



# Perceptions of apprenticeships

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Behavioural Insights Evidence Review

February 2020



THE  
BEHAVIOURAL  
INSIGHTS  
TEAM

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# Executive summary

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## Background

Since 2012 the number of apprenticeship and traineeship commencements has dropped by over 58 percent.<sup>1</sup> A portion of this decline relates to system changes.<sup>2,3</sup> However, there are also behavioural reasons for low uptake of apprenticeships amongst young people and employers.

From April 2019 to June 2020 the Council of Australian Governments Education Council is undertaking a review of senior secondary pathways into work, further education and training. The review will advise the Education Council on how it can help senior secondary students understand and choose the most appropriate post-school pathway. As part of the review, the Behavioural Insights Team (BIT) has been commissioned to conduct a behavioural science research project about how young people and employers perceive and make decisions about apprenticeships.

This project identifies behavioural insights approaches to increase the uptake of apprenticeships among well-suited young people.

## Summary of research findings

In Australia, the apprenticeship and traineeship system requires that young people choose to do apprenticeships during or after the completion of secondary school. The system also requires that employers offer apprenticeships and decide to hire young people into these roles. It is therefore critical to look at the apprenticeship and traineeship system from the perspectives of young people and employers when exploring ways to increase uptake of these pathways.

### How young people make decisions about doing apprenticeships and traineeships

Young people, and people in general, do not always base their decision on a careful weighing of all the relevant information. Instead they make decisions via mental shortcuts. When it comes to secondary pathways, young people typically do not amass a large amount of information before making a decision. In general they won't use any sources which are difficult or confusing to navigate. When collecting information, young people disproportionately seek out information which confirms rather than challenges their existing career preferences, and in making their decision, short-term considerations loom large: the

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<sup>1</sup> NCVET. (2019). Historical time series of apprenticeships and traineeships in Australia: infographic.

<sup>2</sup> Ibid.

<sup>3</sup> Hargreaves, Stanwick, & Skujins. (2017). The changing nature of apprenticeships: 1996–2016.

ease of finding an apprenticeship, balancing work and study, and wages during the apprenticeship matter more than long-term career consequences. Direct experience of what an apprenticeship or traineeship is really like - however brief - generally matters more than facts alone.

In many cases, the issue of whether a young person will undertake an apprenticeship or traineeship is decided before a conscious decision is even made. Across domains and in post-secondary pathways in particular, the default often reigns supreme. As a result, many young people never make a conscious choice about university versus apprenticeships and traineeships: university is their first choice by default. In part, this reflects the way in which schools present the choice to young people, and in part it reflects deep social influences which impact young people's decision making behaviour.<sup>4 5</sup> What parents studied, and what they see as a desirable pathway, is a strong predictor of what a young person will choose.<sup>6</sup> If most of a young person's peers are striving towards university, that becomes the norm and can even create a stigma around other pathways.<sup>7 8</sup>

Together, the combination of these factors means that apprenticeships and traineeships generally do not get a fair hearing, with many young people ruling out these options without ever actively considering whether they would be a suitable pathway.

### How employers make decisions about taking on apprentices and trainees

Businesses, particularly small ones, face huge pressures on time and budgets. They often do not have dedicated staff looking at apprenticeships and traineeships, or in some cases even for human resources at all.<sup>9</sup> This means that even when there are significant benefits to be had, these can be missed or not properly considered. If the benefits of something are uncertain (e.g. investing time and money in an apprenticeship that does not work out), it becomes a very unappealing prospect and people are less likely to choose it as an option. Small amounts of hassle can also put many employers off hiring apprentices entirely, and the capacity of many Australian businesses to investigate the complexities of hiring an apprentice or trainee is limited.<sup>10</sup>

In some countries there is a long standing tradition of using apprenticeships, where the processes are well understood and the value of the investment are completely clear (e.g. in

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<sup>4</sup> Howard, Ferrari, Nota, Solberg, & Soresi, S. (2009). The relation of cultural context and social relationships to career development in middle school.

<sup>5</sup> Cheung & Arnold. (2014). The impact of career exploration on career development among Hong Kong Chinese University students.

<sup>6</sup> Gore, Holmes, Smith, Fray, McElduff, Weaver, & Wallington. (2017). Unpacking the career aspirations of Australian school students: towards an evidence base for university equity initiatives in schools.

<sup>7</sup> Education Council. (2019). The Review of Senior Secondary Pathways into Work, Further Education and Training Discussion Paper.

<sup>8</sup> Hargreaves & Osborne. (2017). Choosing VET: aspirations, intentions and choice.

<sup>9</sup> Dickie et al. (2011). A fair deal; Apprentices and their employers in NSW; Integrated research report.

<sup>10</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

Switzerland approximately two thirds of young people undertake a vocational program).<sup>11</sup> <sup>12</sup> Although many employers in Australia face a skills gap, concerns about the quality of young apprentices mean they prefer to pursue other options such as hiring staff through regular channels who already have a qualification, or from overseas.<sup>13</sup>

## Behavioural Insights Approaches

This report sets out 7 evidence based behavioural insights approaches for the Review Panel, to increase the esteem of apprenticeships and traineeships, and encourage their uptake amongst well-suited young people. It also provides 3 evidence based behavioural insights approaches for encouraging more employers to hire apprentices.

**Table 1: How to encourage well-suited young people to do apprenticeships?**

The following table sets out evidence-based behavioural insights approaches to increase the uptake of apprenticeship pathways. These have been developed from the key findings in this report. As noted above, the combination of the behavioural barriers to decision making that young people face, and the influence of young people's parents, peers, schools, and available information mean that university is often presented as the default post-school pathway. Apprenticeships and traineeships generally do not get a fair hearing, with many young people ruling out these options without ever actively considering whether they would be a suitable pathway.

The 7 behavioural insights approaches below aim to address the challenge of encouraging well-suited young people to do apprenticeships. The key findings in the second column below provide an indication of how each approach was developed. Further details are outlined in Sections 2 and 3 of this report.

What you could do (behavioural insights approaches)	Why is this important? (key findings about barriers and influencers in Section 2 of this report)	How you could implement this
<p><b>1) First, identify students who might be suited to an apprenticeship — and do it early:</b></p> <p>Not all young people are well-suited to apprenticeships. This presents a problem when it comes to getting those who are suited into an apprenticeship: how do you give them the information and intensive</p>	<p><i>This behavioural insights approach has been developed from all key findings (see below) and will help governments and schools target the following behavioural insights approaches to well-suited young people.</i></p>	<p>Conduct a discovery activity during school time to target future interventions.</p> <p>Use a 'purpose for learning' exercise.</p>

<sup>11</sup> U.S. Department of Education. (2018). 15 Fast Facts about the Swiss Apprenticeship Program. U.S. Department of Education.

<sup>12</sup> Devos, B. (2018). Betsy's Blog – What America Can Learn from Switzerland's Apprenticeships.

<sup>13</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

<p>guidance needed, without wasting the time of students who will never consider an apprenticeship? Effort invested in identifying those with some level of interest and suitability early on could reap large benefits.</p>		<p>Ask young people about what they are interested in.</p>
<p><b>2) Ensure that all suitable young people actively consider apprenticeships:</b></p> <p>People tend to develop a preference for things the more familiar they are with them. Compared to other pathways, young people lack exposure to apprenticeships and vocational careers through personal and public channels. To overcome this, suitable young people should be 'opted in' to interventions which provide greater exposure to apprenticeships, ensuring that suitable young people are required to <i>actively</i> consider apprenticeships. This could either be done in a light touch or more intensive way.</p>	<p>The information young people do gather is biased to facts which confirm their existing preferences.</p> <p>Parents are one of the greatest influencers of young people's career decision making, but they are biased towards university.</p> <p>School-based careers advisors are a key source of information about career pathways, but unfamiliarity with apprenticeship pathways limits their ability to provide personalized advice to all students.</p> <p>The school curriculum focuses on university pathways at the expense of apprenticeships.</p>	<p>Provide information about apprenticeships by default (light touch).</p> <p>Require all suitable young people to complete an apprenticeship or traineeship work experience placement (intensive).</p>
<p><b>3) Change the default pathways to include apprenticeships and traineeships:</b></p> <p>Apprenticeships and traineeships are not currently presented as the default post-secondary pathway for suitable students. Switching the default from university so that well-suited young people automatically apply for apprenticeships and traineeships will increase the likelihood of suitable young people engaging with this route. It might also increase the esteem of apprenticeships and traineeships over time, as defaults can communicate an <i>endorsement</i> from the education system.</p>	<p>The biggest single influence on post secondary decisions is which option is seen as the norm or default - for most students that is university.</p> <p>Parents are one of the greatest influencers of young people's career decision making, but they are biased towards university.</p> <p>The school curriculum focuses on university pathways at the expense of apprenticeships.</p>	<p>Automatically send young people pre-filled application forms (light-touch).</p> <p>Make applying for an apprenticeship the default for suitable young people (intensive).</p>

<p><b>4) Emphasise challenge and selectiveness of apprenticeships:</b></p> <p>Apprenticeships and traineeships suffer from stigma in Australia. Teachers, parents and students currently perceive them to be pathways for young people who are underachieving academically. While it is intuitive that promoting the accessibility of apprenticeships will make them appear more attractive, in practice this can backfire and exacerbate stigma. Instead, communicating the challenge and selectivity of this pathway can motivate suitable individuals to consider the additional development and learning that they will achieve, and increase the esteem of apprenticeships.</p>	<p>Parents are one of the greatest influencers of young people's career decision making, but they are biased towards university.</p> <p>Peer groups reinforce university as the 'normal' career choice for many young people.</p> <p>School-based careers advisors are a key source of information about career pathways, but unfamiliarity with apprenticeship pathways limits their ability to provide personalized advice to all students.</p> <p>The school curriculum focuses on university pathways at the expense of apprenticeships.</p>	<p>Promote the skills required to complete an apprenticeship (challenge framing).</p> <p>Use messaging to highlight that 'not everyone can be an apprentice' (selectivity framing).</p>
<p><b>5) Ensure that suitable young people have access to positive role models in the apprenticeships sector:</b></p> <p>Role models are not just a 'nice to have': unless a young person has a credible example of someone like them doing it, many career options won't even be considered as an option. Many potential role models for young people - such as teachers and career advisors - have pursued a university pathway. As a result many young people do not have access to positive role models who have completed apprenticeships. People who <i>have</i> completed apprenticeships often have a strong sense of identity, meaning they have the potential to act as positive role models for those considering or aspiring to apprenticeships.</p>	<p>The information young people do gather is biased to facts which confirm their existing preferences.</p> <p>Parents are one of the greatest influencers of young people's career decision making, but they are biased towards university.</p> <p>School-based careers advisors are a key source of information about career pathways, but unfamiliarity with apprenticeship pathways limits their ability to provide personalized advice to all students.</p>	<p>Send letters from successful apprentices and former apprentices to school students.</p> <p>Encourage current apprentices to visit schools and deliver inspirational speeches.</p> <p>Promote highly successful apprentices in media or awareness raising campaigns.</p>
<p><b>6) Provide meaningful information about apprenticeships that engages young people:</b></p> <p>There is currently a plethora of distinct websites which publish information about the labour market, future job projections,</p>	<p>When exploring alternatives to the university default, young people typically don't amass a large amount of information or weigh up all of their options.</p>	<p>Correct misperceptions about the financial outcomes of apprenticeships.</p> <p>Bring apprenticeships to life by providing</p>

<p>training pathways, and training providers. However, this information is not presented to engage young audiences, taking into account their needs and preferences. While many young people make career decisions informed by social and environmental influences, they still need access to high quality careers information.</p>	<p>When weighing their career options, young people pay special attention to short-term considerations.</p> <p>Small amounts of hassle are enough to make some sources of information functionally useless.</p> <p>Significant friction costs make good information about apprenticeships hard to obtain.</p> <p>Online information about career pathways will not attract young people unless it is relevant to what they care about.</p>	<p>young people information about levels of happiness and wellbeing.</p> <p>Set hard limits on information complexity, and enforce them.</p>
<p><b>7) Give parents and career advisors ‘just in time’ education about apprenticeships:</b></p> <p>Parents and careers advisors have a large influence on young people’s career choices, including their attitudes towards apprenticeships and traineeships. However, many young Australians feel that both careers advice in schools and parental pressure steer them towards a university pathway. Encouraging parents and career advisors to become more familiar with technical qualifications will ensure that they are equipped to advise young people about these pathways.</p>	<p>Parents are one of the greatest influencers of young people’s career decision making, but they are biased towards university.</p> <p>School-based careers advisors are a key source of information about career pathways, but unfamiliarity with apprenticeship pathways limits their ability to provide personalized advice to all students.</p> <p>Where schools do not actively support apprenticeships, young people have to rely on their own professional networks to find out about and pursue this pathway.</p>	<p>Provide information packages to parents when their child is in year 7.</p> <p>Provide ongoing learning for career advisors.</p>

**Table 2: How to encourage employers to hire apprentices?**

<p><b>What you could do (behavioural insights approaches)</b></p>	<p><b>Why is this important? (related key findings in Section 4 of this report)</b></p>	<p><b>To implement this you could...</b></p>
<p><b>1) Make it incredibly easy to hire an apprentice:</b></p>	<p>Employers don’t understand the system and how to hire</p>	<p>Reduce the number of websites providing</p>

<p>There is too much information about the apprenticeship system, too many ways to hire apprentices, and too many organisations involved, for the system to be easily navigable to time-poor employers. Many employers, particularly Small and Medium Enterprises, are overwhelmed and don't know where to start. Simplifying the system and proactively streamlining the information available is a necessary first step towards a manageable system.</p>	<p>apprentices, and even if they do, there's a lot of admin involved.</p>	<p>information about apprenticeships.</p> <p>Provide easy-to-access guidance and resources to employers.</p> <p>Establish a national clearing house, similar to the Australian Universities Admissions Centre.</p>
<p><b>2) Clearly explain the benefits of hiring an apprentice, but be honest about the challenges:</b></p> <p>To help employers overcome their negative perceptions of apprentices and tendency to focus on short term considerations, information should be provided to them which communicates the benefits of engaging an apprentice (for their business, the apprentice and the community). However it is critical that this information also acknowledges that employing an apprentice can be challenging and requires an investment from the employer. Information which appears one sided and to present apprenticeships too favourably will lack credibility, leading to reduced impact and possible backlash from employers.</p>	<p>The cost of hiring and training an apprentice is felt before the pay-offs.</p> <p>Employers have concerns about the quality of workers doing apprenticeships.</p>	<p>Highlight the benefits to the business of hiring an apprentice.</p> <p>Draw on altruism and highlight the benefits to young people and industry.</p> <p>Use case studies and peer examples to show how employers have faced and overcome challenges associated with hiring an apprentice.</p>

# 01 / Introduction

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## Purpose of the report

From April 2019 to June 2020 the Council of Australian Governments Education Council is undertaking a review of senior secondary pathways into work, further education and training. The review will provide the Education Council with advice on helping senior secondary students to better understand and make decisions about post-school pathways.

