Building a skilled and adaptable workforce inquiry

Questionnaire response 84

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Improve school student outcomes with the best available tools and resources

What (if anything) needs to be done to improve the use of edtech tools (including GenAI) in schools?

While generative AI (GenAI) has rapidly become available to teachers and students, a systemic and jurisdictional response has been slower. Policy makers have been understandably cautious and risk averse from the outset, with one eye on ensuring student safety, data privacy and security while the other contemplates the opportunity and potential for GenAI across school systems.
Despite public sector conservatism, public adoption of AI tools has led to intense competition between Edtech providers to develop products to service the education sector. These range from large multi-national listed companies focused on securing individual student subscriptions to large libraries of GenAI-created lesson plans and teaching resources to small startup enterprises capitalising on niche market opportunities.

In most instances it is too early to tell the impact of GenAI driven tools and resources on the market, but adoption in the market is being fueled by the fear of missing out and turbocharged by strong commercial indicators.

The five core (interrelated) areas of Edtech are tools, programs and resources aimed at:
Student Achievement – personalised learning pathways and student engagement, which claim to improve student outcomes, predominantly in reading and numeracy. This area is dominated by large Edtech players;

1. Teaching resources – reducing teacher workload, meeting curriculum standards and aiding differentiation, which claim is to save teacher time by curating high quality teaching and learning resources that fulfil curriculum requirements. While dominated by large Edtech players, teacher-to-teacher organisations and teachers also utilise and share free tools;

2. Wellbeing – supporting student social emotional development, mental health, motivation and learning dispositions. There are many varied and complex tools, resources and programs in this space ranging from GenAI-authored personalised stories focused on building resilience and behaviour strategies through to whole-of-school programs focused on changing systems for wellbeing management. This space is catered to by local coordinated Australian commercial providers that are gaining traction through school-to-school recommendations;

3. Reporting and assessment – the utilisation of GenAI to assess student work and create feedback and report comments is becoming increasingly common. Student assessment data utilises GenAI formatively to align teaching resources and personalised learning pathways with student assessment data driving lesson recommendations;

4. Organisational alignment and compliance – with an ongoing tension between accountability and efficiency, schools are increasingly seeking GenAI support to meet compliance requirements. Some commercial companies are focusing part of their value proposition on satisfying reporting requirements for schools.

5. We encourage the Commission to explore how to improve the evaluative capacity of educators to assess new commercial products, specifically the capacity of key decision makers of school spending. Most school systems in Australia have a decentralised responsibility for funding and programming, leaving individual school leaders to make decisions about how best to spend their budget to meet the needs of their students. This system creates a market where school leaders are the primary customers for commercial providers tasked with making an informed decision with little external support.

Social Ventures Australia is in the process of partnering with ImpactED UK to pilot a capacity-building program for evaluation, including novel data collection methods, and data visualisation, through two successful UK data collection tools, The Engagement Platform and the School Improvement Platform. The primary lens we will be focused on is Edtech as an enabler of teachers, empowering them with the right information at the right time so they are able to support students in the best way possible for their context. As part of our work, we will be focused on inequity and technology as a leveller of disadvantage.

We encourage the Commission to consider the following opportunities:

1. Build the evaluative capacity, data literacy and evidence use of school leaders to make informed decisions about which Edtech products to utilise to meet the needs of their school.

2. Build upon and improve visualisation of existing data sources to generate a reliable and robust data set about student needs.

3. Share anonymous student needs data transparently with commercial providers, allowing them to build products that are directly targeting student need in adherence with the Safer Technologies 4 Schools framework.

4. Evaluate commercial offerings and provide easy to interpret guidance on the program/products ability to meet their schools needs. An example to build upon is Social Ventures Australia's previous work: Evidence for Learning Toolkit - an Edtech version of this would include categories such as cost, evidence base, impact as provided here but with the addition of categories such as data security and alignment with the school's student data.

What more (if anything) needs to be done to improve awareness and access to high quality lesson planning and curriculum materials in schools?

The participant did not respond to this question.

Is there anything more you would like to say about edtech, GenAI or lesson planning and curriculum materials?

The participant did not respond to this question.

Which of the following best describes you?

Not-For-Profit

Are you currently using any edtech tools (including learning games and GenAI) to support teaching and learning in the classroom?

No

If yes, what has been your experience with using these tools?

The participant did not respond to this question.

Are there things you would like to do with GenAI or edtech tools that you can’t do currently? What’s stopping you from doing these things?

The participant did not respond to this question.

If no, can you tell us why you are not using any edtech tools?

The participant did not respond to this question.

Do you access lesson planning and curriculum materials online?

The participant did not respond to this question.

If yes, what has been your experience with using these tools?

The participant did not respond to this question.

If no, can you tell us why you are not using online lesson planning and curriculum materials?

The participant did not respond to this question.

Support the workforce through a flexible post-secondary education and training sector

Credit transfer and recognition of prior learning

In your experience, how well does the credit transfer and recognition of prior learning system operate in Australia? Does it adequately support students to move between courses or have their work experience recognised as part of a qualification? Are there ways it could be improved?

The participant did not respond to this question.

Which of the following best describes you? Please select all that apply.

The participant did not respond to this question.

In the past 3 years, have you applied for credit recognition or recognition of prior learning (RPL)?

The participant did not respond to this question.

If yes, what was your experience in applying for credit recognition or RPL like?

The participant did not respond to this question.

If no, can you elaborate on why you didn't apply?

The participant did not respond to this question.

Work related training

What are the main reasons individuals and/or businesses do or do not participate in work-related training?

The participant did not respond to this question.

What role, if any, should businesses be playing to address any barriers and better support the offer of work-related training to employees?

Growing demand for skills across the economy cannot solely be addressed by investment in public sector provision. Instead, direct employer investment in skilling and reskilling the workforce is critical to bridge skills gaps, boost productivity and ensure workers are equipped for structural change. Despite its importance, there is a notable gap in current data on employer training expenditure. The last ABS survey was released in 2003.

