Here she was met with a “strange, unpleasant, even threatening environment” (Alloway & Dalley-Trim, 2009, p. 54) which she did not foresee; an experience that is historically not uncommon for students from low SES backgrounds (Alloway & Dalley-Trim, 2009; Reay, Crozier & Clayton, 2009). Overcoming these obstacles took resilience of a type typically not required by those who took the ‘path well-travelled’ to university like Lorie.

Early entry was one practicality that a number of the participants relied on in making their course and institution choices. Early entry provides promise and opportunity for those who cannot depend on achieving a high ATAR at the end of secondary school, but it may also lead those from targeted equity groups to choose lower status courses, reproducing hierarchies of access to higher education. High ATAR achievement has been found to correlate with higher SES and there is some evidence to suggest that high ATAR cut-offs for courses substitute as a “proxy for perceived quality” (Blyth, 2014, p. 268). This leaves those from low SES backgrounds, who are less confident in relying on their ATAR, more likely to end up in courses perceived to be of ‘lower quality’. And yet we know that given the same higher education opportunities, students from low SES groups will perform at about the same level as those from more advantaged backgrounds (Gale, 2011). Indeed, a recent study found that while students from disadvantaged backgrounds are less likely to attain an ATAR and enrol at university, if they *do* make it to university then they “achieve slightly better outcomes than their non-disadvantaged peers with the same academic ability” (Manny et al., 2021, p. 68).

Despite their paths to university being unconventional and often interrupted, several of our interviewees, including Zoe and Dahlia, expressed gratitude at the way challenging episodes of their lives had proven helpful in building resilience and determination. Their experiences illustrate how “students can possess experience and coping mechanisms that their more

privileged peers may not" (McKay & Devlin, 2016, p. 354). As the authors of a British study on low SES students attending a prestigious university in the UK note, "making the choice to take the road that they value, in spite of obstacles, requires a significant amount of agency and self-belief" (O'Sullivan, Robson & Winters, 2019, p. 1678). Despite the structural challenges faced by many of our participants, their sense of agency propelled them towards university. This is not to say that all students from equity groups should be expected to utilise their own agency to battle their way to university. Instead, it is important to recognise that while advantaged students are more likely follow a smooth path to university, the less advantaged students who 'make it' have had to rely on their own determination and self-belief to get there.

A generation of students persuaded to go to university: With what effects?

As exemplified by the case studies, the students from targeted equity groups who enrolled in university possessed strong motivation to improve their personal, community, or family situation, with some even framing university as a means to 'escape' their circumstances. Ahmad, for example, sought to improve living conditions in his community, Dahlia was initially spurred on by her desire for systemic change, and Xavier simply wanted a secure job. Many envisioned a university degree as their ticket to a middle-class life and experienced strong encouragement from their parents (experienced both positively and negatively) to either attend university or to enrol in a particular degree. This encouragement reflects discourses currently surrounding university as being the place for those with 'high' aspirations (Gale, 2015; Zipin et al., 2015).

Similarly, there was widespread agreement among participants that university is touted as the most acceptable and desirable post-school pathway in schools. Even participants who had clear non-university aspirations, such as Angus who has pursued a successful career as a chef, were told that going to university would be the best path for them. Our participants' experiences of being pushed towards high academic achievement, and university, mirror the experience of many Australian students who receive "the message reinforced by many schools, families and the media – the ATAR is everything" (Pilcher & Torii, 2018, np). While some of our participants retrospectively rejected the narrative surrounding university as false and harmful, the participants who were currently enrolled in university had invested strongly in the notion that university was the pathway to success. Indeed, the narrative that university would lead to employment and financial security often provided them with resilience during difficult times.

While most of these participants were still at university, and so we cannot comment on their post-university outcomes, job prospects for graduates have become increasingly dire and, thus, we feel a need to express some concern. Recent research has highlighted that "secure, long-term employment prospects for Australians aged from 15 to 24 years are far worse than some sectors of society are aware of or acknowledge" (Walsh et al., 2021, p. 5). Young people spend longer looking for work than ever before and now face a workforce dominated by seasonal, part-time, casual, low wage and insecure work, all of which has been exacerbated by COVID-19 (Walsh et al., 2021). The young people in our survey were experiencing this contraction of the labour market firsthand, with 12% currently unemployed and the majority working in jobs they considered to be temporary. Young people with university degrees face both an insecure and unpredictable job market and credential inflation of their degrees. With higher education participation rates at record highs, and enrolments up 41 per cent in the last decade (Walsh et al., 2021), large numbers of university-qualified jobseekers enter the job market each year. However, while increasing proportions of students are getting university degrees, the percentage of roles classified as professional in the Australian labour force is less than 20% (De Bortoli, 2021) and there are "fewer full-time permanent jobs available for the increasing numbers of highly qualified job seekers" (Walsh et al., 2021, p.13). It is perhaps not surprising, then, that recent research