As part of the review, the Behavioural Insights Team (BIT) has been commissioned to conduct a behavioural science research project focusing on apprenticeships. The aims of the project are to: understand how young people develop perceptions of and make decisions about apprenticeships; understand how employers make decisions about the hiring of apprentices; and identify opportunities to increase the uptake of apprenticeships amongst well-suited young people.

The report applies a behavioural insights lens to these issues, and sets out practical and evidence-based behavioural insights approaches for how to increase the attractiveness of apprenticeships and encourage uptake among well-suited individuals.

First, the report outlines important behavioural and social influences on young people's decisions about whether to pursue an apprenticeship, and sets out a series of behavioural insights approaches to encourage more young people to pursue this pathway (see Sections 2 and 3 of this report for more information). The report then outlines behavioural and social influences on employers' decisions about hiring apprentices, and sets out behavioural insights approaches to encourage more employers to employ apprentices (see Sections 4 and 5 of this report for more information).

## Scope, methodology and limitations

### What's in scope in this report

BIT has undertaken an evidence review to answer the following research questions provided by the Review Panel:

1. How do young people assemble information and make decisions in relation to post-secondary school options and pathways?
2. How do young people explore and assess jobs and industries, including apprenticeships?
3. How do employers make decisions in relation to the engagement of apprentices?
4. Why and at what stage/s do young people take apprenticeships out of contention?

5. What information and approaches/interventions could be used to a) keep the option of apprenticeships open to students and b) increase the level of esteem/attractiveness attached to apprenticeships, presenting them as a first choice for well-suited individuals?

This report focuses heavily on the information gathering and decision making behaviours of young people and employers, and sets out behavioural insights approaches to improve the uptake of apprenticeships.

## Methodology

The report draws on Australian and international behavioural insights academic literature and government grey literature published within the last 10 years to explore the research questions outlined above. Academic articles were identified through a computerised literature search via Google Scholar, using relevant search terms to identify the most relevant literature. Government grey literature was sourced by the Behavioural Insights Team in addition to the material provided by the Education Council Review Panel Secretariat.

For a list of sources consulted please see Annex A: Bibliography.

## Limitations of the report

### **BIT did not do primary research**

The findings in this report are based on secondary evidence instead of new primary research, which limits the scope of the inquiry.

While the focus of this research is apprenticeship and traineeship pathways specifically, BIT also found that much of the available literature on how young people gather information and make decisions focuses on post-school pathways or vocational pathways more broadly. BIT has drawn on this research where it is relevant to formulating behavioural insights approaches in relation to apprenticeships and traineeships. Research suggests that the decision making processes of young people are similar in relation to all post-school pathways, and as a result many of the key findings and behavioural insights approaches in this report are also applicable to the vocational sector and other post-school pathways more broadly.

### **The report only focuses on behaviour change**

The apprenticeship system in Australia is complex, and behaviour is only one part of the equation when looking to increase the uptake of apprenticeships. Federal, state and territory governments have undertaken considerable work in recent years to improve the Australian vocational education sector including apprenticeships, often focusing on issues relating to

system structure and funding.<sup>14</sup> These issues are a vital component of the work that needs to be undertaken on apprenticeships in Australia, but are outside the scope of this report.

### **Young people are not a homogenous group**

The research focused on young people, broadly defined as secondary students in years 9 to 12, who are 15 - 19 years of age. While this report considers 'young people' as a whole throughout, BIT understands that young people are a heterogeneous population facing diverse issues relating to their age, sex and gender, racial and ethnic backgrounds, and social economic status, and has tried to understand these intersecting issues and how they relate to decisions about post-school pathways.

As set out below, the report finds that a range of behavioural and social factors influence young people's decision making about apprenticeships and traineeships. Where research indicates that the particular characteristics of young people are relevant, this is explained. Otherwise the report makes findings and sets out behavioural insights approaches which focuses on improving the perceptions of these pathways and their uptake amongst young people as a whole.

### **The behavioural insights approaches in this report will not change everyone's behaviour**

The behavioural insights approaches set out in this report need to be tested and anchored in the real experiences of young people and employers across Australia, and the detailed realities of the Australian apprenticeship system, which is outside the scope of this project.

The aim of these behavioural insights approaches is to change the behaviour of young people and employers in the 'moveable middle'. For some students, an apprenticeship will never be an appropriate choice. Equally, some young people will have always known they wanted to pursue a vocational pathway. Similarly for employers, some will never hire an apprentice, and some will already do it regularly. The behavioural insights approaches target the groups in between: suitable young people who might benefit from an apprenticeship but who do not consider this pathway or decide against it due to the reasons identified in this report, and employers who are open to the hiring of apprentices but find the current system too cumbersome to do so.

## **Background: apprenticeships and traineeships in Australia**

### **What's the problem?**

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<sup>14</sup> For example: Joyce, (2019). Strengthening skills: expert review of Australia's vocational education and training system; Nelms, Yuen, Pung, Farooqui, & Walsh. (2017), Factors affecting apprenticeships and traineeships.

Australia is currently experiencing a national skill shortage, with many trade roles in high demand. Despite this, the number of young people undertaking apprenticeships and traineeships has dropped significantly in recent years. Since 2012 the number of apprenticeship and traineeship commencements has dropped by over 58 percent.<sup>15</sup> A portion of this decline relates to system changes (such as removal of employer incentives and increase in apprentice pay rates).<sup>16 17</sup> However, there are also behavioural reasons for low rates of young people deciding to undertake apprenticeships and traineeships.

Apprenticeships and traineeships are being overlooked by many young people. For example, 56% of students do not consider an apprenticeship pathway when leaving school.<sup>18</sup> Under the current system, young people need to actively choose to undertake an apprenticeship (instead of pursuing a university pathway), and set up an apprenticeship themselves. However this poses a challenge as many young people report low understanding of these pathways.<sup>19 20</sup>

Young people's decisions are also shaped by their perceptions of apprenticeships. These perceptions vary by socioeconomic status, with one study finding that young Australians in the lowest quartile of socioeconomic status were four times more likely to want to be technicians and trade workers than those in the highest quartile of socioeconomic status (20.3% and 4.8% respectively).<sup>21</sup> In line with these career aspirations, people from a low socioeconomic status background are more likely to complete trade-based apprenticeships than those from a higher socioeconomic status background.<sup>22 23</sup>

However research suggests that the stigma around apprenticeships prevents some young people from evaluating apprenticeships objectively.<sup>24 25</sup> Many students have already developed negative perceptions of vocational pathways in early high school.<sup>26</sup> These negative perceptions of vocational pathways can cause apprenticeships to be taken out of contention before they are fully considered.

### Why should more young people choose apprenticeship and traineeship pathways?

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<sup>15</sup> NCVER. (2019). Historical time series of apprenticeships and traineeships in Australia: infographic.

<sup>16</sup> Ibid.

<sup>17</sup> Hargreaves, Stanwick, & Skujins. (2017). The changing nature of apprenticeships: 1996–2016.

<sup>18</sup> Shipley, & Stublely. (2018). After the ATAR II: Understanding How Gen Z Make Decisions About Their Future'.

<sup>19</sup> Ennis. (2018). Year13. Empowering young people to create their own future.

<sup>20</sup> Shipley & Stublely. (2018) After the ATAR II: Understanding how Gen Z make decisions about their future.

<sup>21</sup> Polesel, Leahy, & Gillis. (2017). Educational inequality and transitions to university in Australia: aspirations, agency and constraints.

<sup>22</sup> According to a modelling study using 1995-2006 data from the *Longitudinal Surveys of Australian Youth*.

<sup>23</sup> Karmel, Roberts & Lim. (2014). The impact of increasing university participation on the pool of apprentices.

<sup>24</sup> Education Council. (2019). The Review of Senior Secondary Pathways into Work, Further Education and Training Discussion Paper.

<sup>25</sup> Hargreaves & Osborne. (2017). Choosing VET: aspirations, intentions and choice.

<sup>26</sup> Ibid.

Apprenticeships and traineeships are promising options for young Australians, combining on-the-job training with formal, nationally recognised qualifications. Apprenticeships have good employment outcomes. For example, 87.7% of those who completed an apprenticeship in 2018 were employed in 2019, with a median income of \$59,600.<sup>27</sup> These high employment outcomes broadly exist across the spectrum of apprentices including male and female apprentices, young people living in major cities and rural areas, people from non-English speaking backgrounds, and Indigenous apprentices.<sup>28</sup> Those who completed apprenticeships are more likely to end up in jobs relevant to their training than those who attended university.<sup>29</sup> Young people undertaking apprenticeships also report higher levels of wellbeing than those in other post-school pathways.<sup>30</sup> Research also indicates that those who have completed an apprenticeship have a strong sense of occupational identity. For example, research suggests that completing an apprenticeship is associated with a strong sense of pride and young people's ability to articulate the value of their skills.<sup>31</sup>

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<sup>27</sup> NCVER. (2019). Australian vocational education and training statistics: Apprentice and trainee experience and destinations.

<sup>28</sup> Ibid.

<sup>29</sup> Skillsroad is an initiative of Apprenticeship Support Australia and the broader business chamber movement in Australia, to provide a one-stop, independent destination for students and job seekers, as well as their key supporters (parents, teachers and employers), to navigate the journey to a fulfilling career. In 2018, Skillsroad conducted the 2018 Youth Census Survey. Over 30,000 people aged 15-24 took part in the survey using an online survey tool.

<sup>30</sup> Apprenticeships Support Australia. (2019) Skillsroad.com.au 2018 Youth Census.

<sup>31</sup> Smith. (2016). Links between concepts of skill, concepts of occupation and the training system: A case study of Australia.

## Box 1: What are apprenticeships and traineeships?

Australia's apprenticeship and traineeship system combines paid employment with on-the-job and institutional training to provide apprentices with a nationally recognised qualification. Both apprenticeships and traineeships involve a registered legal training agreement, between an apprentice, an employer, and a registered training organisation (RTO).<sup>32</sup>

**Apprenticeships** form the foundation for a vocational career and take 3-4 years to complete. The majority of apprenticeships are in trade-based occupations, and qualifications are awarded at the Certificate III or Certificate IV level.

**Traineeships** typically take less than two years to complete. They cover a wider range of primarily service-focused industries (e.g. childcare, business, retail). They typically provide qualifications at the Certificate II or Certificate III level.<sup>33</sup>

**School based apprenticeships and traineeships:** School-based apprenticeships and traineeships (SBATs) are also available for Australian students aged 15 and over. Students are able to begin or complete a nationally recognised vocational qualification whilst completing their secondary school qualifications. Requirements for SBATs vary by state, and require coordination between the school, an employer, and an RTO.<sup>34</sup>

**Governance and funding structures:** Apprenticeships are delivered via an agreement between the Federal, State and Territory Governments, employers, and RTOs. Training plans and agreements must be in line with the *Australian Qualifications Framework*,<sup>35</sup> which is managed by the Federal Department of Education, Skills, and Employment.<sup>36</sup> State and territory governments are responsible for developing guidelines to ensure that qualifications, as well as employment arrangements during the apprenticeship, are suitable.<sup>37</sup>

**Ongoing reforms in the sector:** Federal, state and territory governments have undertaken significant work in recent years on improvements to the apprenticeships system and many reforms are underway or being planned. These include: initiatives to provide young people the opportunity to trial different industries;<sup>38</sup> financial incentives to employers for taking on apprentices;<sup>39</sup> scholarships for apprentices;<sup>40</sup> and reform to improve cross-jurisdictional cooperation and oversight of apprenticeships and traineeships.<sup>41</sup>

<sup>32</sup> Nelms et al. (2017), Factors affecting apprenticeships and traineeships

<sup>33</sup> Ibid.

<sup>34</sup> Australian Apprenticeships. (2019). Australian School-based Apprenticeships Fact Sheet.

<sup>35</sup> Nelms et al. (2017). Factors affecting apprenticeships and traineeships

<sup>36</sup> Australian Qualifications Framework.

<sup>37</sup> Nelms et al. (2017), Factors affecting apprenticeships and traineeships

<sup>38</sup> Apprenticeship Employment Network. (2019). MIP Overview.

<sup>39</sup> Australian Apprenticeships. (2019). Supporting Apprentices and their Employees.

<sup>40</sup> Australian Department of Education, Skills and Employment. (2020). Delivering Skills for Today and Tomorrow.

<sup>41</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

## 02 / How young people make decisions about apprenticeship and traineeship pathways

Young people's decisions about what to do after secondary school are the product of their internal psychology plus a set of external influences. In some cases this process results in a rational weighing-up of the relevant reasons for and against each option, but in most it falls short of that ideal, sometimes with unhappy consequences for the young people involved. Policymakers seeking to act in the apprenticeships system need to understand how changes they make translate to changed perceptions in young people and then into changed behaviour. This section of the report examines these influences in turn, with a focus on areas where decision making can go wrong, and areas where apprenticeships fare particularly poorly:

1. Psychology of the decision
2. Personal influencers on young people's career decision making
3. The impact of schools on career decision making
4. How available information affects young people's career decision making.

At the moment the net result of these influences is a hostile environment for proper consideration of apprenticeships. The bar for apprenticeships is set high by a system which treats university as the desirable default. Young people have a limited 'cognitive budget' of time, energy and attention to spend on investigating apprenticeships and traineeships. That budget is then largely squandered by information and resources which are unnecessarily cumbersome and don't speak to their core concerns. This results in many young people ruling out these options without ever actively considering whether they would be a suitable pathway.

### Psychology of the decision

#### Key findings on the psychology of the decision

- The biggest single influence on post secondary decisions is which option is seen as the norm or default - for most students that is university.
- When exploring alternatives to the university default, young people typically don't amass a large amount of information or weigh up all of their options.
- Small amounts of hassle are enough to make some sources of information functionally useless ('friction costs').
- The information young people do gather is biased to facts which confirm their existing preferences.
- When weighing their career options, young people pay special attention to short-term considerations ('present bias').