The limited data we have on trends in employer investments in training raises concerns. For example:
ABS data examining the learning opportunities of individuals show that in 2005 35.9% of Australians received work related training in the previous year as noted in a Submission to Productivity Commission Interim Report on the National Agreement on Skills and Workforce Development from J. Buchanan. In 2020-21, only 23% received this training.

A 2024 Deloitte Access Economics report, Ready Set Upskill, on training expenditure found that one in eight employers surveyed planned to reduce spending on training, while nearly half reported that their spending budgets are not prioritised to address skill. Nearly 64% of employers surveyed believed that businesses aren't doing enough to address the skills gap.

In addition to understanding trends in employer investment in training, it is important to consider how these opportunities are distributed.
Evidence from the ABS suggests that those in the most skilled occupations are far more likely to have received workplace training than those in the lowest skilled occupations (40% vs 19%), while the poorest 20% were less likely to receive workplace training than the best off (15.3% vs 27.4%).

When they are in work, young people are concentrated in casual and part-time work, making them less likely to receive workplace training. This is likely to be a contributing factor in declining rates of progression identified by the Productivity Commission.

We also note the continuing challenges experienced by both employees and employers in regional, rural and remote areas. For employees, there is limited access to training opportunities particularly for those with resource or mobility limitations.

In the public sector, one approach may be the incentivising of employers to deliver or lead training in their workplace. Not-for-profits may be resource constrained in delivering workplace training, and we are keen to explore further opportunities for the pooling of resources between NFPs and the public and private sector.

Another area for consideration is trends in youth un- and under-employment. Internationally there has been a growing focus on NEETs (Not in Education, Employment or Training). Being excluded both from the labour market and education heightens the individual's risk of social exclusion and the likelihood of engaging in negative behaviour affecting both wellbeing relationships with society, including a detachment from democratic engagement and civic participation.

Employers who utilise emerging technologies may see access, productivity and satisfaction benefits from employees, however any benefits must be considered against the risk of further exclusion based on levels of digital literacy, cultural appropriateness of the technology, and employees facing existing socio-economic disadvantage.

What, if anything, could government do to address barriers and better support the offer of work-related training to employees?

There is an opportunity for the Australian Government to develop a series of measures designed to increase the volume and the equitable distribution of training opportunities including:

1. Expansion of the Australian Skills Guarantee to other industries/sectors over time to increase the number and equitable distribution of work-based training opportunities;

2. Encouraging/requiring large employers providing goods and services to government to demonstrate action to promote economic mobility in their organisations, for example by removing barriers to people from less privileged backgrounds (e.g. unpaid internships);

3. Increased data collection and reporting on employer investment in workplace training and apprenticeships with a particular focus on areas of identified skills and labour shortages;

4. Initiation of a process to develop options to increase overall investment by employers in workplace training, including considering a training guarantee or levy on larger employers, particularly where there is evidence of underinvestment.

We suggest the Commissioners explore, alongside SVA research and programs, models including the European Union's five pronged approach which includes policies around measures to prevent early school leaving, reintegration of early school leavers, school-to-work transitions, measures to foster employability, and measures to remove practical and logistical barriers to employment.
SVA research reports on the promotion of quality job opportunities, including the crucial role of work-related training, have been provided as supporting documents to this response.

Which of the following best describes you? Please select all that apply.

The participant did not respond to this question.

For business owners, managers and sole traders, how many employees do you have?

The participant did not respond to this question.

For employees/individuals, have you participated in any work-related training in the last 12 months that did not relate to general compliance (such as WHS)?

The participant did not respond to this question.

If yes, can you elaborate on the reasons for the training and any benefits you received from doing it?

The participant did not respond to this question.

If no, can you elaborate on any challenges or barriers you faced in attempting to undertake work-related training?

The participant did not respond to this question.

For business owners, managers or sole traders, have you provided or supported your employees to participate in work-related training in the past 12 months?

The participant did not respond to this question.

If yes, can you elaborate on the reasons for the training and any benefits you or your employees received from doing it?

The participant did not respond to this question.

Can you describe whether you accessed any government assistance, what type, and the amount received? If you didn't access any financial assistance, please tell us the reasons why.

The participant did not respond to this question.

If no, can you elaborate on any challenges or barriers you faced in attempting to provide or support your employees to undertake work-related training, such as the time or cost, availability of relevant or high-quality courses, and level of interest from your employees?

The participant did not respond to this question.

Balance service availability and quality through fit-for-purpose occupational entry regulations

What are the effects of occupational entry regulations? Please describe your experience and name the specific occupations you are referring to.

The participant did not respond to this question.

Do you believe current occupational entry regulations are proportionate to the level of risk associated with different professions? Why or why not? If not, do you have any suggested improvements to regulations to better reflect risks? Please name the specific occupations you are referring to.

The participant did not respond to this question.

Which of the following best describes your connection to occupational entry regulations? Please select all that apply.

The participant did not respond to this question.

Which state or territory are you predominantly based in?

The participant did not respond to this question.

Cover sheet: Supporting document #1

Beyond the Green Dream:

navigating the realities of green jobs for young people

the Y YLab. SVA Consulting MACQUARIE

About this report

'Beyond the Green Dream: navigating the realities of green jobs for young people' has been prepared for Y Careers, an initiative of the Y Australia by Social Ventures Australia Consulting in collaboration with YLab.

We acknowledge with gratitude the funding and support of the Macquarie Group Foundation to produce this report.

Y Australia: The YMCA is the oldest global youth movement, reaching almost 65 million people in 120 countries. The Y Australia offers a wide range of programs and services that support children and young people across their life cycle, from early learning programs to meaningful career pathways, through to recreation and other supports for older Australians.

Y Careers was established in 2022 by the Y Australia bringing a fresh approach to showing young people careers in the care sector. Y Careers provides school leavers and young people multiple paid work placements, qualifications, tailored coaching and future career opportunities in a new take on traineeships.