has shown that “graduates have reported experiencing labour market mismatches despite their qualifications, including skill underutilisation, poor job quality and limited choices” (Walsh et al., 2021, p.13). The current job market simply cannot match the current appetite for secure professional roles. This raises many questions about the hopes students from disadvantaged social backgrounds hold about university being their pathway into what might be a disappearing ‘secure middle-class’ life.

Thus, while participants such as Zoe, Xavier, Audrey and Ahmad illustrate the ways university students from disadvantaged backgrounds can be led to view university as their pathway to a better life, there is no guarantee that they will find suitable employment once they graduate. Even teaching, a once secure profession for working class students to aspire to, has become increasingly casualised (Mercieca, 2017). Traditional understandings of job security, loyalty and fair dealings which have been projected onto young people, and on which disadvantaged youth trying to ‘improve themselves’ rely, are increasingly overlooked by employers. This situation, arguably, borders on a breach of the “social contract” or “set of norms, assumptions, and beliefs that society conceives as fair and appropriate” (Edwards & Karau, 2007, p. 67). In one recent study of young people who were approximately 28 years of age and thus several years ahead of the cohort in this report, participants were disillusioned by precarity and:

> *caught between the opportunities they imagined would be available to those who invested in their education and the reality that the labour market they prepared to enter has changed dramatically.*
>
> (Chesters & Wyn, 2019, p. 683)

As such, the ability of these young people to maintain faith in the nexus between education and employment is severely strained (Chesters & Wyn, 2019). Arguably, the situation has only deteriorated for young people leaving school today. And yet, the experiences of our participants suggest that narratives aligning higher education with desirable and financially rewarding employment persist.

High frequency of mental health distress

Many obstacles to university access and success for students from equity target groups have been well-documented in the literature, including: the cost of relocation and living independently for rural and remote students (Wilks & Wilson, 2012); experiencing imposter syndrome and feeling like university is a place where they do not belong (Jury et al., 2017); lower prior academic achievement (Gore et al., 2015); and limited knowledge of university and careers (Bok, 2010). From accepting the first university offer that came their way, to working casually to supplement Centrelink payments, these well-documented obstacles were predictably evident in many of our participants’ accounts of the paths they have taken since school. However, less predictable and somewhat surprising was the high prevalence of mental health challenges noted by many participants.

As Macaskill (2013) has pointed out, mental health has long been an unacknowledged aspect of widening participation agendas, with limited attention given to the issue. It is only very recently, with a rise in university student suicides internationally, that more serious, and perhaps long overdue, attention has begun to be given to students’ mental health (Young et al., 2020). Our data affirms this need for more serious, and deliberate, attention to youth mental health within the widening participation agenda. Both the open-ended survey responses and interviews were filled with stories of short-term and long-term mental ill-health, which ranged from mildly disruptive anxiety to extremely disruptive suicide attempts.

The experiences of mental ill-health shared by many of our participants are a reminder of the vulnerability of young people, even before the occurrence of the global COVID-19 pandemic. A 2010 survey of more than 600 Australian university students found that 30% had

experienced either depression, anxiety, an eating disorder or harmful drinking, and that low-income students, females, and LGBTQI+ students were most vulnerable (Said, Kypri & Bowman, 2013). Students can be particularly vulnerable to mental ill-health due to the pressures of university study, especially when students are far from home or facing financial stress (O'Shea, Koshy and Drane, 2021), factors that those from equity target groups are more likely to experience. Indeed, financial pressures, being away from home, and social isolation all featured as contributors to mental ill-health in our participants' stories.

For this group of participants, mental health issues were by far the most disruptive factor in realising their aspirations. Concerningly, not all participants were able to access adequate support from universities, as seen in both Zoe's and Xavier's case studies. A 2017 report by Orygen, The National Centre of Excellence in Youth Mental Health, found that due to stigma (or perceived stigma), or the lack of understanding that some university staff have about how to respond to mental health issues in their students, many students do not access support for their mental health. When they do seek help, some students do not get to see the right mental health professional when most needed (Orygen, 2017). Considering these pre-COVID statistics, and the extra pressures learning online and coping with isolation might bring, it is essential for universities to ensure their support services are improved.