## Box 2: Why 'biases and heuristics' matter to post secondary pathways

Behavioural biases are useful for understanding how humans make real life decisions. This is because humans rarely make decisions with unrestricted access to complete information. In reality, decision making is limited by time, the information people have at hand and the cognitive limitations of people's minds.

As a result, people often make decisions based on 'heuristics'.<sup>42</sup> These are mental shortcuts or rules-of-thumb which help us process a large amount of information in our day to day lives, but can also lead to poor decision making in certain contexts. Biases arise in circumstances where heuristics systematically lead us astray - for example, the 'availability heuristic' helps us estimate probabilities based on how easily they can be brought to mind, but causes a bias where people overestimate the risk of rare but vivid events such as earthquakes or tornados.

There is growing physiological and psychological evidence that people's ability to engage in more deliberative decision making does not fully develop until young adulthood. This manifests in two key ways.<sup>43 44</sup> Firstly, young people are less likely to critically evaluate their options when making a decision. As a result young people are more vulnerable to risk-taking and impulsive behaviour compared to adults.<sup>45 46</sup> Secondly, young people rely on opportunistic sources of information such as friends, family and digital media, rather than assessing options on their own.<sup>47</sup>

Reliance on heuristics may be heightened for individuals of low socioeconomic status. These young people have increased pressures on their time and fewer resources leading to lower engagement in the decision making process,<sup>48 49</sup> and hence rely more on opportunistic sources of information.<sup>50</sup> The economic and emotional strain of financial hardship can also impair decision making, as people with scarcer access to resources tend

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<sup>42</sup> Heuristics are mental shortcuts which people adopt to solve problems and make judgments quickly and efficiently. These rule-of-thumb strategies aid decision-making and enable people to function without having to consciously deliberate about each course of action.

<sup>43</sup> Sunstein. (2008). Adolescent risk-taking and social meaning: A commentary.

<sup>44</sup> Arain, Haque, Johal, Mathur, Nel, Rais, ... & Sharma. (2013). Maturation of the adolescent brain.

<sup>45</sup> Steinberg. (2004). Risk taking in adolescence: what changes, and why?

<sup>46</sup> Steinberg. (2007). Risk taking in adolescence: new perspectives from brain and behavioral science.

<sup>47</sup> Viswanathan & Jain. (2013). A dual-system approach to understanding "generation Y" decision making.

<sup>48</sup> Greenbank & Hepworth. (2008). Working class students and the career decision-making process: A qualitative study.

<sup>49</sup> Dickinson. (2019). Choices that students make between different post-18 routes and whether these choices are effective and reliably informed: review of relevant literature and evidence.

<sup>50</sup> Usher. (1998). Income-Related Barriers to Post-Secondary Education, Council of Ministers of Education.

to invest time and energy into managing daily expenditures with less resources to focus on long term planning.<sup>51</sup>

Behavioural biases and heuristics often manifest as barriers to young people making well considered decisions about post-school pathways. However, consideration of these biases and heuristics by policy makers also presents an opportunity. Making small changes to the decision making architecture and information available to young people can significantly improve the way young people approach and make these decisions. Suggestions about how to do this are set out in the behavioural insights approaches sections of this report.

**Table 3: Behavioural biases and heuristics which influence how young people make decisions about post-school pathways**

Bias or heuristic	How this influences career decisions
Present bias	People overvalue immediate costs or rewards at the expense of their long-term intentions. <sup>52</sup> Young people's decisions and actions are particularly influenced by emotional and in-the-moment pressures rather than consideration of future outcomes. <sup>53</sup> This may make it harder for them to appreciate the temporally distant employment benefits that apprenticeships offer.
Confirmation bias	People seek out or evaluate information in a way that fits with their existing thinking and preconceptions. <sup>54</sup> If young people form negative attitudes towards apprenticeships, they will be less likely to seek or absorb information about apprenticeships in a neutral way.
Status quo bias	People are more likely to choose an option presented as the default or status quo. <sup>55</sup> University pathways are now perceived to be the default post secondary school option for young people, meaning that fewer young people will engage with vocational avenues.
Friction costs	Friction costs refer to small, seemingly minor details that make a task more effortful, and they have a disproportionately large effect on whether people complete a task. <sup>56</sup> As many young people have to proactively seek out information about apprenticeships, these friction costs might deter them from engaging with these avenues.
Familiarity principle	People tend to develop a preference for things simply because they are familiar. <sup>57</sup> Compared to other pathways, young people experience a lack of exposure to apprenticeships and vocational careers through personal and public channels.

<sup>51</sup> Adamkovič & Martončík. (2017). A review of consequences of poverty on economic decision-making: A hypothesized model of a cognitive mechanism.

<sup>52</sup> Green, Fry & Myerson. (1994). Discounting of delayed rewards: A life-span comparison.

<sup>53</sup> Ibid.

<sup>54</sup> Nickerson. (1998). Confirmation bias: A ubiquitous phenomenon in many guises.

<sup>55</sup> Jachimowicz, Duncan & Weber. (2016). Default-Rejection: The Hidden Cost of Defaults.

<sup>56</sup> Bettinger, Long, Oreopoulos, & Sanbonmatsu. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment.

<sup>57</sup> Zajonc. (2001). Mere Exposure: A Gateway to the Subliminal.

Social norms	The perception of what constitutes normal or desirable behaviour amongst one's social group has strong influences on behaviour. <sup>58 59</sup> As only a minority of people complete apprenticeships, completing or considering one may violate a 'norm' set by young people's social networks.
Choice overload	Having too many choices can make decisions more difficult, meaning that people make suboptimal decisions or postpone deciding entirely. As young people have to choose from hundreds of potential post-school pathways, they may be more prone to heuristics and are unlikely to consider all options.
Satisficing	Satisficing is a heuristic that involves choosing an option that meets a set of minimum standards, rather than continuing to search for an optimal choice. <sup>60</sup> In career decision making, this may mean selecting a pathway that satisfies a small number of criteria (e.g. years of study, salary) without searching for the best possible option.

### The biggest single influence on post secondary decisions is which option is seen as the norm or default

People tend to prefer the status quo, or in other words, to maintain the existing state of affairs.<sup>61</sup> This means that, even when other options are preferable, people may select the 'default' (i.e. the option that they were allocated). One meta-analysis exploring how defaults affect decision making found that default options are selected on average 23% more often (all else being equal).<sup>62</sup> This preference for defaults holds even when making important life decisions.<sup>63</sup>

University is increasingly represented as and perceived to be the 'default' post-secondary pathway for many young Australians,<sup>64</sup> to the exclusion of other pathways such as apprenticeships and traineeships. For example, one modelling study found that university participation directly displaces men who otherwise may have completed apprenticeships.<sup>65</sup>

One reason for the presentation of university as the default pathway is that young people's key influencers prioritise information about university. Many parents are more familiar with university career pathways and more confident in providing advice about these options, and

<sup>58</sup> Cialdini (2007). *Influence: The Psychology of Persuasion*.

<sup>59</sup> Deutsch & Gerard. (1955). A study of normative and informational social influences upon individual judgment.

<sup>60</sup> Bazerman & Moore. (2009). *Judgement in Managerial Decision Making*.

<sup>61</sup> Kahneman, Knetsch & Thaler. (1991). *Anomalies: The endowment effect, loss aversion, and status quo bias*.

<sup>62</sup> Jachimowicz, Duncan & Weber. (2016). *Default-Rejection: The Hidden Cost of Defaults*.

<sup>63</sup> For example, 77% of seriously ill patients accepted a 'comfort-oriented' end of life care regime when it was the default option, while only 43% of patients with a different default option chose it; Halpern & Loewenstein. (2013). *Default options in advance directives influence how patients set goals for end-of-life care*.

<sup>64</sup> Wyman, McCrindle, Whatmore, Gedge & Edwards. (2017). *Perceptions are not reality: myths, realities & the critical role of vocational education & training in Australia*.

<sup>65</sup> Karmel, Roberts, & Lim. (2014). *The impact of increasing university participation on the pool of apprentices*.

are therefore more likely to discuss them with young people.<sup>66</sup> Schools also provide advice which presents university as the default pathway. One recent review reported that a common complaint amongst stakeholders was an inbuilt bias against vocational pathways, with school systems pushing young people who may flourish in vocational pathways towards university.<sup>67</sup> Supporting this idea, a third of young Australians report never having heard about apprenticeship opportunities during school.<sup>68</sup>

The presentation of university as the default pathway means that some young Australians go to university sheerly because it is the 'status quo', with one study finding that almost 15% of young Australians who attended university did so because they didn't know what else to do, suggesting that they were 'going with the default'.<sup>69</sup>

### **When exploring alternatives to the university default, young people typically don't amass a large amount of information or weigh up all of their options ('satisficing')**

Young people need to choose between hundreds of potential post-school pathways.<sup>70</sup> Ideally, young people would consider the wide range of possible career options before identifying a profession that they wish to pursue. However, research finds that students do not utilise the type of rational approaches to career decision-making promoted by policymakers and the education system.<sup>71</sup> Instead of engaging in extensive information seeking processes before making career decisions,<sup>72</sup> they adopt a number of mental shortcuts to simplify their decision.

This is because comparing multiple career pathways is a complicated and cognitively demanding task. Young people experience choice overload, feeling overwhelmed by the range of pathways and no clear way to make sensible comparisons.<sup>73</sup> Research finds that choice overload is most likely to occur when people are faced with time constraints, complex choices, and a lack of expertise.<sup>74</sup>

To overcome this, research suggests that many young people simplify their decision by narrowing their scope to consider fewer options and compare them among a smaller set of

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<sup>66</sup> Demos. (2015). Commission on Apprenticeships Report.

<sup>67</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

<sup>68</sup> Bisson & Stublely. (2017). After the ATAR: Understanding How Gen Z Transition into Further Education and Employment

<sup>69</sup> Apprenticeships Support Australia. (2019) Skillsroad.com.au 2018 Youth Census.

<sup>70</sup> For example, even for those who choose to complete an apprenticeship must choose one of hundreds of potential qualifications; Australian Government Department of Education Skills and Employment. (2019). Australian Apprenticeships Incentives Program Appendix A - List of Australian Apprenticeships Incentives Qualifications as at 1 July 2019.

<sup>71</sup> Greenbank. (2014). Career decision-making: 'I don't think twice, but it'll be all right'.

<sup>72</sup> Dickinson. (2019). Choices that students make between different post-18 routes and whether these choices are effective and reliably informed: review of relevant literature and evidence. Final Report, May 2019.

<sup>73</sup> The Careers & Enterprise Company. (2016). A response to the Moments of Choice research: a programme to support informed choice.

<sup>74</sup> Chernev, Böckenholt & Goodman. (2015). Choice Overload: A Conceptual Review and Meta-Analysis.

attributes (e.g. salary, availability at local college, cost of the course)<sup>75</sup> until a minimum standard of acceptability is met.<sup>76</sup>

### **Small amounts of hassle are enough to make some sources of information functionally useless ('friction costs')**

As apprenticeships and traineeships are not promoted equally compared to academic pathways, young people and their parents have to proactively seek out information about these avenues. Online careers information is often incomplete, fragmented across different websites, and difficult to navigate.<sup>77</sup> As a result, interested students may have difficulty accessing information about these pathways. These barriers that make a process more effortful are known as friction costs,<sup>78</sup> and they have a disproportionately large effect on whether people complete a task.

### **The information young people do gather is biased to facts which confirm their existing preferences ('confirmation bias')**

People tend to seek, interpret, prioritise, and remember information which confirms one's prior beliefs. This mental shortcut is known as confirmation bias.<sup>79</sup> Confirmation bias may impact young peoples' consideration of apprenticeships. Many young Australians report low understanding<sup>80</sup> and negative perceptions<sup>81</sup> of the value of apprenticeships by the time they start seeking career information. Furthermore, in many educational contexts, apprenticeships are less common and therefore unfamiliar, or are not presented with equal representation compared to university pathways.<sup>82</sup> This means that young people may be less likely to seek, or may devalue or dismiss information about apprenticeships and traineeships.

Research from the UK shows that young people demonstrate confirmation bias in their information seeking behaviour, choosing a pathway based on an array of factors and then sourcing information to support it.<sup>83</sup> BIT's qualitative research on how young people make career decisions in the UK found that students in their final years of high school already had a career in mind and spent most of their time researching the qualifications needed to achieve that goal.<sup>84</sup>

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<sup>75</sup> Department of Business, Innovation and Skills. (2012). Tracking the decision making of high achieving HE applicants.

<sup>76</sup> Bazerman & Moore. (2009). Judgement in Managerial Decision Making.

<sup>77</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

<sup>78</sup> Hallsworth, Halpern, Algate, Gallagher, Nguyen, Ruda, ... & Reinhard. (2014). EAST Four simple ways to apply behavioural insights.

<sup>79</sup> Plous. (1993). The Psychology of Judgment and Decision Making.

<sup>80</sup> Shipley & Stublely. (2018). After the ATAR II: Understanding how Gen Z make decisions about their future.

<sup>81</sup> NSW Government, Department of Industry & Year13 Post-School Pathways Survey. Research Reports Findings and Conclusions. 2019

<sup>82</sup> City & Guilds Centre for Skills Development. (2011). New Directions: Young people's and parents' views of vocational education and careers guidance

<sup>83</sup> Dickinson. (2019). Choices that students make between different post-18 routes and whether these choices are effective and reliably informed: Review of relevant literature and evidence.

<sup>84</sup> Moments of choice. (2016). The Behavioural Insights Team.

Confirmation bias also affects the information-seeking behaviour of career-choice influencers such as parents and career advisers. A disproportionate percentage of these influencers undervalue apprenticeships and traineeships compared to university,<sup>85</sup> because they have less lived experience of these pathways.<sup>86</sup>

### When weighing their career options, young people pay special attention to short-term considerations ('present bias')

Evidence from neuroscience has found that young people are vulnerable to momentary influences in decision making and consider future outcomes less than adults.<sup>87 88</sup> The tendency to overweight immediate payoffs relative to those which are further away in time is known as present bias. This behavioural bias explains why many people would prefer to receive \$10 today than receive \$15 in a week's time.<sup>89</sup> Present bias has important implications for career decisions, as people tend to place less value on consequences which occur further away in time.