SVA Consulting is Australia's leading not-for-profit consultancy focused solely on social impact and work with partners to increase their capacity to create positive change. This report has been researched and authored by Divya Roy and Justin Court from SVA Consulting at Social Ventures Australia. SVA is a not-for-profit organisation that works with partners to alleviate disadvantage – towards an Australia where all people and communities thrive.

YLab is a co-design and consulting social enterprise that was imagined by the Foundation for Young Australians in 2016 to equip young people with the skills and networks to design a better future. YLab's work is driven by young people, not for them.

Macquarie Group Foundation drives social impact work for Macquarie, supporting its people, businesses, and communities to build a better future. Recognising that many people around the world face systemic barriers to employment, the Macquarie Group Foundation's global grantmaking and social impact investing focuses on breaking down these barriers and building effective pathways to economic security. In Australia, the Macquarie Group Foundation's grantmaking specifically supports organisations helping young people to participate in jobs that prepare them for a better future.

Legal disclosure statement

SVA acknowledges Traditional Owners of Country throughout Australia. We pay our respects to Aboriginal and Torres Strait Islander Elders past, present, and emerging. We also accept the invitation in the Uluru Statement from the Heart to walk together with Aboriginal and Torres Strait Islander peoples in a movement of the Australian people for a better future.

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FOREWORD

The Y Australia is pleased to present this report into how young people could be better supported into meaningful training and employment pathways in Australia's growing green economy.

Globally, The Y is one of the world's oldest and largest youth organisations. We now reach over 65 million people each year across 120 countries. Here in Australia, we are one of the largest employers of young people, who comprise more than half of our organisation's 11,500 employees.

Our vision is for a better world, with and for young people. Meaningful work is one of our strategic pillars and we are passionate about supporting young people into their careers. Each year we support thousands of young people in education programs and vocational schools.

As part of our commitment to supporting young people into meaningful work, the Y Australia established the Y Careers initiative that will support 15,000 placements of young people, with meaningful, secure employment and training opportunities in the care economy.

The purpose of this report is to share the insights from our work in understanding the opportunities for the Y Careers initiative to be adapted in supporting young people into the green economy.

The green economy has the potential to offer a range of meaningful employment opportunities for young people and, like the care economy, is critical to Australia's future. It also resonates with The Y's strategic pillar for a sustainable planet and is an increasingly important focus of The Y's work globally.

Our hope is that this report increases awareness of the challenges young people currently face in entering green economy careers and stimulates further discussion and efforts on how these challenges can be addressed.

We would like to acknowledge the support received from the Macquarie Group Foundation to conduct this work, alongside its continued support of many other youth initiatives around the world that support young people into meaningful employment.

There is an opportunity for Australian employers, educational institutions, youth organisations and governments, to shift how we think about the green economy. The green economy will focus on more than environmental sustainability; it will be inherently connected into broader social and economic systems. The Y globally is advocating for a just and inclusive transition into a cleaner and greener economy for marginalised or at-risk communities. We need a green economy which keeps humans at the centre, as we create a more sustainable society, collectively build the skills, jobs and opportunities of the future, and prepare for a world where humans live in full harmony with nature.

Introduction and aims of this report

The Y Australia commissioned Social Ventures Australia Consulting (SVAC) to undertake a feasibility study of deploying the Y Careers initiative in the green economy, to provide meaningful employment and training pathways for entry-level young people. To ensure the work was supported by the views of young people, the Y Australia and SVAC partnered with YLab to conduct targeted research on the perceptions of young people on employment within the green economy.

This work generated a number of insights about the potential opportunities to support young people into employment within the green economy that may be of interest to other stakeholders. It also highlighted the limited research currently available on the needs and opportunities for entry-level pathways for young people in the green economy. As such, the Y Australia, SVAC and YLab, with the ongoing support and funding of the Macquarie Group Foundation, are sharing these insights to inform green economy employers, industry bodies, government, and youth organisations on some of the opportunities to better support young people into meaningful training and employment in one of the most important sectors for Australia's future.

Our approach for this work involved a desktop review of key research on the green economy, alongside consultations with employers, sector agencies and leaders, to understand the opportunities and challenges in supporting young people with entry-level pathways into the green economy. YLab also conducted a literature review of key research on the views of young people around the green economy, and consultations with a range of young people to understand their perspectives around green economy employment. Further detail on our approach can be found in the Appendix.

The intended audience for this report is anyone with an interest in employment within the green economy and how young people can be better supported into meaningful employment pathways. Though this report maintains a focus on the green economy, the opportunities raised through our consultations on how young people can be supported into training and employment may also be relevant to other sectors.

02

Overview of the green economy

I. Introduction to the green economy

The green economy is defined by the United Nations as a macro-economic approach that is low carbon, resource efficient and socially inclusive. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that allow reduced carbon emissions and pollution, enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services.[1]