Expanding career education to meet the challenges of the post-COVID world

Many of our survey participants found access to information about education and career options to be a positive influence. However, there was a general consensus among interview participants that the career education they received at school was insufficient to prepare them for the realities of life after school. This is perhaps not surprising, given that schools and governments have long been criticised for viewing career education as a 'peripheral' and 'extracurricular' activity (Patton & McMahon, 2014). Our interviewees told us of career advisers who simply handed them a UAC Guide or suggested they pick a university course with entry requirements that matched their predicted ATAR. Participants in this study, such as Elicia, reported that the strategies employed by career advisers were entirely "unhelpful" and could be confusing. Similarly, Ahmad was not told that he would be required to undertake a Master's degree in order to become a qualified architect and experienced his teachers as being "old fashioned". Some commented that their career adviser was not useful because they already knew what they wanted to study and how to go about achieving their higher education goals. Those who were more uncertain sought, but did not always find, the advice they needed.

Career advice is vital for those "who are more vulnerable when making the transition from school" (Rothman & Hillman, 2008, p. vi). However, the nature of advice they are given is important, with advice that is student-centred rather than information-centred considered more useful by students (Walker et al., 2006). Vague and generic advice about university entrance is particularly unhelpful for FiF students who had no other resources to fall back on. Career advisers are stretched to capacity and tend to rely on blunt tools, such as occupational matching, and dated conceptions of long-term single professional careers when giving advice to students (Patton, 2019). However, as our survey data and a minority of our interviews suggest, for students from equity groups, the right kind of career advice can play a crucial part in students' journeys to university, with nuanced and individualised, student-centred advice, sometimes leading to life-changing decisions.

Recent studies of university students in Australia have shown the consequences of inadequate resources being allocated to career advice: high proportions of students enrol in university with a limited understanding of what employment could result from their qualifications and of the relevance of postgraduate study to their chosen career goals (Baik et al., 2015). As a result, up to a third of students who enrol in university do not graduate

(Meuleman et al., 2015). Just 6% of students in our sample had dropped out of university, however many who we surveyed were only in their first year.

While “for governments and schools, it is the role of career guidance to ensure that young people go through education and training and into the labour market with understanding and confidence” (Mann, 2021, para 3), our data suggests this is not currently being achieved. Even with consensus on the need to improve career education, the challenges of doing so in a rapidly changing post-COVID world cannot be underestimated. A useful metaphor for the changing career environment might be to compare the traditional career “ladder” to the contemporary career “jungle gym” (Elkin & Sutton, 2000, p. 8). As Elkin and Sutton suggest, a simple career ladder is now a rarity. Instead, young people are faced with a “complex and mysterious” career structure, one that is “continuously reconstructed, possibly at an ever-increasing rate, while the individual negotiates it” (p. 8). Therefore, fluidity in aspirations may be needed. An important question is whether career advisers are trained for this new reality. One recent report argued that traditional mechanisms suggested for improving career education, such as improved reporting of graduate outcomes, no longer hold sway “due to the unpredictable influence of geopolitics and international trade relationships on the future employment climate in the globalised and increasingly digital economy” (Walsh et al., 2021, p. 23). That is, planning for a future is near impossible when the world is changing so rapidly; what works to secure employment now might not work after the completion of a degree. Instead of specific career planning, Walsh et al., (2021) suggest that “careers education could refocus on the necessary skills to navigate contemporary work” and precarity (p. 24).

The most common recommendation given by participants in this study to improve their career education was to have alumni from their school return with stories and experiences about university life. Our interviewees believed this would make university more relatable and would be especially useful for students who might otherwise have no connection to higher education. One Indigenous interviewee explained that although visiting a university campus is valuable, students feel more comfortable in their own high school environment, so are more likely to tune in and ask questions. Ahmad thought it would be useful to hear alumni talk about different courses, to help clarify whether HSC students’ “preconceived notions” of what they aspire to study are correct. Hearing from alumni from their own schools might well dispel the notion that university is out of reach for students from targeted equity groups.