Present bias is a universal phenomenon, with university students from 53 countries (including Australia) demonstrating some degree of present bias when making decisions about hypothetical monetary decisions.<sup>90</sup>

When applied to decisions about post-school pathways, the existence of present bias means that young people may not be focusing on or developing their long term goals, and may instead overweight short term costs or benefits. This may be a problem in this cohort - with key considerations for young Australians seeking apprenticeships being , finding an apprenticeship, balancing work and study, and low training salaries, all relatively short term considerations.<sup>91</sup> Young people from low income backgrounds may be particularly present biased, placing greater emphasis in the immediate costs of post-school training, and undervaluing the future earnings that could be unlocked by gaining these qualifications.<sup>92</sup>

## Personal influencers on young people's career decision making

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<sup>85</sup> Wyman, McCrindle, Whatmore, Gedge, & Edwards. (2017). Perceptions are not reality: myths, realities & the critical role of vocational education & training in Australia.

<sup>86</sup> Roksa & Potter. (2011). Parenting and academic achievement: Intergenerational transmission of educational advantage.

<sup>87</sup> Blakemore & Choudhury. (2006) Development of the adolescent brain: implications for executive function and social cognition.

<sup>88</sup> Loewenstein & Elster. (1992). Choice over time.

<sup>89</sup> O'Donoghue & Rabin. (1999). Doing it now or later.

<sup>90</sup> Wang, Rieger & Hens. (2016). How time preferences differ: Evidence from 53 countries.

<sup>91</sup> Apprenticeships Support Australia. (2018) Skillsroad.com.au 2017 Youth Census.

<sup>92</sup> Usher. (1998). Income-Related Barriers to Post-Secondary Education, Council of Ministers of Education.

### Key findings on personal influencers on young people's career decision making

- Parents are one of the greatest influencers of young people's career decision making, but they are biased towards university.
- Peer groups reinforce university as the 'normal' career choice for many young people.

Young people's parents and peers are key influencers on how they seek information and make decisions about post-school pathways. Both these influencers discourage young people from undertaking apprenticeships by reinforcing university as the default pathway. This is done both explicitly and implicitly as outlined below.

### Parents are one of the greatest influencers of young people's career decision making, but they are biased towards university

Parents are influential, and play key roles in young people's career choices and attitudes to vocational pathways. Having a parent in a similar profession is a predictor of career aspirations for many young Australians.<sup>93</sup> This influence exists across different cultural groups.<sup>94</sup>

Parents are seen by many young people as trusted advisors, and well informed parents can play a beneficial role in shaping young people's decisions about post-school pathways. Young Australians perceive their parents as a better source of advice than friends or online sources, with 76% of young people reporting that they would go to their parents for career advice because they believed their parents had their best interests at heart.<sup>95</sup>

However, many parents have a preference for university pathways. A recent survey found that 79% of Australian parents have a preference for university over vocational training pathways.<sup>96</sup> In a separate survey, 32% of parents believed that university was the best career option for their child, while only 7% nominated vocational education, and 6% an apprenticeship or traineeship.<sup>97</sup> These findings are supported by research from the UK which found that 92% of parents approve of apprenticeships in general, while only 32% approved of their own child pursuing this pathway.<sup>98</sup>

<sup>93</sup> Gore, Holmes, Smith, Fray, McElduff, Weaver & Wallington. (2017). Unpacking the career aspirations of Australian school students: towards an evidence base for university equity initiatives in schools.

<sup>94</sup> Akosah-Twumasi, Emeto, Lindsay, Tsey & Malau-Aduli. (2018). A Systematic Review of Factors That Influence Youths Career Choices—the Role of Culture.

<sup>95</sup> Ennis. (2018). Year13. Empowering young people to create their own future.

<sup>96</sup> Wyman, McCrindle, Whatmore, Gedge & Edwards. (2017). Perceptions are not reality: myths, realities & the critical role of vocational education & training in Australia.

<sup>97</sup> Shipley & Stubley. (2018). After the ATAR II: Understanding How Gen Z Make Decisions About Their Future.

<sup>98</sup> However, parents who had completed an apprenticeship were more likely to prefer that pathway for their child. Demos. (2015). Commission on Apprenticeships Report.

This bias towards university suggests that parents are not giving their children balanced advice about post-school pathways. Many Australian students report feeling pressure from their parents to attend university.<sup>99</sup> Similarly, while around 90% of young people report that their parents have expressed positive views about university, around 40% said they had never discussed apprenticeships with their parents.<sup>100</sup>

### Peer groups reinforce university as the 'normal' career choice for many young people

Research suggests that peers are another important influence on young people's career decisions.<sup>101 102</sup> The influence of peers has been shown to be important, even where students self-report it as low.<sup>103</sup>

One reason for the high level of influence of peers is because perception of social norms, or what constitutes 'normal' behaviour amongst one's social group, can have a strong influence on behaviour.<sup>104</sup>

Far fewer young people pursue apprenticeships and traineeships than attend university. Australian students who complete Year 12 are almost ten times as likely to begin a Bachelor's degree than an apprenticeship (50.6% vs 5.7%, as of 2018).<sup>105</sup> This means that young people's perceptions of what is 'normal' may exclude apprenticeships and traineeships.

These trends can be self-perpetuating: if most people in a peer group go to university, an individual is breaking an unspoken rule by deviating from the norm of university to pursue an apprenticeship or traineeship.

## The impact of schools on career decision making

### Key findings on the impact of schools on career decision making

- The school curriculum focuses on university pathways at the expense of apprenticeships.
- School-based careers advisors are a key source of information about career pathways, but unfamiliarity with apprenticeship pathways limits their ability to provide personalized advice to all students.

<sup>99</sup> Apprenticeships Support Australia. (2019) Skillsroad.com.au 2018 Youth Census.

<sup>100</sup> Ennis. (2018). Year13. Empowering young people to create their own future. Year13.

<sup>101</sup> Howard, Ferrari, Nota, Solberg, & Soresi. (2009). The relation of cultural context and social relationships to career development in middle school.

<sup>102</sup> Cheung & Arnold. (2014). The impact of career exploration on career development among Hong Kong Chinese University students.

<sup>103</sup> City & Guilds Centre for Skills Development. (2011). New Directions: Young people's and parents' views of vocational education and careers guidance

<sup>104</sup> Cialdini. (2007). Influence: The Psychology of Persuasion.

<sup>105</sup> Social Research Centre. (2018). NSW Secondary Students' Post-School Destinations and Expectations 2018 Main Destination findings.

- Where schools do not actively support apprenticeships, young people have to rely on their own professional networks to find out about and pursue this pathway.

Schools are a key influence on how young people seek information and make decisions about post school pathways. However, many schools present university as the default options and do not actively promote apprenticeship pathways. Preconceptions exist within schools in relation to the ‘types’ of people who choose vocational education and training, particularly that vocational pathways are for people who perform poorly academically. One study found that teachers are more likely to suggest apprenticeships to young people who are not performing well, compared to those performing at a high level.<sup>106</sup> Careers advisers also lack knowledge of apprenticeship pathways, limiting their ability to inform students of these options.

### **The school curriculum focuses on university pathways at the expense of apprenticeships**

In Australia, the focus of study in many schools, particularly in year 11 and 12, is the ATAR - the university entrance exam, meaning that many young people are provided less opportunity to explore other pathways including apprenticeships and traineeships. One survey found that students in year 10 have a similar level of understanding of university and apprenticeship pathways, but that this gap widens significantly as students move into their final years of high school and focus their attention on completing ATAR subjects.<sup>107</sup>

While some schools offer school-based apprenticeships, this same survey found that overall 43% of respondents were either not sure whether their school offered school based apprenticeships, or knew that it did not. This could suggest that even if they are offered, school based apprenticeships are not always actively promoted within schools.

A lack of school support for apprenticeships is more prominent in the city than rural areas, with the same survey conducted a year earlier finding that 71% of students in rural areas reported that their school offered school-based apprenticeships.<sup>108</sup> However, the evidence suggests that many schools prioritise study to support university pathways over apprenticeships and traineeships.

### **School-based careers advisors are a key source of information about career pathways, but unfamiliarity with apprenticeship pathways limits their ability to provide personalised advice to all students**

School based careers advisors are a strong influence when young people are choosing post-school pathways.<sup>109</sup> One reason for this is that young people prefer careers information

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<sup>106</sup> Karmel. (2017). Research Report 3/2017, Factors affecting apprenticeships and traineeships.

<sup>107</sup> Bisson & Stublely. (2017). After the ATAR: Understanding How Gen Z Transition into Further Education and Employment.

<sup>108</sup> Ibid.

<sup>109</sup> Whiston, Li, Mitts & Wright. (2017). Effectiveness of career choice interventions: A meta-analytic replication and extension.

when it is accompanied by face-to-face support and advice.<sup>110</sup> Research also suggests that information is also most effective when accompanied by personalised advice and mentoring.

<sup>111</sup> <sup>112</sup>

However, while career advisors are relatively common in Australian schools,<sup>113</sup> the quality of advice provided varies, with one study finding that 76% of young people thought they needed more personal careers advice.<sup>114</sup> Many careers advisors do not have the tools to personalise advice and direct young people to the most suitable pathways. One reason for this may be that careers advisors and teachers are often less familiar with vocational pathways, making it difficult to identify the appropriate pathway for aspiring apprentices and trainees.<sup>115</sup> In a recent survey, a third of young Australians reported never hearing about (29%) or feeling that they were discouraged from pursuing (9%) apprenticeship opportunities during school.<sup>116</sup>

The timing of career advice can also pose an issue. In Australia, subject selection has a significant influence on the career options available to students after school.<sup>117</sup> However, over 60% of Australian year 9 students reported not having any career advice when making subject selection.<sup>118</sup> Information which is provided after subject selection may not allow sufficient time or opportunity for students to make the necessary prior investments to keep technical pathways open.

### **Where schools do not actively support apprenticeships, young people have to rely on their own professional networks to find out about and pursue this pathway**

Where school curricula and careers advisers do not actively promote apprenticeships, young people have to proactively seek out information about these pathways, making it more difficult for young people to identify pathways to an apprenticeship or traineeship. This may be especially challenging for young people who do not have pre-developed networks in their chosen sector. In a study with female Australian apprentices, only around half of apprentices reported that finding an apprenticeship place was easy, with around a third finding it difficult. Of those that found the process easy, they most frequently said it was easy because they

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<sup>110</sup> Hughes. (2017). User insight research into post-16 choices: a report by CFE Research with Deirdre Hughes.

<sup>111</sup> Bettinger, Long, Oreopoulos, & Sanbonmatsu. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment.

<sup>112</sup> Carrell & Sacerdote. (2013). Why Do College Going Interventions Work?

<sup>113</sup> In an inquiry into career advice decisions in Victorian schools, the majority of young people reported that they had an interview with a career or guidance counselor (63.04%) and nearly half (45.05%) reported that they had developed a career plan; Parliament of Victoria Economic, Education, Jobs and Skills Committee. (2018). Inquiry into career advice activities in Victorian schools Online survey summary report.

<sup>114</sup> Ennis. (2018). Year13. Empowering young people to create their own future.

<sup>115</sup> Polesel, Leahy & Gillis. (2017). Educational inequality and transitions to university in Australia: aspirations, agency and constraints.

<sup>116</sup> Bisson & Stublely. (2017). After the ATAR: Understanding How Gen Z Transition into Further Education and Employment.

<sup>117</sup> Education Council. (2019). The Review of Senior Secondary Pathways into Work, Further Education and Training Discussion Paper.

<sup>118</sup> Galliot & Graham. (2015). School based experiences as contributors to career decision-making: Findings from a cross-sectional survey of high-school students.

were offered an apprenticeship with a current employer (23%), had relevant contacts (20%), or had previous work experience (11%).<sup>119</sup> A 2019 survey found that the most common place that young people heard about apprenticeships before commencing this pathway was from their employer.<sup>120</sup>

## How available information affects young people's career decision making

### Key findings on how available information affects young people's career decision making

- Significant friction costs make good information about apprenticeships hard to obtain.
- Online information about career pathways will not attract young people unless it is relevant to what they care about.

The way information is presented influences how people make decisions. This is called 'choice architecture'. Seemingly trivial variations in presentation such as the number of choices presented,<sup>121</sup> the words used to label them,<sup>122</sup> and the presence of a default,<sup>123</sup> all have an influence on the choices people make.

Choosing the right post-school pathway is a complicated decision for young people. This decision is made harder for young people seeking information about apprenticeships, which is often poorly organised, difficult to navigate and presented either too early or too late. Poor choice architecture influences the ways in which suitable young people search for and interpret information, and may lead to some young people disengaging with the process and taking apprenticeships and traineeships out of contention.

### Significant friction costs make good information about apprenticeships hard to obtain

When people are presented with too many options about post-school pathways they can experience choice overload, artificially narrowing their search for information or becoming

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<sup>119</sup> Quay Connection. (2014). Ducks on the Pond: Women in Trade Apprenticeships.

<sup>120</sup> NCVET. (2019). Apprenticeship and Trainee Experience and Destinations.

<sup>121</sup> Scheibehenne, Greifeneder, & Todd. (2010). Can there ever be too many options? A meta-analytic review of choice overload.

<sup>122</sup> Besson, Bouxom & Jaubert. (2020). Halo It's Meat! the Effect of the Vegetarian Label on Calorie Perception and Food Choices.

<sup>123</sup> Jachimowicz, Duncan, Weber & Johnson. (2019). When and why defaults influence decisions: A meta-analysis of default effects.

disengaged.<sup>124 125 126</sup> While good systems increase navigability of information, poorly designed systems make it more difficult for young people to find the information they need.

The current system of online careers information is not supporting young people to make optimal decisions about post-school pathways. Australian government agencies and educational organisations host a plethora of distinct websites which publish information about the labour market, future job projections, training pathways, and training providers.<sup>127</sup> Despite the abundance of information, school students find it challenging to source clear and accurate information about technical pathways in Australia.<sup>128</sup>

One reason for this is that the online information is often incomplete, fragmented across different websites, and difficult to navigate.<sup>129</sup> There are numerous federal,<sup>130</sup> state and territory,<sup>131</sup> and organisational/affiliated<sup>132</sup> websites that seek to help young people explore post-school options.<sup>133</sup> Additionally, students may need to navigate between information provided by multiple service providers and organisations including Apprenticeship Network Providers, Group Training Organisations, Registered Training Organisations, Job and Career Services, and Government Services. The Productivity Commission described online careers information in Australia as carrying “the risk of a confusing maze of information.”<sup>134</sup>

### Online information about career pathways will not attract young people unless it is relevant to what they care about

When considering post-school pathways, young people consider practical considerations, as well as things they will enjoy or are passionate about.