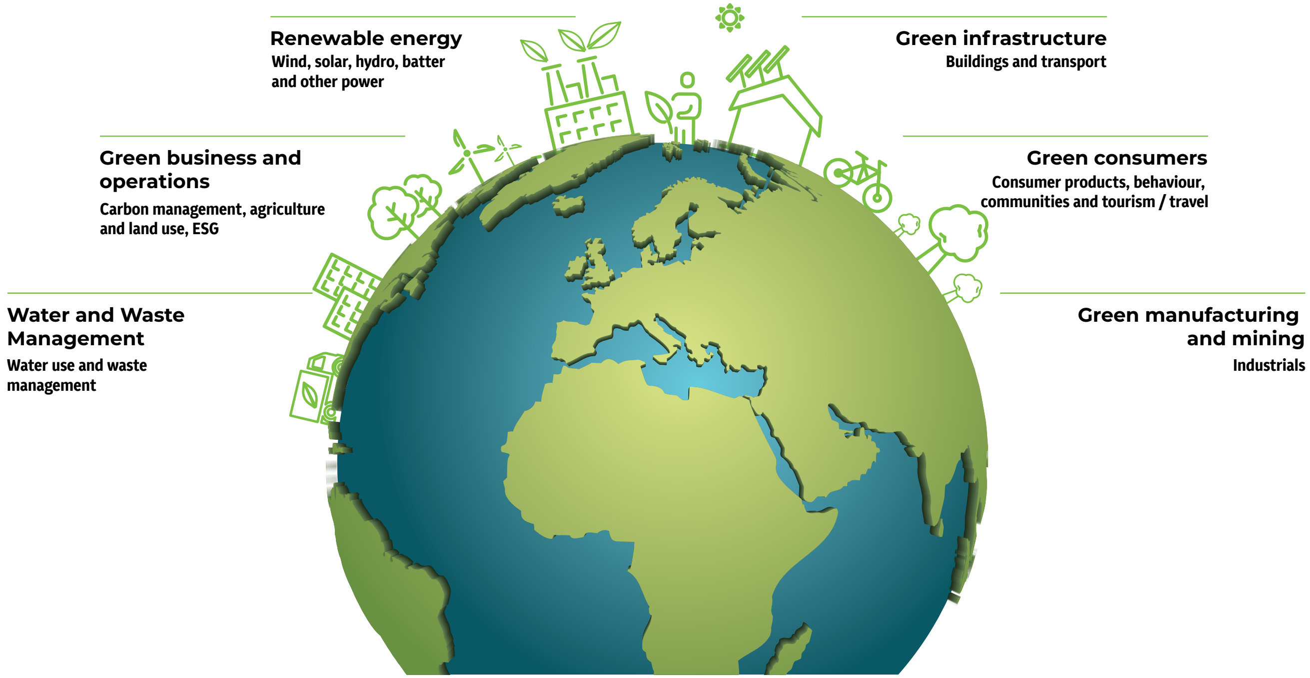
The green economy is comprised of multiple sectors. Six key sectors are outlined here, however, these may expand and change over time as the green economy continues to develop and new sectors emerge.

Transition to the green economy is expected to bring about economic restructuring and shifts in employment. New jobs and activities of the green economy will require different skills.[2] The green economy is expected to constitute a significant portion of the global economy in 20 to 30 years' time. Oxford Economics and ARUP estimate that the transition to a net zero emissions environment by 2050 will create new industries worth $10.3 trillion to the global economy.[3] Deloitte estimate that more than 300 million additional "green collar" workforce jobs can be created globally by 2050.[4, 5]

Globally, growth in demand for jobs requiring "green talent" is increasing – and supply is not keeping up. According to a LinkedIn report, between 2022 and 2023 the share of green talent in the global workforce rose by a median of 12.3 percent, while the share of job postings requiring green skills (i.e. those that enable the environmental sustainability of economic activities)[6] grew twice as quickly – by a median of 22.4 percent. And this is not a one off. The growth rate between 2018 and 2023 reveals a similar trend.[7]

Given the expected growth and importance of the green economy into the future, there is an opportunity to put humans at the centre of these sustainability transformations.[8] EY's 'people sustainability approach' can be applied to the way in which we think about the green economy and its employment into the future.

The Green Economy



1 United Nations Environment Programme, Green Economy, United Nations Environment Programme website, n.d., accessed 16 August 2023.
2 Con Gregg, Olga Strietska-Ilina, Christoph Büdke, Anticipating skill needs for green jobs: a practical guide, International Labour Office, 2015, p 14, accessed 1 September 2023.
3 Brice Richard and James Lambert, The Global Green Economy, ARUP and Oxford Economics, n.d., pp 7-8, 44, accessed 16 August 2023
4 Deloitte, An overview of green job growth, Deloitte website, 15 May 2023, accessed 16 August 2023.
5 McKinsey also estimates the creation of an additional 200 million jobs by 2050. McKinsey Global Institute, What will a green economy cost? Our experts on the numbers – and what's at stake, McKinsey & Company, 8 February 2022, accessed 18 August 2023.
6 Sue Duke – LinkedIn VP, Closing the Green Skills Gap to Power a Greener Economy and Drive Sustainability, LinkedIn Learning, accessed 23 August 2023.
7 Over this period the share of green talent grew by 5.4 percent per year over that period, while the share of jobs requiring green skills grew by 9.2 percent. LinkedIn, Global Green Skills Report 2023, LinkedIn Economic Graph, 2023, p 5, accessed 18 August 2023.
8 EY, How can putting people first accelerate sustainable transformation, 9 November 2023, p 2.

This approach includes employee-powered environmental sustainability, where employee behaviour is harnessed to accelerate and positively contribute to environmental sustainability goals. And it also includes organisations catalysing people sustainability, where organisations positively impact the personal, professional or societal health and equity of employees and the people and communities they interact with.[9]

One example of this transition is in Rio de Janeiro, Brazil, where the city has committed to 40 percent of all jobs being green jobs that contribute to tackling climate change.[10] This strategy is also being used to address broader social issues across the city, by aiming to provide equitable access to quality employment.[11]

II. The green economy in Australia

Within Australia, governments' commitments are shaping the country's approach to reducing carbon emissions.[12] For example, the Victorian Government is developing a Victorian Energy Jobs Plan to mobilise the workforce to deliver on the state's ambitious target of 95% renewable electricity generation by 2035 and provide confidence to investors enabling this transition.[13] But actions by other players are also driving the transition to a green economy.