Limitations

An inevitable outcome of our recruitment process is that the stories of those who completed the survey and, even more so, those who stepped up to be interviewed, might not represent the broad range of outcomes experienced by their peer group. Those who we interviewed were motivated, dedicated and proud of the outcomes they were achieving. Notably, all our interviewees were currently either employed or engaged in study, and most of them had been to or were currently studying at university, though some of the survey participants were unemployed. While the survey participants were very diverse, the interviewees had experienced what might be considered relatively ‘successful’ outcomes. We also heard from individuals who did not want to be interviewed because they felt their stories were ‘boring’. We did not interview anyone who had left university and not returned or who was currently unemployed. However, the reality is that a third of students who enrol in university do not graduate (Meuleman et al., 2015) and the rate of youth unemployment in July 2021 was 10.2% (ABS, 2021). This suggests that our sample does not necessarily represent the broader experience of most youth in contemporary society.

In light of the narrative about university being promoted as the most desirable outcome for young people, we must consider the feelings that some might harbour about their lack of higher education. Is it possible that some young people we had met as younger students felt that their outcomes were not worthy, or that they had ‘failed’ because they did not match

those they had aspired to? Was there a sense in these young people that they were ‘not good enough’ and their stories did not warrant being heard? Have we missed out on hearing the stories of those who wanted to pursue a university education but could not navigate the university system, or decided university was not financially viable, or felt that travelling away from their rural town was simply too difficult? Interviews with young people with experiences such as these would provide a broader picture of the complexities of entering and staying at university.

We should acknowledge the apparent inconsistencies in access to career education between our survey and interview data. Interviews often draw out negative or problematic experiences due to the opportunity participants have to express themselves, with surveys gleaning more positive responses (Bazeley, 2018). Furthermore, in the survey we did not ask about career advisers, merely about *teachers'* influence on career paths. In the interviews we differentiated between teachers and career advisers, and this prompted interviewees to identify that career advisers were often unhelpful or ill-informed. Teachers typically know their students' interests and academic performance, making them better equipped to offer personalised, one-on-one advice; career advisers don't always have this advantage. All of this considered, almost 50% of respondents indicated teachers had a neutral effect on their career path. Although guidance might not be considered the primary job of teachers, this result suggests that for many students, even their teachers, who might be their only source of career education, are not able to provide it. As we recommend, if career education was better funded, career advisers might have the time and resources to provide more individualised advice to students, and teachers would not have to bear so much of this responsibility.

Conclusion

Our study, *Aspirations, equity and higher education course choice: The path travelled* explored the educational and occupational pathways taken by students after they completed formal schooling and the ways in which these pathways related to the aspirations they held for the future while they were at school. Drawing on longitudinal data, in the form of surveys and interviews, we set out to examine three key questions:

1. How do early aspirations (at ages 10-18) relate to post-school and higher education course choices?
2. What equity insights can participants from the Aspirations studies provide with regards to the path they travelled in making their higher education choices?
3. How might recent environmental, health and economic crises shape institutional efforts to ensure equitable participation across higher education courses?

Our findings suggest there is a modest relationship between early aspirations and future higher education course choices, with less than a third of participants indicating that their education (29%) and career (21%) aspirations had not changed over the span of our research. However, a number of the young people in our study remained interested in their school career aspirations and made attempts to pursue these, or related, pathways after school. Not all of these young people were immediately successful; some shifted direction or began an entirely new journey. Others were met with unexpected barriers or opportunities or were still searching for their path several years after leaving school.

The course choices of young people in equity target groups often reflect their immediate or practical needs. Although many students from equity target groups base their higher education choices on early interests, they are more likely than their advantaged peers to consider factors such as future career stability, or whether early entry schemes are available. Career stability is an important factor in course choice for those in equity target groups, with hopes for a secure future pinned on careers such as teaching, which is not only familiar to all students, but also perceived as secure and having a stable income. Scholarships were also highly influential in guiding their choices and will likely remain essential in supporting other students in the future.

The students who took a ‘path less travelled’ to university possessed strong motivation to improve their personal, community, or family situation, and often felt pressure from their schools and families to attend university. There was strong consensus among the sample that many young people today face pressure to attend university, regardless of their aspirations, and that they are told that this will lead to superior career opportunities. However, the journey to university was not easy for the young people from targeted equity groups who had taken up this message and they are likely to face a more uncertain future than they hope for with “fewer full-time permanent jobs available for the increasing numbers of highly qualified job seekers” (Walsh et al., 2021, p.13).