One key practical consideration for young people is salary. As noted above, present bias means that concerns about low wages are prominent in relation to apprenticeships and traineeships, with 43% of respondents stating that their biggest concern with undertaking an apprenticeship was the pay.<sup>135</sup> This issue is particularly relevant in the first two years of an apprenticeship when wages are less attractive than many semi-skilled and unskilled

<sup>124</sup> Gourville & Soman. (2005). Overchoice and assortment type: When and why variety backfires.

<sup>125</sup> Department of Business, Innovation and Skills. (2012). Tracking the decision making of high achieving HE applicants.

<sup>126</sup> Norton & Cherastidtham. (2018). Dropping out: the benefits and costs of trying university.

<sup>127</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

<sup>128</sup> Gore, Ellis, Fray, Smith, Lloyd, Berrigan, ... & Holmes. (2017). Choosing VET: Investigating the VET Aspirations of School Students; Hargreaves & Osborne.

<sup>129</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

<sup>130</sup> For example: Australia Government, Job Smart, <https://www.jobjumpstart.gov.au/article/working-out-what-do-after-finishing-school>.

<sup>131</sup> For example: Skilled Careers, <https://www.skills.sa.gov.au>; Queensland Skills Gateway, <http://skillsgateway.training.qld.gov.au>, NSW Government, Vocational Education and training, <https://vet.nsw.gov.au/>, NSW Government Smart and Skilled, <https://smartandskilled.nsw.gov.au/>.

<sup>132</sup> For example: Australian Apprenticeships, <https://www.australianapprenticeships.gov.au>, Skills Road, <https://www.skillsroad.com.au>.

<sup>133</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

<sup>134</sup> Australian Productivity Commission. (2017). Shifting the dial: 5 year productivity review.

<sup>135</sup> Apprenticeships Support Australia. (2019). Skillsroad.com.au 2018 Youth Census.

occupations.<sup>136</sup> For young people who are concerned about finances, this may make the attractiveness of apprenticeships, relative to employment, especially unappealing. However, apprenticeships have good graduate earning potential, with one study finding that some apprenticeship pathways earn comparable salaries to university graduates.<sup>137</sup>

Information about earning potential for apprenticeships and traineeships is not always communicated to young people, deterring them from these pathways. In one survey, 56% of respondents said they would have considered apprenticeships if they had known about the financial position of university graduates relative to apprentices (incorporating both graduate earnings and university debt).<sup>138</sup>

Another key concern for young people when making a decision about post-school pathways more broadly, is the potential for social and personal growth, and how much they will enjoy a particular profession. A recent survey found that 96% of young Australians listed enjoyment as one of the most important factors when considering a career, while only 70% listed salary.<sup>139</sup> This same study found that young people measured success in terms of happiness (91%) and the pursuit of passion (76%), while only 30% valued having lots of money.<sup>140</sup> Australian careers websites tend not to reflect these additional priorities of young people. For example, the *My Skills* website compares different courses by course cost, duration, and employability.<sup>141</sup> While the *Job Outlook* website compares different careers based on pay, projected future job prospects and skill level required.<sup>142</sup>

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<sup>136</sup> Karmel. (2017). Factors affecting apprenticeships and traineeships.

<sup>137</sup> Shipley & Stublely. (2018). After the ATAR II: Understanding How Gen Z Make Decisions About Their Future.

<sup>138</sup> Ibid.

<sup>139</sup> Ibid.

<sup>140</sup> Ibid.

<sup>141</sup> Australian Government, My Skills, <https://www.myskills.gov.au/>.

<sup>142</sup> Australian Government, Job Outlook, <https://joboutlook.gov.au/>.

## 03 / Behavioural insights approaches: encouraging well-suited young people to undertake apprenticeships

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Behavioural biases and heuristics mean that young people do not undertake extensive searches for information about post-school pathways, instead narrowing their search parameters early based on what is most familiar to them or what appear to be the status quo, and looking for information that reinforces these ideas. In addition, young people are heavily influenced by the views of their parents and peers, and advice received in school, when making decisions about post-school pathways. These factors most commonly push young people towards university pathways.

This report sets out 7 evidence based behavioural insights approaches for the Education Council, to increase the esteem of apprenticeships and traineeships, and encourage their uptake amongst well-suited young people.

Behavioural insights approaches:

1. Identify students who might be suited to an apprenticeship - and do it early
2. Ensure that all suitable young people actively consider apprenticeships
3. Change the default pathways to include apprenticeships and traineeships
4. Emphasise challenge and selectiveness of apprenticeships
5. Ensure that suitable young people have access to positive role models in the apprenticeships sector
6. Provide meaningful information that engages young people
7. Give parents and career advisors 'just in time' education about apprenticeships.

The aim of these behavioural insights approaches is to change the behaviour of students in the 'moveable middle'. For some students, an apprenticeship will never be an appropriate choice. Equally, some young people will have always known they wanted to pursue a vocational pathway. The behavioural insights approaches identified in this report target the group in between: suitable young people who might benefit from an apprenticeship, but who do not consider this pathway or decide against it due to the reasons identified above.

It is also important to note that these behavioural insights approaches do not aim to encourage young people to undertake apprenticeships to the exclusion of other pathways or to close off other options. The aim is to even the playing field with the current default option (university), and give suitable young people the information and assistance they need to make an informed choice about whether they want to pursue an apprenticeship.

## 1) First, identify students who might be suited to an apprenticeship — and do it early

Not all young people are well-suited to apprenticeships. This presents a problem when it comes to getting those who *are* suited into an apprenticeship: how do you give them the information and intensive guidance needed, without wasting the time of students who will never consider an apprenticeship? The key points of decision for young people are year 10 and year 12. Early effort invested in identifying those with some level of interest and suitability could reap large benefits.

Research has not uncovered clear evidence for the optimal time to engage with young people. However, most young people start thinking about their careers in years 9 or 10 (36.6%), 27% start to consider their options in years 11-12, and some as early as year 7 (13%). For those who pursue an apprenticeship or traineeship, most report that they made this decision either after school finished (38%) or during year 10 (21%).<sup>143</sup>

It is important to target young people in the early years of high school when they start thinking about their options. As most young people start to think about their careers in years 9 onwards, this is a good time to engage them in apprenticeship pathways. As a result many of the behavioural insights approaches in this report specify they are for students in year 9 onwards. Some are also highlighted as being suitable from year 7 onwards.

Behavioural insights approaches 2 to 7 in this report will have maximum impact if they can be targeted to well-suited young people identified through the methods suggested below. You could:

- **Just ask them.** A simple way to identify young people well-suited to an apprenticeship is to ask them. BIT recommends that teachers or careers advisors actively ask young people about their interest in apprenticeships as early as in year 7. The question should be paired with some basic information about the different kinds of apprenticeship programs and vocational careers available. This will capture young people with an explicit interest in apprenticeships at an early stage in their schooling.
- **Conduct a discovery activity during school time in year 9 to target future interventions.** At a minimum it may be enough to ‘just ask’ students as this will capture students with predetermined interest in apprenticeships, however some students will likely need additional prompting. Schools should also use discovery tools to assess students’ interests, influencers, and ability. Using a discovery tool would allow schools to identify young people that are appropriate for apprenticeships, who might not have formulated an explicit interest in this pathway. For example, some primary schools in Winnipeg Canada offer ‘discovery days’ to promote interest in

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<sup>143</sup> Apprenticeships Support Australia. (2019) Skillsroad.com.au 2018 Youth Census.

medical science careers amongst inner city Aboriginal and disadvantaged youth.<sup>144</sup> These events provide students the opportunity to interact with health professionals including occupational therapists, laboratory technicians, and nurses in their research laboratories and clinical settings.<sup>145</sup> Vocational ‘discovery days’ could be introduced into school curricula to offer students the opportunity to explore hands-on learning in apprenticeships sectors with local professionals.<sup>146</sup> Suitable educators such as design and technology teachers could then proactively follow up with the most engaged students. Psychometric tests such as vocational assessment tools should also be implemented at scale in year 9 to identify students with interests or aptitudes well-suited to apprenticeship and traineeship pathways. These could either be short career interest reference tools such as The Job Outlook Career Quiz,<sup>147</sup> or more comprehensive vocational assessment tools. The selected tools should be validated to ensure that they reliably assess and predict suitable careers for young people. For example, the STEM Semantic Survey and the Career Interest Questionnaire are measures for determining attitudes towards STEM.<sup>148</sup>

- **Use a ‘purpose for learning’ exercise.** Purpose for learning exercises involve asking young people to generate and define their own reasons for achieving a goal.<sup>149</sup> The intervention works by getting participants to consider their own ‘self-transcendent’ motivation for learning i.e. a motivation that goes beyond self-interest and relates to helping people or the world. It is based on the premise that people are more inclined to respond to their own argument in favour of carrying out a particular behaviour, than to someone else’s instruction. Studies have demonstrated that purpose for learning exercises improve persistence and motivation in the short term, and can have a positive effect on educational attainment measured several months later.<sup>150</sup> Students identified as being well-suited to an apprenticeship could be given an overnight assignment in year 9: to write a short essay reflecting on their reasons for pursuing this pathway. As a result they will be required to actively contemplate the relevance of this pathway for their own lives.

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<sup>144</sup> Amara. (2012). A Canadian Medical School in Partnership with an Inner City School Division and Community Organization to Promote Interest in Science to Aboriginal and Disadvantaged Youth: Plugging the First Leakage in the Medical Pipeline.

<sup>145</sup> Parents report that the ‘discovery days’ have a high impact on observable interests of their children in healthcare careers, and they form part of a wider suite of interventions which have been evaluated to be effective at promoting interest in health care professions.

<sup>146</sup> For example, Dunalley Primary School in Tasmania offers a boat building program for year 6 students with a local shipwright.

<sup>147</sup> Australian Government, Job Outlook: Career Quiz, <https://joboutlook.gov.au/careerquiz>.

<sup>148</sup> Tyler-Wood, Knezek, & Christensen, R. (2010). Instruments for assessing interest in STEM content and careers.

<sup>149</sup> Priniski, Hecht, & Harackiewicz. (2018). Making learning personally meaningful: A new framework for relevance research.

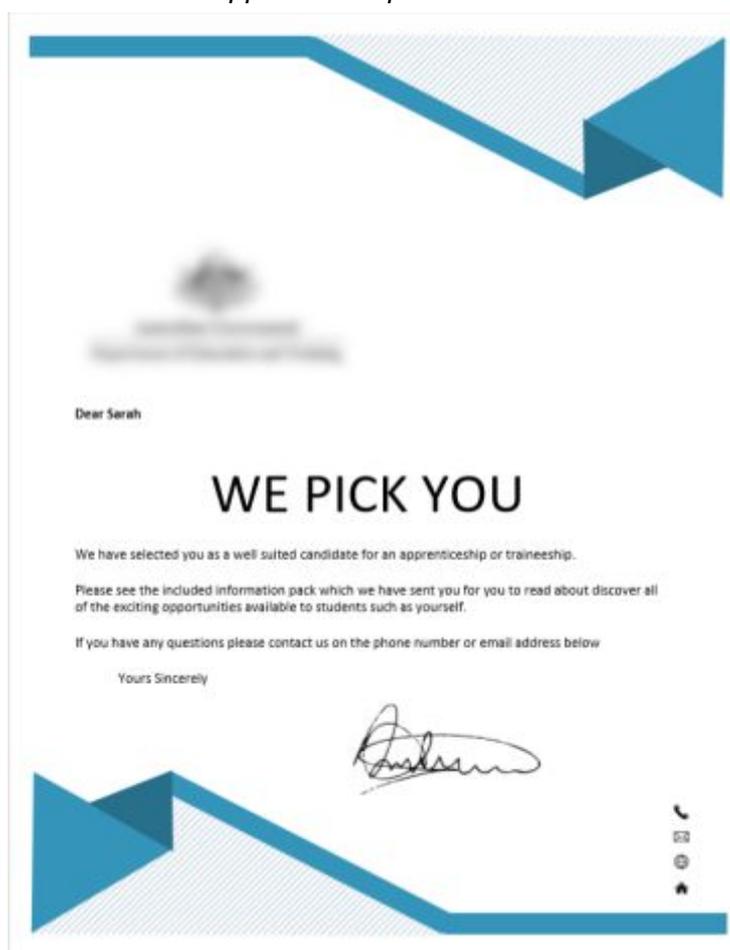
<sup>150</sup> Yeager, Henderson., Paunesku, Walton, D'Mello, Spitzer & Duckworth. (2014). Boring but important: A self-transcendent purpose for learning fosters academic self-regulation.

## 2) Ensure that all suitable young people actively consider apprenticeships

People tend to develop a preference for things the more familiar they are with them. Compared to other pathways, young people lack exposure to apprenticeships and vocational careers though personal and public channels. To overcome this, suitable young people should be 'opted in' to interventions which provide greater exposure to apprenticeships, ensuring that suitable they are required to *actively* consider apprenticeships. This could either be done in a light touch or more intensive way. You could:

- **Provide information by default (light touch).** Directly providing information about apprenticeships and traineeships by default will reduce the burden on young people of having to source this information online. Information and application forms about local apprenticeship opportunities should be provided to all well-suited young people in year 9. You could also opt suitable young people into an information session with their school careers advisor about apprenticeships, as young people find information delivered face-to-face more engaging.

*Figure 1. A mock letter exemplifying how information could be provided by default to young people identified as well-suited to apprenticeships.*



- **Require all suitable young people complete an apprenticeship or traineeship work experience placement (intensive).** Work experience is an effective way of conveying information about post-school pathways as it provides an opportunity for young people to get a snapshot of what it would be like to work in various professions, helping them make informed choices.<sup>151 152</sup> Research also suggests that being exposed to a range of vocational occupations increases the desirability of these pathways. For example, as part of the Multi Industry School Based and Pre-Apprenticeship Support Pilot Project, over 2200 young people were given the opportunity to trial a range of vocational occupations.<sup>153</sup> This showed promise as a way of increasing the desirability of apprenticeships. The proportion of respondents reporting that they would consider undertaking an apprenticeship or traineeship increasing from 77-92%.<sup>154</sup> Well-suited young people could be opted in to a range of vocational work experience opportunities including ‘work-tasters’, job-shadowing opportunities and longer formal placements.<sup>155</sup>

### 3) Change the default pathways to include apprenticeships and traineeships

Apprenticeships and traineeships are not currently presented as the default post-secondary pathway for suitable students. Switching the default from university so that well-suited young people automatically apply for apprenticeships and traineeships will increase the likelihood of suitable young people engaging with this route. It might also increase the esteem of apprenticeships and traineeships over time, as defaults can communicate an *endorsement* from the education system.<sup>156</sup> You could:

- **Automatically send young people pre-filled application forms (Light-touch).** Suitable young people should receive pre-filled application forms for apprenticeships and traineeships by default. Pre-filled application forms remove unnecessary barriers for young people who won’t have to gather information on the application process. A study in the US found that pre-filling financial aid application forms (Figure 2) increased the likelihood of young people submitting the application, enrolling in a course and receiving financial aid.<sup>157</sup> Similarly, when BIT replaced paper application forms with a pre-filled online version it encouraged three times as many trainee teachers to apply for rural placements.<sup>158</sup>

<sup>151</sup> Parliament of Victoria Economic, Education, Jobs and Skills Committee. (2018). Inquiry into career advice activities in Victorian schools Online survey summary report.