The Australian Government's Climate Change Authority has assessed that international low emissions trade and investment trends will have big impacts for Australia's economy, and lowering carbon emissions should not be seen as a cost but as a source of competitive advantage.[14] A global increase in demand for lower emissions products and services has the potential to open up new areas of jobs and growth in Australia in diverse economic sectors such as sustainable agriculture, new clean-tech industries and environmental and financial services.[15]

In a net zero emissions global economy, Australia has some natural advantages. These include possessing some of the world's largest renewable resources, extensive landscapes conducive to sequestration of carbon, and large reserves of the raw materials required for low emissions technologies, such as lithium, uranium, nickel and copper. The Australian Government has recently announced an expansion of critical minerals financing to support net zero goals and develop related job opportunities in mining, processing and manufacturing.[16]

Transitioning to net zero emissions is not the only part of a green economy – other elements relevant to future job opportunities and workforce development include preventing losses in biodiversity and ecosystem services.[17] Jobs associated with environmental conservation efforts and climate change adaptation will also be in increased demand.[18]

9 EY, How can putting people first accelerate sustainable transformation, 9 November 2023, p 5.
10 The OECD Forum Network, How Rio de Janeiro is using green jobs to help solve larger social issues, The Forum Network website, 30 October 2023, accessed 1 November 2023
11 How Rio de Janeiro is using green jobs to help solve larger social issues.
12 For example, Department of Industry, Science, Energy and Resources, Australia's Nationally Determined Contribution Communication 2022, Australian Government, 2022, accessed 18 August 2023.
13 Victorian Government, Victorian Energy Jobs Plan Consultation Paper: Supporting the development of the Victorian Energy Jobs Plan, Engage Victoria website, p 8, accessed 28 March 2024.
14 Climate Change Authority, Paris Plus: From cost to competitive advantage – Insights Paper, Australian Government, 2021, pp 4-5, accessed 16 August 2023.
15 Climate Change Authority, Trade and investment trends in a decarbonising world, Australian Government, 2021, p iv, accessed 16 August 2023
16 Prime Minister and Minister for Resources, Media Release - $2 billion critical minerals boost crucial to energy transition, Australian Government, 25 October 2023, accessed 26 October 2023.
17 United Nations Environment Programme, Green Economy, United Nations Environment Programme website, n.d., accessed 16 August 2023.
18 For example, see US Government figures: Bureau of Labor Statistics, Green growth: Employment projections in environmentally focused occupations, US Government, April 2022, accessed 14 November 2023.

III. Overview of current employment opportunities

Estimates of the potential employment opportunities in Australia's green economy vary and are generally estimated at the sector/sub-sector level rather than the whole.[19] But all these estimates point to significant employment growth opportunities.[20] LinkedIn's job data for Australia indicates that the current green skill shortage may be greater in Australia than elsewhere. The growth in green talent in Australia is slightly higher than the global average but the share of LinkedIn job postings requiring green skills in Australia is much higher than the global average (24 percent compared to 17 percent as of February 2023).[21]

Through our consultations, research and analysis, three broad, but distinct 'buckets' of green economy roles in Australia have emerged: *Tech*, *Trades*, and *Trees*:

TECH

The green economy relies on various professionals including engineering, project management, transport, logistics, finance and others. Digital capabilities will be increasingly important to support the transition as technology and automation continue to play a bigger role in manufacturing, mining and green products.

TRADES

Skilled tradespeople make up a significant portion of roles across the green economy. These include electricians, wind, hydro or solar technicians, and construction tradespeople. For example, electricians and electrical workers make up as much as 20 per cent of the entire clean energy workforce.[22]

TREES

Ensuring Australia's natural environment and agricultural industries can adapt to the changing climate will preserve natural capital, improve productivity, and protect heritage.[23] Environmental conservation, climate adaptation and regeneration are critical to Australia's future. There are a broad range of roles required here which include environmental planning, community engagement and conservation roles.

It is also important to note that the green economy is still emerging – the extent of future roles and skills required for a mature green economy are not yet known. It is useful to think of green economy jobs on a continuum – one that will continue to evolve and grow over time.[24]

For young people, this involves engaging them as employees along the green economy's sustainability journey, equipping them with future skills, strengthening sustainable working life and incentivising change across the broader society. Young Australians of today will need to play an increasingly significant role in the green economy and the green economy workforce of the future.

19 The Victorian Government acknowledges the challenge of limited data on the current and forecast energy workforce, Victorian Energy Jobs Plan Consultation Paper: Supporting the development of the Victorian Energy Jobs Plan, p 27.

20 For example: The Clean Energy Council estimates that the renewable energy sector could grow from 25,000 people in 2019, to as many as 44,000 in 2025. Clean Energy Council, Clean Energy at Work, Clean Energy Council, June 2020, pp 3, 5, accessed 16 August 2023. the Climate Change Authority has identified that: the energy efficiency industry is job-intensive, employing an estimated 59,000 Australians in 2019, with the potential for more than 120,000 additional jobs over time; if Australia is able to generate green steel from clean hydrogen, and capture around 6.5 percent of the global steel market, 25,000 manufacturing jobs could be created across Queensland and New South Wales. Climate Change Authority, Economic Recovery, Resilience and Prosperity after the Coronavirus, Australian Government, 2020, pp 14, 18, accessed 16 August 2023. The Victorian Government's Clean Economy Workforce Development Strategy forecasts that Victoria's transition to renewable energy alone, is expected to create 10,000 jobs each year to 2030, Victorian Energy Jobs Plan Consultation Paper: Supporting the development of the Victorian Energy Jobs Plan, p 27, accessed 28 March 2024.

21 Dylan Thomas, Actionable Insights: LinkedIn Green Skills Report 2023 - Demand Growing Faster Than Supply, LinkedIn, 5 July 2023, accessed 18 August 2023.

22 Clean Energy Council, Trades or Technician Careers, Clean Energy Council website, n.d., accessed 18 August 2023.

23 Department of Agriculture, Water and the Environment, National Climate Resilience and Adaptation Strategy 2021-2025, Australian Government, 2021, p, 39, accessed 23 August 2023.

24 Lee Domeika, Stuart Andreason, Meena Naik and Molly Dow, Growing Quality Green Jobs – Driving Economic Advancement in the Green Economy, Jobs for the Future and The Burning Glass Institute, 2023, p 6, accessed 31 October 2023.

The green economy aligns with young people's interests and values

The green economy is essential for promoting inclusive environmental sustainability and climate adaptation, whilst utilising resources effectively.[25] **Young people are interested in, and concerned about, the environment and climate change**. A 2022 survey conducted by Plan International with over 2,200 young people from 53 countries found 95 percent of respondents said they were worried about the effects of climate change and environmental degradation.[26]

And the environment is one of the most important issues for young Australians. **In Mission Australia's 2022 Annual Youth Survey, the environment was identified as one of the most important issues in Australia by 51 percent of the nearly 19,000 young people surveyed – the highest response rate for any issue.** And this level of concern has grown. In 2021 this figure was 38 percent. Of those surveyed 25.5 percent stated they were personally "extremely" or "very concerned" about climate change.[27]

Our focus groups with young people also reflected this interest in the green economy, and part of this interest flowed from how the green economy resonated with young people's values.