Students pursuing ‘paths less travelled’ to university faced an array of well-documented challenges including financial pressures, being away from home, and social isolation. Two particularly prominent challenges for participants, which will need to be important foci for schools and higher education institutions moving forward, were careers education and mental health. The young people in our sample were adamant that the careers advice available at school was not sufficient to support them in the modern world. This is reflected in high university dropout rates reported in the literature and confusion surrounding degree outcomes (Baik et al., 2015; Meuleman et al., 2015). Concurrently, mental health served as the most prevalent and disruptive obstacle for participants in meeting their aspirations. Concerningly, not all participants were able to access the services they required, and episodes of mental ill-health were common in participants who felt forced to abandon or alter their chosen pathway.

Events such as natural disasters and the COVID-19 pandemic have influenced our participants in a number of ways. Fire and flood impacted several of our students, but only in the short-term and with no obvious ongoing effects. The pandemic lockdowns seemed to cause two main issues for participants. First, for university students, they were forced to transfer to online learning, which some found to be less effective than face-to-face learning, but for others led to more time for work or leisure. Second, some participants were often left without work, exacerbating their already vulnerable financial situations. The long-term effects of COVID-19 on students' mental health and their study and employment prospects remain to be seen. However, it seems likely that the pandemic will exacerbate existing inequality (Blundell, 2020; Archer, 2020). Efforts will need to be made by universities and governments to ensure those from equity target groups are able to access the same educational opportunities as their more advantaged peers.

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Appendix 1. Student and school background variables

Variable	Source	Measure
School location	My School (www.myschool.edu.au)	Five categories of geographic location are used to describe school locations: Major Cities, Inner Regional, Outer Regional, Remote, Very Remote. The remoteness areas on My School are determined by school postcode and defined according to the Australian Bureau of Statistics (ABS) remoteness classification
School ICSEA	My School (www.myschool.edu.au)	The Index of Community Socio-Educational Advantage (ICSEA) is a standardised scale measuring school advantage based on summarising student level data. A higher score indicates a relative lack of disadvantage. This national measure was developed to compare aggregate achievement results between schools using scores from NAPLAN. ICSEA scores were categorised using cut-offs from the state quartile values in each year.
Language background	School enrolment form	Categorised as English-speaking background or NESB.
Aboriginal and/or Torres Strait Islander status	School enrolment form	Categorised as Indigenous or non-Indigenous.
Socioeconomic status	School enrolment form	Calculated by combining the highest parental education and occupation levels for each student into an equally- weighted proxy for student SES. Data for all NSW government schools were used to separate scores into quartiles.
Gender	School enrolment form	Categorised as male or female
FiF status	School enrolment form	Students who did not have a parent or guardian that attended university.
Educational aspiration	Survey	Student responses to the survey question What is the highest level of education you plan to complete? Primary students selected from the options of “High school”, “TAFE”, “University”, or “I don’t know”. Secondary students selected from the options of “Year 11”, “Year 12”, “Certificate or Diploma from TAFE or other training provider”, “Bachelor degree from university”, “Masters or Doctorate from university”, or “I don’t know”.
Occupational aspiration	Survey	Student responses to the survey question What would you like to do when you grow up? (primary students) or What kind of work would you like to do when you’re 25? (secondary students). Answers to this open- ended survey question were coded according to the Australian and New Zealand Standard Classification of Occupations (ANZSCO), which is the national standard for classifying occupations based on all jobs in the Australian workforce.

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Appendix 3. Aspirations Longitudinal Study Sample

CHARACTERISTIC	Aspirations Longitudinal Study (2012-2015) Sample N (%)	Locating Aspirations (2017) Sample N (%)
School Location		
Major Cities	3367 (51.9)	0 (0.0)
Inner Regional	3026 (46.6)	537 (35.8)
Outer Regional	99 (1.5)	841 (56.1)
Remote/Very remote	0 (0.0)	121 (8.1)
School ICSEA		
Quartile 1	1711 (26.4)	843 (56.2)
Quartile 2	2573 (39.6)	629 (42.0)
Quartile 3	593 (9.1)	27 (1.8)
Quartile 4	1615 (24.9)	0 (0.0)
Sex		
Male	3079 (51.0)	722 (49.5)
Female	2657 (49.0)	738 (50.5)
Indigenous status		
Aboriginal or Torres Strait Islander	438 (7.3)	260 (18.0)
Non-Indigenous	5527 (92.7)	1187 (82.0)
Language background		
Non-English Speaking Background (NESB)	680 (10.5)	126 (8.7)
English	5356 (88.7)	1330 (91.3)
First-in-family (FiF) status		
Prospective first-in family-student	4035 (70.5)	1176 (82.3)
Parent/s attended university	1687 (29.5)	253 (16.6)