<sup>152</sup> Ibid.

<sup>153</sup> Apprenticeships Employment Network. (2019). MIP Overview.

<sup>154</sup> Ibid.

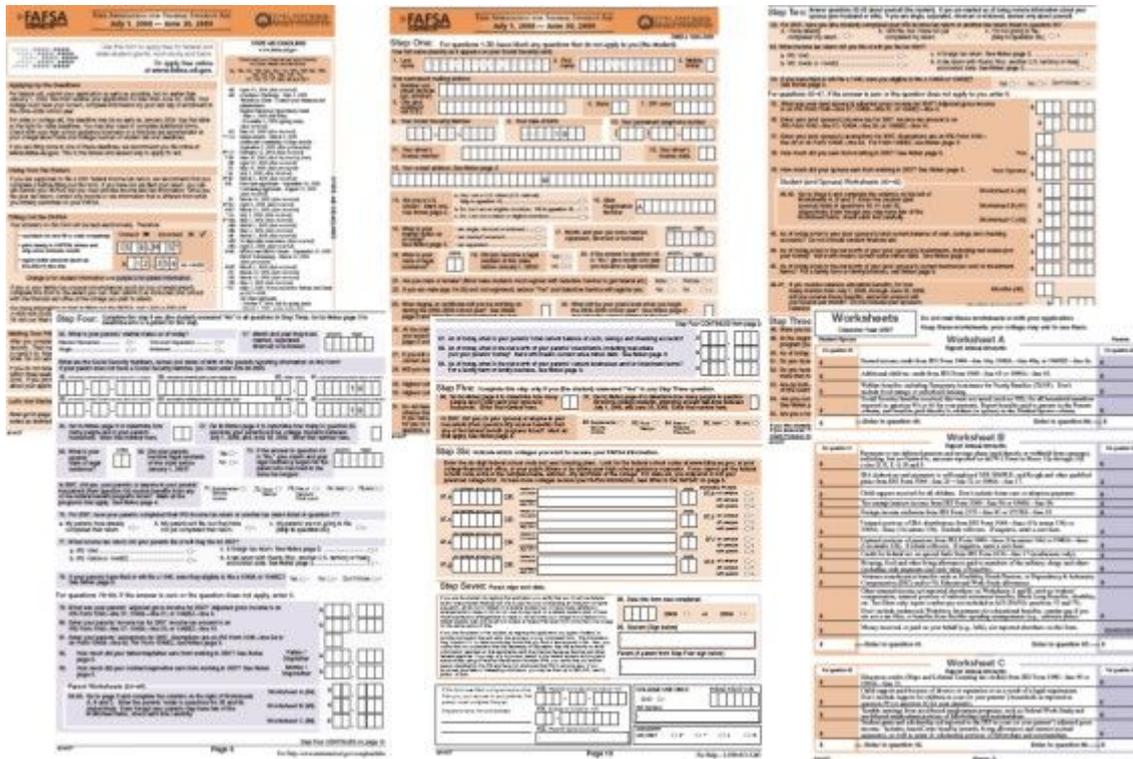
<sup>155</sup> JP Morgan & Learning and Work Institute. (2019). Best practice in the design and delivery of pre-apprenticeship programmes Summary report.

<sup>156</sup> Jachimowicz, Duncan, Weber & Johnson. (2019). When and why defaults influence decisions: A meta-analysis of default effects.

<sup>157</sup> Bettinger, Long, Oreopoulos & Sanbonmatsu. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment.

<sup>158</sup> The Behavioural Insights Team. (2018). Behavioural Insights Team Annual Update Report 2017-18.

Figure 2. FAFSA financial aid application forms which have not been pre-filled<sup>159</sup>



- **Make applying for an apprenticeship the default for suitable young people (Intensive).** Suitable young people should be opted in to receive a face-to-face consultation with a careers advisor to go through the application process for an apprenticeship or traineeship.

While more intensive than the above two behavioural insights approaches, auto-enrolling well-suited young people directly into apprenticeships could provide further benefits. BIT recognises that this option is challenging in the current system, where young people apply to an employer rather than a centralised body which processes and accepts applications. However, a centralised body, such as the National Careers Institute advocated for in the *Joyce Review of Australia’s Vocational Education and Training System*, might allow for direct auto-enrollment into apprenticeships in the future.<sup>160</sup>

<sup>159</sup> Image sourced from Harvard University FAFSA Experiments, <https://scholar.harvard.edu/btl/fafsa-experiments>.

<sup>160</sup> Joyce recommended that the commonwealth create a National Careers Institute - a body to be the single, authoritative source of information spanning careers education on post-school pathways through vocational education, higher education and other training, labour market data, and training pathways and their employment outcomes.

## 4) Emphasise challenge and selectiveness of apprenticeships

Apprenticeships and traineeships suffer from stigma in Australia. Teachers, parents and students currently perceive them to be pathways for young people who are underachieving academically. Furthermore, many young people believe that employment following an apprenticeship will be low paid compared to university pathways, even though there is evidence that this is often not the case.<sup>161</sup> While it is intuitive that promoting the accessibility of apprenticeships will make them appear more attractive, in practice this can backfire and exacerbate stigma.

When something is scarce, people are more likely to both focus on it and value it.<sup>162</sup> This means that in many situations people use an item's availability, or the difficulty required to obtain it, as a signal of its worth. By reframing information about apprenticeships and traineeships around the unique skills required or the selectivity of these pathways, they can be made to seem more appealing. Communicating the challenge may motivate suitable individuals to consider the additional development and learning that they will achieve, and increase the esteem of apprenticeships. Messaging could be delivered with either a challenge or selectivity frame. You could:

- Promote the skills required to complete an apprenticeship (challenge framing).** Completing an apprenticeship is challenging and draws on specific skills and attributes. BIT recommends promoting these qualities to highlight the challenging nature of apprenticeships and traineeships. A trial with the UK Department for Education focused on recruitment emails to get more young people to study teaching. A blend of challenge and commitment<sup>163</sup> messages increased the proportion of registrants who directly visited the university application page, and increased registrations with the university application platform by 76%.<sup>164</sup> Another trial found that challenge messaging was more effective than pro-social messaging at encouraging students to click through to a job application for a teaching position (Figure 3).<sup>165</sup>

*Figure 3. Challenge messaging to attract students to apply for teaching positions in Somerset UK*

<b>Challenge email</b>	<p><b>Are you up for the challenge?</b></p> <p>If you're the kind of person that has the skills and the dedication to thrive in challenging environments, you're just the person Somerse is looking for .</p>
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<sup>161</sup> Bisson & Stublely. (2017). After the ATAR: Understanding How Gen Z Transition into Further Education and Employment.

<sup>162</sup> Cialdini (2007). Influence: The Psychology of Persuasion.

<sup>163</sup> Where BIT got recipients to commit to when they would apply to study teaching.

<sup>164</sup> The Behavioural Insights Team. (2015). Behavioural Insights and the Somerset Challenge.

<sup>165</sup> Ibid.

Schools in Somerset are recruiting teachers right now. Learn more [here](#).

- **Use messaging to highlight that ‘not everyone can be an apprentice’ (selectivity framing).** Not everyone is suited to an apprenticeship. They are demanding and require high levels of skills and determination. BIT recommends framing these challenges as virtues, and highlighting the *selectivity* of apprenticeships. In a trial targeting teacher recruitment in the UK, BIT trialled 7 behaviourally-informed versions of an email encouraging people to apply for a teacher training course. The most effective message involved highlighting that teachers are special - that is, “Not everyone can teach”.<sup>166</sup> BIT recommends personalising this to a particular career. For example, “Not everyone can be an electrician”.

## 5) Ensure that suitable young people have access to positive role models in the apprenticeships sector

Role models can have a large influence on career decisions. Many potential role models for young people - such as teachers and career advisors - have pursued a university pathway. This means that they are more familiar with university pathways and are more likely to advocate for them. As a result many young people do not have access to positive role models who have completed apprenticeships. People who *have* completed apprenticeships often have a strong sense of identity,<sup>167</sup> meaning they have the potential to act as positive role models for those considering or aspiring to apprenticeships. In order to increase young people’s access to positive role models who have completed an apprenticeship. You could:

- **Encourage current apprentices to visit schools and deliver inspirational speeches.** In work conducted in the UK, current students at the University of Bristol delivered inspirational talks at local schools and colleges in disadvantaged areas. The intervention led to an increase in applications (and offers) to top UK universities, indicating that having a positive, relatable role model can have substantial impacts on young people’s career decisions.<sup>168</sup> BIT recommends that speakers advocate for specific career pathways, rather than advocating more generally for apprenticeships. For example, engineering apprentices could speak to a cohort of students who have chosen engineering as an elective.
- **Send letters from successful apprentices and former apprentices to school students.** While ambassadorship programs are beneficial, delivering them in person can limit their reach. Sending letters (instead of or in addition to in-person

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<sup>166</sup> Ibid.

<sup>167</sup> Smith. (2016). Links between concepts of skill, concepts of occupation and the training system: A case study of Australia.

<sup>168</sup> Ibid.

ambassador programs) would significantly increase the scale of these interventions. In the UK, BIT ran a trial where it sent personalised communications from current university students to school students from lower SES backgrounds, encouraging them to apply to high-ranking universities (Figure 4). This intervention was effective in increasing the proportion of people applying for selective Universities.<sup>169</sup> Letters should be personalised and matched so that young people receive letters from people of a similar background.

Figure 4. Example letter from Rachel sent to young people to encourage them to apply for selective universities.



**Department  
for Education**

Please send any queries to:  
Department for Education  
Sanctuary Buildings  
Great Smith Street  
London  
SW1P 3BT  
[www.education.gov.uk/help/contactus/dfe](http://www.education.gov.uk/help/contactus/dfe)

[full name]  
[House number]  
[Street]  
[Town / City]  
[Postcode]

**A message from Rachel Prescott, currently studying at University of Bristol**

Dear [firstname]

You may have received a letter from Ben, a student at the University of Bristol, congratulating you on your fantastic GCSE results. I'd like to add my congratulations! I am also studying at the University of Bristol – and wanted to follow up Ben's letter by reminding you that, with the grades you have achieved, you have more options open to you than most.

When I received my GCSE results in 2010, I had good grades and wanted to continue my education, but had no idea where to start looking. I decided to apply to university and after doing some research online and attending several open days I realised that there are so many opportunities to study at prestigious universities for students who have achieved grades like yours and mine.

I remember how difficult it was to choose a University. Each one is so different and you'll have many things to consider when deciding, such as the type of courses they offer and where they are based. The majority of people assume that the more prestigious universities are the most costly. This is not necessarily true, as these universities often provide larger grants or bursaries (money you are given and don't have to pay back) and government maintenance loans are more generous if you do choose to live away from home. I now live 200 miles from home, but have not suffered financially for doing so.

It's a very exciting time – but also important as the choices you make will affect your future. I would advise you to do plenty of research, visit open days and speak to students and lecturers. To remind you of the websites that can help, <http://university.which.co.uk/> gives you honest advice about different places you could choose, [www.gov.uk/student-finance](http://www.gov.uk/student-finance) and [www.moneysavingexpert.com/students/student-loans-guide](http://www.moneysavingexpert.com/students/student-loans-guide) can help with any financial questions you may have.

I hope this letter helps you to realise that you've a great future ahead of you.

Yours sincerely,

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Research has shown that providing young people with better information on the costs and benefits of attending different universities helps them make better decisions about their future. The Department for Education has arranged for pupils that have performed very well in their GCSEs to receive letters from a current university student explaining how to find out more.

<sup>169</sup>The Behavioural Insights Team. (2017). Inspirational students encourage university applications.

- **Promote highly successful apprentices in media or awareness raising campaigns.** People give different weight to information depending on who is communicating the message. For example, people are influenced by messages from people who they look up to such as experts<sup>170</sup> or people perceived to be highly credible<sup>171</sup> or trusted.<sup>172</sup> BIT recommends recruiting well known Australians who have undertaken apprenticeships and become highly successful. The role models should highlight the *selectivity* of apprenticeships and traineeships, and how these programs contributed to their success.

## 6) Provide meaningful information about apprenticeships that engages young people

There is currently a plethora of distinct websites which publish information about the labour market, future job projections, training pathways, and training providers. However, this information is not presented to engage young audiences, taking into account their needs and preferences. While many young people make career decisions informed by social and environmental influences, they still need access to high quality careers information. Online information could be improved in the following ways. You could:

- **Provide accurate information about apprenticeships.** Many young Australians report not pursuing apprenticeship pathways because they believe they will earn lower wages than university graduates. However, this is not necessarily the case. For example, one study in Australia found that the median graduate salary following a bachelor's degree is \$54,000, while the median full-time income for a vocational education and training graduate is \$56,000.<sup>173</sup> Further, apprentices earn money during their traineeship while university students accrue debt, which has negative short- and long-term financial implications. Correcting misperceptions between the perceived and actual financial outcomes of apprenticeship programs will support young people to make more informed career choices. BIT recommends disseminating annual factsheets to careers advisors in schools which have been identified as having a large cohort of young people suitable for apprenticeships. The factsheets should present employment metrics which are easy to interpret and allow for immediate side-by-side comparison of different pathways.
- **Bring apprenticeships to life.** Many young people make career decisions based on social and personal growth, and how much they will enjoy a particular profession. One study found that young people measured success in terms of happiness (91%)

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<sup>170</sup> Wilson & Sherrell. (1993). Source effects in communication and persuasion research: A meta-analysis of effect size.