Within both focus groups, when the concept of the green economy and the breadth of green economy jobs were explained, young people indicated that it aligned well with their values – particularly the outcomes the green economy aims to achieve (i.e. environmental sustainability, social responsibility and climate change adaptation). The potential connection of green economy jobs to local communities was also seen as a desirable feature.

Young people also indicated that they are increasingly drawn to professional roles that align with their personal values. This finding is supported by other research that illustrates a growing significance between employees' personal values and those of their workplace.[28]

Given the growth in the green economy and green economy jobs, the alignment with young people's values and interests, provides an opportunity to support young people into employment pathways within an important sector for Australia's future.

" It's part of the next generation's values so I feel like this will happen with the green economy.

" I have always been a science/nature advocate and even though I don't know specifics about jobs the value and goals align with my personal values so working in a job with a 'purpose' or 'goal.

25 Lin Zhang, Meng Xu , Huangxin Chen, Yuexinyi Li and Shuiguang Chen, Globalization, Green Economy and Environmental Challenges: State of the Art Review for Practical Implications, 2022 Front. Environ. Sci. 10:870271, accessed 14 November 2023.
26 Plan International, Young People and Green Skills – Preparing for a Sustainable Future, 2022, pp 1-2, accessed 31 October 2023.
27 Mission Australia, Youth Survey 2022, 2022, p 7, accessed 31 October 2023.
28 Natalie Baumgartner, Build a Culture That Aligns with People's Values, Harvard Business Review, 2020, accessed 24 October 2023.

04

Recruitment demand within the green economy

As highlighted in Section 2, the number of jobs within the green economy is expected to grow. The current data from LinkedIn's Green Skills Report suggests that the demand for green economy workers in Australia exceeds the available supply.[29] Below, we highlight key insights from our employer and industry consultations around the current recruitment demand within Australia's green economy.

I. The current green economy is largely a skilled workforce

Australia's current green economy workforce is largely a skilled workforce. Most green economy jobs in Australia currently require some form of tertiary qualification – through either higher education or vocational education and training (including traineeships and apprenticeships). As such, many of the current jobs and short-term recruitment demand is within the *Tech* and *Trades* buckets of roles.

Preliminary modelling from Jobs and Skills Australia suggests that close to two million workers will be needed in building and engineering trades alone by 2050, in order to support the transition to clean energy.[30] This modelling also projects significant shortages of electrical, building and engineering VET qualified trade roles, with one of the most flexible trades in demand being that of electrician.[31]

Our interviews highlighted that the safety risk associated with many of these roles, particularly those in green energy, green infrastructure and green manufacturing and mining, is one reason why skilled workers (ideally with prior work experience) are preferred. Workforce projections in the green energy sector predict that the vast majority of clean energy jobs over the next 30 years will require tertiary-level qualifications.[32] The preference for skilled and experienced workers is also evidenced by the average worker age in the clean energy sector being 42, which is older than the average age of 40 across the Australian labour force.[33]

Jobs within the current Australian green economy with lower barriers to entry (i.e. not requiring tertiary qualifications) include labourer occupations,[34] such as Construction and Plumbing Labourers, Concreters, and Insulation and Home Improvement Labourers.[35]

29 Actionable Insights: LinkedIn Green Skills Report 2023 - Demand Growing Faster Than Supply.
30 Jobs and Skills Australia, The Clean Energy Generation – Workforce needs for a net zero economy, Australian Government, 2023, p 17, accessed 1 November 2023.
31 The Clean Energy Generation – Workforce needs for a net zero economy, p 14, accessed 1 November 2023.
32 The Clean Energy Generation – Workforce needs for a net zero economy, p 103.
33 The Clean Energy Generation – Workforce needs for a net zero economy p 69.
34 Approximately 15% of the construction sector workforce are labourers. National Skills Commission, Australian Jobs 2021 – Construction, National Skills Commission website, Australian Government, n.d., accessed 31 August 2023.
35 The Clean Energy Generation – Workforce needs for a net zero economy, p 57.

II. Demand for jobs in regional, rural and remote areas

Many green economy jobs, whether in the *Tech*, *Trades* or *Trees* buckets, are project based and often located in regional, rural and remote areas of Australia. This trend is expected to continue, as these are the areas where major green infrastructure projects to support the transition to lower emissions are expected to occur. Within clean energy alone, growth in jobs is expected to be concentrated in regional Australia.[36] **The Clean Energy Council acknowledges that the regional location of employment opportunities is an impediment to attracting graduates.**[37] In Victoria, the clean energy transition will explicitly require workforce and skills development in regional areas where renewable projects are based.[38]

Increasing investment in green infrastructure projects (e.g. in renewables and the electricity grid),[39 40] means there is expected to be growing demand for employees for these types of projects in the years to come. And there is scope for greater investment both now and in the future to meet renewable targets while maintaining energy reliability.[41 42] Industry stakeholders expect there will be a shortage of workers in project delivery and management, engineering roles, and other trades (*Tech* and *Trades* buckets of jobs). In addition to these there are also expected to be growth in employment opportunities within the *Trees* bucket of jobs, particularly in regional areas to support expanding environmental conservation and climate adaption efforts. These roles may include stakeholder engagement, agriculture and environmental sustainability.

III. Demand for diverse candidates

Green economy employers also reflect the growing focus on diversity and inclusion in workforce recruitment. This is often given formal effect through social procurement frameworks, which are used to generate social value above and beyond the value of the goods, services, or construction being procured.[43] In consultations, employers noted that social procurement targets in many government funded projects are increasingly being included within contracting arrangements. Some of these employers operating within regional and remote parts of the country were looking for opportunities to employ local community members, including First Nations people.