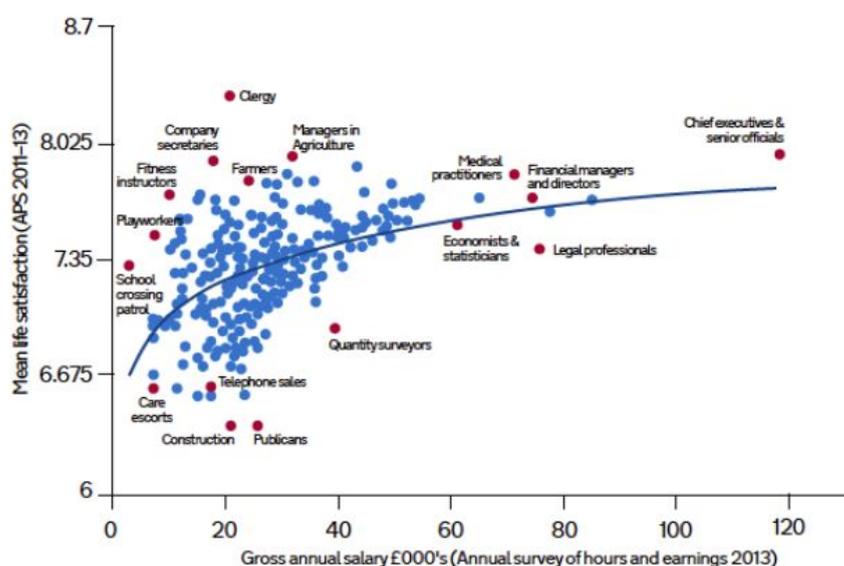
<sup>171</sup> Ibid.

<sup>172</sup> Webb & Sheeran (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence.

<sup>173</sup> Bisson & Stubley. (2017). After the ATAR: Understanding How Gen Z Transition into Further Education and Employment.

and the pursuit of passion (76%), while only 30% valued having lots of money.<sup>174</sup> Information should be provided to young people about levels of enjoyment and wellbeing of people undertaking, and who have undertaken an apprenticeship. While some organisations are already collecting similar information (e.g. Skillsroad already collects information about student wellbeing),<sup>175</sup> this could be done more systematically at a larger scale. This could include adapting measures of job satisfaction, wellbeing, or quality of life for an apprenticeship context. The UK Office for National Statistics collects data on national well being quantified in terms of self-reported happiness, levels of anxiety, life satisfaction, and the extent to which people feel that the things they do in their life are worthwhile.<sup>176</sup> Similar measures could be used to track enjoyment and wellbeing in relation to apprenticeships and subsequent careers. Equally important, however, is that the data is communicated in a way that is engaging. This could include personalisation, comparisons with University pathways, or testimonials.

Figure 5. An example of graphically visualising data on salary and life satisfaction by occupation using data collected by the UK Office for National Statistics.<sup>177</sup>



- **Set hard limits on information complexity, and enforce them.** Good choice architecture presents people with a manageable set of decisions, edited with an understanding of what is most relevant and useful for young people. In order for information presented online to engage younger audiences it should be presented using evidence based best practice for online design. This could involve imposing restrictions on how careers information is presented. BIT recommends:

<sup>174</sup> Ibid.

<sup>175</sup> Apprenticeships Support Australia. (2019) Skillsroad.com.au 2018 Youth Census.

<sup>176</sup> UK Office for National Statistics. (2019). Personal Well-being in the UK. April 2018 to March 2019.

<sup>177</sup> Image sourced from What Wellbeing Works,

<https://whatworkswellbeing.org/blog/whats-wellbeing-like-in-different-jobs-new-data-analysis-and-case-study/>.

- All language is simplified to a reading age of 7
- All text is broken into digestible chunks,<sup>178</sup> with clear subheadings<sup>179</sup>
- All decisions are broken into manageable choice sets, with no more than 10 options available per choice
- All actions are signposted
- Information should be provided when it's needed, rather than overloading young people with information that isn't relevant
- Links to external advice lines should be provided at all key decision points.

## 7) Give parents and career advisors 'just in time' education about apprenticeships

Parents and careers advisors have a large influence on young people's career choices, including their attitudes towards apprenticeships and traineeships. However, many young Australians feel that both careers advice in schools<sup>180</sup> and parental pressure<sup>181</sup> steer them towards a university pathway. Encouraging parents and career advisors to become more familiar with technical qualifications will ensure that they are equipped to advise young people about these pathways. You could:

- **Provide information packages to parents when their child is in year 7.** A US study found that issuing communications to parents about the value of STEM increased uptake of science and mathematics courses<sup>182</sup> and was associated with increased STEM career pursuit 5 years after the intervention.<sup>183</sup> Information about apprenticeship and traineeship pathways should be provided to the parents of young people who are identified as well-suited to these pathways through the methods outlined above (behavioural insights approach 1). BIT recommends providing this information early, when children begin high school, to ensure that parents are familiar with this pathway before key decisions (i.e subject selection) are made which steer students away from apprenticeships.
- **Provide ongoing learning for career advisors.** Careers advisers at schools where a high number of students are determined to be suitable for apprenticeship and traineeships should be provided with targeted information about these pathways. This

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<sup>178</sup> Miller. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information.

<sup>179</sup> Most people will 'scan' webpages (commonly in an 'F-shaped' pattern of reading), meaning that they will read more content at the top of pages and beginning of paragraphs or sections; e.g. Nielsen. (2006). F-Shaped Pattern For Reading Web Content.

<sup>180</sup> Apprenticeships Support Australia. (2019) Skillsroad.com.au 2018 Youth Census.

<sup>181</sup> Ibid.

<sup>182</sup> Harackiewicz, Rozek, Hulleman & Hyde. Helping parents motivate adolescents in mathematics and science: An experimental test.

<sup>183</sup> Rozek, Svoboda, Harackiewicz, Hulleman & Hyde. (2017). Utility-value intervention with parents increases students' STEM preparation and career pursuit.

could include messaging to counter negative perceptions of vocational pathways,<sup>184</sup> simple and up-to-date information packs delivered in a practical way (e.g. via email), or using a train the trainer model (i.e. providing formal training for career advisors in schools). Careers advisers should also be required to complete a short online learning module about apprenticeship and traineeship pathways to ensure that they are able to provide balanced and personalised advice to young people. In an intervention targeting graduate students training to be counsellors, prospective career counsellors were given a series of assignments that required them to navigate an online careers site.<sup>185</sup> The assignments increased self-perceived knowledge about careers, which was retained for three months.<sup>186</sup>

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<sup>184</sup> For example, trialling strategies like loss-aversion (e.g. 'don't let your student's miss out') offers a low-cost potential opportunity for change.

<sup>185</sup> Zalaquett & Osborn. (2007). Fostering counseling students' career information literacy through a comprehensive career Web site.

<sup>186</sup> Ibid.

## 04 / How employers make decisions about engaging apprentices and trainees

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When aiming to increase the uptake of apprenticeships and traineeships, encouraging young people to consider and undertake these pathways is only one part of the equation. It is also critical that employers are prepared to hire apprentices.

Research points to a number of motivations for employers hiring apprentices in Australia. A 2019 survey of Australian employers who had employed apprentices and trainees found their top reasons for doing so were to 'get skilled staff and improve staff skills' (46%) and to 'fill a specific role in the organisation' (42%).<sup>187</sup> The survey found 30% employed apprentices and trainees because they wanted to 'give young people a head start', 30% because it is 'usual business practice' to employ them, and 20% because they wanted to 'support the industry'. Financial incentives and apprentices being a 'cheap source of labour' were much less prominent in this survey at 1% and 13% respectively.

Similarly, a survey of employers of apprentices in NSW conducted in 2011<sup>188</sup> found more than a third of their participants hire apprentices because they believe it makes good sense for their business as they are growing their own workforce and adding skilled workers to their industry.

This suggests that employers are altruistic, at least to an extent. They see the benefit an apprenticeship provides to the apprentice and to the broader industry, beyond the benefits they receive themselves. This data also suggests that for at least some employers, the social norm is to hire apprentices, i.e. it is seen as 'normal' for their business to hire apprentices. As outlined in Section 2, perceptions of what constitutes normal or desirable behaviour amongst one's social group has a strong influence on behaviour.

However, a 2019 survey of more than 7,000 Australian employers found that only a quarter had at least one apprentice or trainee.<sup>189</sup> Research points to a number of reasons that Australian employers might decide not to hire apprentices and trainees. These include the fact that the apprenticeships system is complex and information about it is not centralised, and as a result many employers don't know how to hire apprentices. Employers also report the costs of hiring apprenticeships as being a deterrent, as well as concerns about poor quality apprenticeship candidates, and apprentices being poached by other workplaces.

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<sup>187</sup> NCVET. (2019). Employers' use and views of the VET system 2019.

<sup>188</sup> Dickie et al. (2011). A fair deal; Apprentices and their employers in NSW; Integrated research report.

<sup>189</sup> NCVET. (2019). Employers' use and views of the VET system 2019.

These concerns are often valid, and there is considerable work taking place across the jurisdictions on how to address some of these system-wide concerns.<sup>190 191</sup> However, there are also a number of behavioural biases impacting employers' decision making about the hiring of apprentices. These are explored in further detail below.

This section of the report examines how employers make decisions about the hiring of apprentices and trainees, with a view to encouraging greater hiring of apprentices and trainees in the future.

### Box 3: How do employers recruit apprentices?

There are a large number of ways through which employers can recruit apprentices. For example, employers can recruit apprentices through:

- **Informal channels**, such as one employer in South Australia who found their apprentice through the local footy club<sup>192</sup>
- Usual **recruitment channels** such as advertising jobs through Seek.com.au, engaging an employment services provider, or through federal government programs such as jobactive, Disability Employment Services, Transition to Work and Community Development Program providers
- Engaging **existing employees** such as trade assistants, or engaging someone who has completed a **work placement** with the employer
- Contact with Registered Training Organisations (RTOs) to engage someone who has completed a **pre-apprenticeship program**
- Contact with an **Australian Apprenticeship Support Network (AASN) provider**, who can help to match an employer with a potential apprentice and an RTO
- **Links to high schools**, either directly or through industry bodies, to engage school-based apprentices, such as Rio Tinto Weipa's school-based apprenticeship and traineeship program in Queensland<sup>193</sup>
- Contact with a **Group Training Organisation (GTO)** who facilitates apprentices undertaking multiple work placements with different employers, and who may also facilitate pre-apprenticeship programs, such as the Multi-Industry Pre-Apprenticeship Project in Victoria.<sup>194</sup>

<sup>190</sup> Karmel. (2017). Factors affecting apprenticeships and traineeships.

<sup>191</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

<sup>192</sup> Training and Skills Commission. (2018). Future-proofing the South Australian apprenticeship and traineeship system.

<sup>193</sup> Jobs Queensland. (2017). Positive Futures: Apprenticeships and Traineeships in Queensland.

<sup>194</sup> Apprenticeship Employment Network. (2020). Aen.org.au Multi-Industry Pre-Apprenticeship Project.

## Behavioural barriers to recruiting apprentices and trainees: the employer perspective

### Key findings on the behavioural barriers to recruiting apprentices and trainees

- Employers don't understand the system and how to hire apprentices, and even if they do, there's a lot of admin involved (friction costs).
- The cost of hiring and training an apprentice is felt before the pay-offs, meaning hiring an apprentice is less appealing (present bias).
- Employers have concerns about the quality of workers doing apprenticeships (negativity bias).

As for young people, employers make decisions based on behavioural biases and heuristics. This is because all people tend to practice fast, intuitive and emotional decision-making, rather than slow, deliberative and analytical decision-making. Relying on these heuristics or mental shortcuts helps people process a large amount of information in their day to day lives, but can also lead to poor decision making. In the case of employers, research suggests that biases and mental shortcuts pose barriers to employers hiring apprentices.

Reliance on heuristics may be heightened for employers in small-to-medium enterprises (SMEs). Employers in SMEs have increased pressures on their time and fewer resources, which can lead to lower engagement in the decision making process.<sup>195</sup> With scarcer access to resources, these employers may tend to invest time and energy into managing daily expenditures with less resources to focus on long term planning.<sup>196</sup>

The biases and mental shortcuts of employers identified in this report are barriers to hiring apprentices, but also pose an opportunity, as developing interventions to target these behaviours has the potential to encourage more employers to hire apprentices and trainees.

**Table 4: Behavioural biases and heuristics which influence how employers make decisions about hiring apprentices and trainees**

Bias or heuristic	How this influences decisions to hire an apprentice
Friction costs	Friction costs refer to small, seemingly minor details that make a task more effortful, and they have a disproportionately large effect on whether people

<sup>195</sup> Training and Skills Commission. (2018). Future-proofing the South Australian apprenticeship and traineeship system; Summary of Feedback.

<sup>196</sup> Adamkovič & Martončík. (2017). A review of consequences of poverty on economic decision-making: A hypothesized model of a cognitive mechanism.

	complete a task. The effort of trying to navigate the apprenticeships system might deter employers from hiring apprentices.
Present bias	People overvalue immediate costs or rewards at the expense of their long-term intentions. The upfront costs of employing an apprentice may deter employers from hiring an apprentice, as it may outweigh the reward of hiring an apprentice which is often not felt for a few years.
Negativity bias	People are more likely to recall and dwell on negative events than positive ones. Employers may be more likely to recall negative attributes of previous apprentices or apprenticeship applicants than positive attributes, and therefore decide not to hire an apprentice.

### Employers don't understand the system and how to hire apprentices, and even if they do, there's a lot of admin involved (friction costs)

Research suggests that the effort of trawling through multiple sources of information to try and figure out how to hire an apprentice, what exactly will be involved in the process, and what the employer's ongoing responsibilities will be, acts as a barrier to employers hiring an apprentice (particularly for the first time).

Information about the process required to hire an apprentice is hard for employers to navigate. Employers in Western Australia report being frustrated with trying to navigate the numerous bodies and websites to obtain up-to-date and relevant information on rules, regulations, availability of courses, government subsidies/financial support and the costs of hiring an apprentice or trainee. As one employer said "It is too confusing about where to start the search"<sup>197</sup>. Even in states with central websites, such as the Queensland Skills Gateway, employers still find the abundance of information unclear and confusing.<sup>198</sup> A simple Google search of 'I want to hire an apprentice' provides six different national websites followed by numerous state/territory specific websites and Australian Apprenticeship Support Network provider websites on how to hire an apprentice.

These challenges are particularly problematic for SMEs, who may not have the human resource capability to effectively navigate the system and complete the administration involved in setting-up an apprenticeship. SMEs in South Australia report that they struggle to find information when they want to hire an apprentice<sup>199</sup> and SMEs in Western Australia don't have time to get the information they need to make informed decisions.<sup>200</sup> SMEs also may

<sup>197</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

<sup>198</sup> Jobs Queensland. (2017). Positive Futures: Apprenticeships and Traineeships in Queensland.

<sup>199</sup> Training and Skills Commission. (2018). Future-proofing the South Australian apprenticeship and traineeship system.

<sup>200</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

not be able to offer the full scope of on-the-job training for an apprentice to complete all the competencies required to reach a qualification. Flexibility, such as temporary or permanent transfers and the ability to share apprentices, is built into the apprenticeship system, yet some employers are not aware that this is the case.<sup>201</sup>

Once an employer works out how to hire an apprentice and decides to do this, they then have to complete necessary administration to set-up the apprenticeship, such as establishing a training contract with the apprentice and a Registered Training Organisation (RTO). Employers in Western Australia find the process of signing-up an apprentice or trainee onerous, complex, difficult and confusing.<sup>202</sup> In New South Wales, 17% of employers who wanted to hire an apprentice but couldn't said they found the administrative burden of arranging an apprenticeship too time consuming.<sup>203</sup>

Resources and support have been provided to employers across Australia to hire apprentices,<sup>204</sup> however employers report these do not overcome the difficulties they face. Additionally, employers still have concerns with the large number of different agents involved in administering the apprenticeship system, with a "bewildering array" of representatives "queuing up to help them".<sup>205</sup>

### **The cost of hiring and training an apprentice is felt before the pay-offs (present bias)**

Research suggests that the cost of hiring and training an apprentice is a significant barrier for many employers across Australia. Direct costs to employers include recruitment expenses, wages, and training fees. Indirect costs include a loss of productivity in relation to a qualified worker's time spent supervising an apprentice, and in releasing an apprentice for off-site training. Supervision costs are particularly high in an apprentice's first year, but are significantly reduced in the third and fourth years, when an apprentice starts becoming more productive.<sup>206</sup>

Whilst the Australian Government offers incentives to employers, such as for hiring an apprentice and when their apprentice completes the apprenticeship, and some state governments<sup>207</sup> offer allowances and rebates to employers to hire apprentices, some employers, particularly from SMEs, argue that these are not enough to cover the costs associated with employing an apprentice.<sup>208 209 210</sup>

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<sup>201</sup> Jobs Queensland. (2017). Positive Futures: Apprenticeships and Traineeships in Queensland.

<sup>202</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

<sup>203</sup> NSW Business Chamber. (2017). Workforce Skills Survey.

<sup>204</sup> For example, the Australian Apprenticeship Support Network was introduced in 2015 to help employers recruit, train and retain apprentices.

<sup>205</sup> Joyce. (2019). Strengthening skills: expert review of Australia's vocational education and training system.

<sup>206</sup> NCVET. (2009). The cost of training apprentices.

<sup>207</sup> New South Wales, Victoria and Western Australia

<sup>208</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

A further concern reported by employers across most jurisdictions is that apprentices will be poached by other employers (who don't invest in training) once they start becoming productive in the later years of their apprenticeship, which means employers don't experience a return on their investment in training the apprentice.<sup>211</sup> In support of this, one study found that only 43% of people who completed an apprenticeship were employed with the same employer 9 months after completion of their training.<sup>212</sup>

### Employers have concerns about the quality of workers doing apprenticeships (negativity bias)

Psychology research has shown that people recall and dwell on bad experiences more than positive ones.<sup>213</sup> The flow on from this is that bad impressions and stereotypes are more easily formed and more resistant to change than good ones. In the context of employers and apprentices, employers may be more likely to recall negative attributes of previous apprentices or apprenticeship applicants than positive attributes, and therefore decide not to hire an apprentice. If employers have had negative experiences with previous apprentices it "colours their current commitment and attitudes".<sup>214</sup>

Across Australia, employers report difficulty in finding a suitable apprentice. In New South Wales, employers believe many young people don't understand workplace requirements such as punctuality, and don't have a willingness to accept authority or critical feedback. This was particularly seen as a problem with young people from lower socio-economic backgrounds, with employers reporting that some apprentices lack role models for the importance of work.<sup>215</sup> In Western Australia, employers report that many applicants have poor communication, social and interview skills.<sup>216</sup> Similarly in South Australia, a concern reported by employers is that young people lack language, literacy and numeracy skills as well as people skills, discipline and resilience.<sup>217</sup>

Some employers report preferring to hire apprentices who are aged 25 or older, as they have had experience in the workforce before commencing an apprenticeship.<sup>218</sup> West Australian employers report that older apprentices offer maturity and life experiences, learn quicker and are more driven to complete their apprenticeship. However, the higher wage rate for these

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<sup>209</sup> Training and Skills Commission. (2018). Future-proofing the South Australian apprenticeship and traineeship system. Summary of Feedback.

<sup>210</sup> NSW Business Chamber. (2016). Laying the Foundations for Apprenticeship Reform.

<sup>211</sup> Ibid.

<sup>212</sup> NCVER. (2019). Apprentice and trainee experience and destinations 2019.

<sup>213</sup> Baumeister et al. (2001). Bad Is Stronger Than Good.

<sup>214</sup> Dickie. (2011). A fair deal: Apprentices and their employers in NSW: Integrated research report.

<sup>215</sup> NSW Business Chamber. (2016). Laying the Foundations for Apprenticeship Reform.

<sup>216</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

<sup>217</sup> Training and Skills Commission. (2018). Future-proofing the South Australian apprenticeship and traineeship system; Summary of Feedback.

<sup>218</sup> Jobs Queensland. (2017). Positive Futures: Apprenticeships and Traineeships in Queensland.

apprentices may prevent employers from hiring them.<sup>219</sup> Some employers also report preferring to hire apprentices who have had exposure to the job already, either through a work placement or pre-apprenticeship program. Employers believe having a 'taste for the trade' means apprentices are more aware of what they are 'getting themselves into'.<sup>220</sup> For some employers, a pre-apprenticeship program is even a prerequisite to employment as an apprentice, for example NPG Melbourne expects all apprenticeship applicants to have completed a pre-apprenticeship.<sup>221</sup>

Concerns about school-based apprenticeships have also been expressed by some employers. Research in Victoria found that employers think the skills acquired during a school-based apprenticeship are not up to the standard they require for students to continue their apprenticeship after leaving school.<sup>222</sup> In Queensland, however, school-based apprenticeships are generally well regarded as helping students gain an understanding of the workplace culture, and in helping employers assess students' suitability.<sup>223</sup>

Where young people do lack basic skills, soft skills and an understanding of workplace conduct, employers may be unsure how to mentor and coach young people to address these gaps. Employers in South Australia, particularly SMEs, report they lack the capability to support apprentices when issues arise.<sup>224</sup>

The quality of training provided by registered training organisations (RTOs) also feeds into employers negative perceptions of their apprentices.<sup>225</sup> One survey found that of the employers who were dissatisfied with their apprentice, 56.7% were dissatisfied because the training the apprentice or trainee received was of a poor quality or low standard, and 30.3% because relevant skills are not taught. In South Australia, employers reported that the quality of training provided by RTOs is variable<sup>226</sup>, and in New South Wales some employers question the relevance of RTO training to current industry needs and employer requirements.

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<sup>219</sup> State Training Board. (2018). Strategies to grow apprenticeships and traineeships in Western Australia.

<sup>220</sup> NCVET. (2014). Understanding the non-completion of apprentices.

<sup>221</sup> Victorian Skills Commissioner. (2017). Rebalance and Relaunch.

<sup>222</sup> Ibid.

<sup>223</sup> Jobs Queensland. (2017). Positive Futures: Apprenticeships and Traineeships in Queensland.

<sup>224</sup> Training and Skills Commission. (2018). Future-proofing the South Australian apprenticeship and traineeship system.

<sup>225</sup> NCVET. (2019). Employers use and views of the VET system.

<sup>226</sup> Training and Skills Commission. (2018). Future-proofing the South Australian apprenticeship and traineeship system: Summary of Feedback.

<sup>227</sup> NSW Business Chamber. (2016). Laying the Foundations for Apprenticeship Reform.

## 05 / Behavioural insights approaches: Encouraging employers to hire apprentices

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Hiring and training an apprentice is a commitment that takes time, effort and resources. With time and investment, however, apprentices can become productive, provide a return-on-investment and become valuable workers to their employer. Yet a positive return-on-investment is a necessary but not sufficient condition for employers to take on apprentices in any numbers. There are also strong behavioural factors at play: uncertainty about the outcome, difficulties navigating the system, the influence of peers, and the weight of past experience (positive and negative) matter as much as cold economic calculation. To begin addressing these factors, the report sets out two behavioural insights approaches below:

1. Make it incredibly easy to hire an apprentice
2. Clearly explain the benefits of hiring an apprentice, but be honest about the challenges.

The aim of these behavioural insights approaches is to change the behaviour of the employers in the 'moveable middle'. For some employers, employing an apprentice will never be viable, whilst some employers have well established mechanisms for recruiting and training apprentices and will continue to do so. The behavioural insights approaches in between: employers who could hire an apprentice, but decide against it, or fail to do so due to the reasons identified in the report.

### 1) Make it incredibly easy to hire an apprentice

There is a plethora of information available about the apprenticeship system, and multiple organisations involved in the recruitment process. Many employers, particularly SMEs, are overwhelmed and don't know where to start. Simplifying the system and reducing the amount of information available, could make the process of hiring an apprentice more manageable for employers. You could:

- **Reduce the number of websites providing information about apprenticeships (light touch).** Having one central website that provides a single source of information that is easily navigable will help employers find the information they are looking for, and have confidence that it is up-to-date. Existing government or government-funded websites, such as those of Australian Apprenticeships, the Fair Work Ombudsman, Business.gov.au and the Department of Education, Skills and Employment, should be amalgamated so that information is given only once. The United States Task Force

on Apprenticeship Expansion made a similar recommendation in terms of providing centralised apprenticeship resources in its final report.<sup>228</sup>

Figure 6. A selection of the current Australian Government websites which provide information on apprenticeships for employers

- **Provide easy-to-access guidance and resources to employers (light touch).** Employers may not feel confident that they have the skills to mentor and coach young people, particularly if young people lack basic skills, soft skills and an understanding of workplace conduct. Different AASN providers have developed numerous tools and forms of assistance to help guide employers in coaching and mentoring young people. However, these resources are only accessible to employers once they have signed-up with a specific AASN provider. The best resources should be synthesised and housed on a central website and be easily available for employers to access at any stage of their decision making process.
- **Establish a national apprenticeships clearing house, similar to the Australian Universities Admissions Centre (intensive).** The university admission process in Australia<sup>229</sup> uses tertiary admission centres, which allow students to submit multiple

<sup>228</sup> Task Force on Apprenticeship Expansion. (2018). Final report to the President of the United States.

<sup>229</sup> With the exception of Tasmania, which requires applications go directly to the institution.

applications using one online platform.<sup>230</sup> Young people can choose to apply to multiple courses across multiple universities through this platform. In comparison, the system for recruiting apprentices is highly complex and burdensome. An apprenticeship clearing house which coordinates apprenticeship applications, undertakes skills matching between apprentices and employers, and manages the relationships with RTOs would significantly simplify the process of hiring an apprentice. To truly reduce the burden associated with hiring an apprentice the clearing house should require:

- young people to submit one application across multiple employers/industry sectors.
- employers to submit job outline/s and requirements for available positions within their business
- RTOs to provide information about available courses and participant numbers.

The clearing house should then process applications, and match apprentices, employers and RTOs.

## 2) Clearly explain the benefits of hiring an apprentice, but be honest about the challenges

One reason that employers hire apprentices is that they want to give the young person a head start or to support industry. This suggests that employers value the broader social benefits of hiring an apprentice. However many employers also have negative perceptions of apprentices.

To help employers overcome their negative perceptions of apprentices and tendency to focus on short term considerations (such as the cost and time associated with hiring an apprentice), information should be provided to them which communicates the benefits of engaging an apprentice (for their business, the apprentice and the community). However it is critical that this information also acknowledges that employing an apprentice can be challenging and requires an investment from the employer. Information which appears one sided and to present apprenticeships too favourably will lack credibility, leading to reduced impact and possible backlash from employers. You could:

- **Highlight the benefits to the business of hiring an apprentice.** Information should be sent to employers highlighting the business benefits of engaging an apprentice. In the UK, simple messages highlighting the average business productivity gains of each apprentice hire in pounds per year was found to be the best way to get employers to engage with government information on the new UK Apprenticeship Levy.<sup>231</sup> As mentioned above, people are more likely to be influenced by messages

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<sup>230</sup> New South Wales and ACT: <https://www.uac.edu.au/>; Queensland: <https://www.qtac.edu.au/>; South Australia and the Northern Territory: <https://www.satac.edu.au/>; Victoria: <https://www.vtac.edu.au/>; Western Australia: <https://www.tisc.edu.au/static/home.tisc>.

<sup>231</sup> The Behavioural Insights Team. (2017). Behavioural insights to boost apprenticeships.

from people they see as experts, or people they perceive to be highly credible or trusted. People may also give more weight to messages from 'peers' and/or people who are similar to them.<sup>232</sup> BIT recommends recruiting people who are trusted by or are peers to employers. This may differ by industry, but could include other (similar) employers, industry associations, trusted professionals (such as accountants), or well known Australians who have had a positive experience employing apprentices.

- **Draw on altruism and highlight the benefits to young people and industry.** Information should be sent to employers highlighting the societal benefits of engaging an apprentice, such as helping young people to get a head start and supporting industry. Information could include messages such as 'help young people get the best start to their career' and 'support your industry by teaching the next generation of workers'.
- **Use case studies and peer examples to show how employers have faced and overcome challenges associated with hiring an apprentice.** Information should be developed and shared with employers (particularly SMEs) which acknowledges the challenges associated with hiring apprentices, and communicates employer led strategies for overcoming these challenges. These messages should focus on known challenges that employers face such as 'how I navigated the apprenticeship recruitment process' or 'how I worked with my apprentices to build their skills and capabilities so that they are work ready'. Employers may put more weight on information communicated by 'peers' - employers in the same industry and who are similar to them (e.g. employ a similar number of staff).

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<sup>232</sup> Dolan, Hallsworth, Halpern, King & Vlaev. (2010). MINDSPACE: influencing behaviour for public policy.

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