36 The Clean Energy Generation – Workforce needs for a net zero economy, p 14.
37 The Clean Energy Generation – Workforce needs for a net zero economy p 16.
38 Victorian Energy Jobs Plan Consultation Paper: Supporting the development of the Victorian Energy Jobs Plan, p 31, accessed 28 March 2024.
39 Clean Energy Finance Corporation, Media – CEFC confirms record renewables investment as race to net zero gathers momentum, 21 August 2023, accessed 2 October 2023.
40 Department of Climate Change, Energy, the Environment and Water, Rewiring the Nation, Australian Government, n.d., accessed 2 October 2023
41 Clean Energy Council, Media release – Time to remove handbrakes on clean energy projects, 31 August 2023, accessed 2 October 2023.
42 Australian Energy Market Operator, 2023 Electricity Statement of Opportunities, August 2023, p 3, accessed 2 October 2023.
43 Victorian Government, Victoria's Social Procurement Framework, 2018, p 11, accessed 31 August 2018.

05

Improving young people's awareness of jobs in the green economy

Research demonstrates the growing employment opportunities in the green economy across Australia. However, our focus groups with **young people highlights that young Australians have limited awareness of these opportunities and the pathways to green economy careers** (across all buckets of green economy jobs – *Tech*, *Trades* and *Trees*).

In late 2023, the Y Australia, in partnership with the World YMCA, conducted the Global Meaningful Work Survey with almost 10,000 young people across the globe to understand what meaningful work meant to them, their experiences of work, their aspirations of the future and what support they need to achieve these.[44] The survey asked young people what impacts they believed climate change would have for their work. Notably, 30% of young people globally believed climate change would "positively" impact their work, compared to 50% who believed it would either "negatively" or "neutrally" impact their work.

Further local engagement by the Y Australia with young people found that only 7% of Australian young people believed climate change would have a positive impact on their work, compared to 70% who believed it would "negatively" or "neutrally" impact their work.[45] This demonstrates the lack of targeted, localised information for Australian young people both on green economy careers and the interconnectedness of climate change with the future of work.

The UK consultancy Public First, on behalf of the Prince's Trust, surveyed young people in the UK and similarly found that young people had a "limited understanding of how [the transition to] Net Zero will impact industries, jobs and their own lives".[46]

There is an opportunity for this gap to be addressed to better engage young people in potential employment within the future green economy workforce.

> *"There is not much exposure in the media about the green economy so young people haven't heard anything about the scope. Them being unaware leads to lack of knowledge in career paths and the entire green economy.*

I. Young people's limited understanding of jobs in the green economy

The Clean Energy Council acknowledges the challenge of 'visibility' as being one of the factors that exacerbates skills shortages within the clean energy sector of the green economy. It notes that occupations within the sector and entry pathways into the sector are "poorly understood", with most employees entering the sector by "side-stepping from other industries".[47]

Young people highlighted their limited understanding of the types of roles and level of qualifications required within the green economy.

When provided an explanation of the green economy, as one that is low-carbon, resource-efficient and socially inclusive, young people were surprised at its broader-than-expected scope.

The World YMCA's Global Meaningful Work Survey found that only 4.8% of young people globally thought that green and climate related skills would be the most important to their work in the future.[48]

Similarly, Public First's survey of young people in the UK found they were "unfamiliar with green jobs" which made them less willing to consider applying for a role or entering training.[49] And "poor pay" was seen as the top disadvantage of green jobs with 25% of surveyed young people viewing this as a barrier.[50]

44 World YMCA, Global Youth Meaningful Work Survey, 2023, accessed 13 March 2023.
45 World YMCA, Global Youth Meaningful Work Survey, 2023.
46 Prince's Trust and Public First, Generation Green Jobs? Exploring young people's readiness for the Net Zero skills revolution, November 2023, p 3, accessed 13 March 2023.
47 The Clean Energy Generation – Workforce needs for a net zero economy, p16.
48 World YMCA, Global Youth Meaningful Work Survey, 2023.
49 Generation Green Jobs? Exploring young people's readiness for the Net Zero skills revolution, p 3
50 Generation Green Jobs? Exploring young people's readiness for the Net Zero skills revolution, p 3

Interestingly, Public First also found that young women were "less aware of and less interested in green jobs" which risks perpetuating the gender disparities that already exist within many industries key to the Net Zero transition.[51]

These findings highlight the severe lack of credible, targeted and localised information for young people about green jobs.

Our focus groups validated these findings with young people highlighting a limited understanding of green economy jobs and the skills required for them.

Young people's initial perception of jobs within the green economy was that they were:

Low skilled – not requiring post school qualifications

Low paid – to the extent that (in some cases) young people perceived them as not being financially sustainable

Little social prestige – as compared to other, more traditional and university qualified, professions

"Green jobs don't require uni so wouldn't pay as much or wouldn't be considered a 'real' job.

This limited understanding was attributed to their limited exposure to those working within the green economy, and the limited exposure of these types of jobs within their education and the media they consume. Due to this, young people stated that they felt unprepared for the green economy and did not understand the range of skills and qualifications required.

"There are so much more unconventional green jobs that I didn't know about.

Young people were surprised by the diverse range of job roles available in the green economy – noting there were many 'hidden' jobs that they had not been aware of. Some young people also stated that they had not realised their existing interests and skills could align with green economy careers.

"We are pushed to a green agenda by the government, but it is difficult to know the full facts when we are being fed false information.

"The green economy feels like a dystopian future that we won't actually get to.

Interestingly, some high-school aged young people demonstrated a higher degree of scepticism and hesitation about the green economy. They raised concerns about whether the efforts of green economy organisations were genuinely tackling pressing environmental issues.

This was in part due to perceived instances of 'greenwashing', where organisations falsely claimed to be environmentally responsible. These examples undermined the legitimacy of the green economy for them.

51 Generation Green Jobs? Exploring young people's readiness for the Net Zero skills revolution, p 3

How can I divert my career goals or qualification and work in the green economy? It'd be great to hear from those doing similar work as me but in the green economy.

II. Opportunities to increase young people's awareness of jobs in the green economy

There is an opportunity to provide more information to young people on the range of potential jobs within the green economy to better support them to consider and pursue pathways into the green economy workforce. Given the breadth of roles available, it may be useful to leverage the *Tech*, *Trades* and *Trees* classification of roles to provide a frame for young people to align their qualifications.

Young people in our focus groups expressed interest in learning more about jobs and employment pathways that were open to them, with 60 percent of participants from one focus group stating that they would now consider a career in the green economy that they had not considered before the consultations.

They shared the following opportunities by which tailored information about green economy jobs and pathways could be provided to them:

Young people expressed interest in hearing from those currently working within the green economy, including those who have experienced changing careers into it. This was particularly important to provide role models of those undertaking similar study or employment, to demonstrate how their skills and experience can be leveraged in the green economy.

The National Energy Technician Training Scheme (NETTS) provides an example of how this outreach might be done. NETTS is an apprenticeship program that operates over four years providing placements primarily in the oil and gas sector. Though NETTS is not focused specifically on the green economy it provides a training and employment model that could be adopted. Its outreach approach to young people is focused on school leavers, with NETTS representatives visiting schools and Indigenous academies to raise awareness of the program and its employment pathways.

CASE EXAMPLE

National Energy Technician Training Scheme (NETTS)

NETTS was established in 2016 following a period of rapid growth for the oil and gas sector. Developed as a collaboration between Programmed and major oil and gas organisations, it has three core goals:

- To increase diversity in the energy sector, targeting 50/50 male/female split and 20 percent First Nations participation.
- Setting an industry standard for the training of new entrants into the oil and gas sector across Australia.
- To provide a steady pipeline of competent, safe and skilled operators and tradespeople into the energy sector.

NETTS is an apprenticeship scheme that operates over four years. The trades covered in the NETTS Program are instrumentation electrical technicians, mechanical technicians, and process plant technicians. 25 secondment companies participate in the Program.

It is different from traditional apprenticeships in the following ways:

- Companies are working together, ensuring that apprentices have the best possible exposure.
- The first 18 months are based in a structured learning environment.
- All NETTS apprenticeships, regardless of trade, complete a common foundation year to start the course.
- Apprentices are also taught a variety of life skills designed to prepare them for the transition into employment.
- Host companies offer opportunities to all NETTS apprenticeships to give them exposure to a variety of facilities and equipment.
- The apprentices are instilled with a safety culture that prepares them for the oil and gas industry.

NETTS has a 98 percent apprentice retention rate and primarily operates in Western Australia, with some sites in the Northern Territory, Queensland and South Australia.

Potential candidates are targeted at school-leaver stage with a pre-recruitment strategy involving representatives visiting schools and Indigenous academies to raise awareness of the program and its employment opportunities.[52]

52 NETTS, NETTS Program, LinkedIn, n.d., accessed 2 October 2023. Programmed, NETTs – National Energy Technician Training Scheme, 2020, accessed 2 October 2023

Young people raised career guidance services, outreach services and other educational initiatives to explore green economy jobs. Career education services (which already exist across Australia's schools) could be leveraged for this purpose. The range of career education activities on offer (including career exploration and planning, curriculum embedded vocational and applied learning, industry exposure, work experience and VET tasters) could support young people's green economy career planning before the senior secondary years.

For example, the state of Victoria introduced the Clean Energy and Engineering pathway as one of the priority VET pathways for secondary students developing students' skills and experience to pursue pathways in clean energy roles.[53] Young people also highlighted the importance of receiving upskilling and reskilling information targeted to those currently in post-school education and training.

The Prince's Trust and Public First report on young people's readiness for green jobs similarly recommended that "employers engage with schools and career hubs" to increase awareness and interest, particularly in areas where green jobs would be most numerous.[54]

> *" Young people want clearer pathways and how to access them.*

The recently launched, Careers for Net Zero campaign, delivered by the Energy Efficiency Council and the Clean Energy Council, is one example of this in practice. Careers for Net Zero was established to help meet the roughly two million new jobs required to meet net zero by 2050, acknowledging the existing workforce and talent pool is already experiencing skills shortages. The campaign includes an online platform aggregating the list of careers needed to help Australia achieve net zero, alongside mapping educational pathways for students, graduates and experienced workers.[55] Global climate career platform Terra.do, which was recently launched in Australia, provides another example of how online platforms can be leveraged to connect, match and upskill workers to employment opportunities within the green economy.

53 Victorian Energy Jobs Plan Consultation Paper: Supporting the development of the Victorian Energy Jobs Plan, p 27, accessed 28 March 2024
54 Prince's Trust and Public First, Generation Green Jobs? Exploring young people's readiness for the Net Zero skills revolution, November 2023, p 4, accessed 13 March 2023.
55 Careers for Net Zero, Mission, n.d., accessed 8 November 2023

CASE EXAMPLE

Terra.do

Terra.do is a global climate career platform that was established in 2020 with a mission to support 100 million people to work directly on climate by 2030. The platform was launched locally in Australia in 2023, with philanthropic support from Philanthropic venture Boundless Earth (founded by Mike Cannon-Brookes).

Terra.do offers learning programs for reskilling and upskilling professionals, a job board for discovering climate roles and community networks to support an ecosystem of climate professionals and employers.

Online education offered via the platform include a 12-week climate education and solutions bootcamp alongside targeted courses in carbon accounting and reduction, ESG fundamentals, and software stacks in climate technology.

The platform has supported more than 700 organisations, including Octopus Energy (renewables), Form Energy (batteries), NextEra Mobility (electric vehicles) and Remora (carbon capture) through upskilling and sourcing new workers.

In 2023, Terra.do had roughly half a million users across 25 countries, hosting more than 40,000 roles globally.

Upon its launch in Australia, there were 4,500 clean economy roles available.[56]

Lastly, young people were also interested in learning more about job opportunities within the green economy through the media they consume. While research indicates that 88 percent of Australian young people consume news, the sources of this news have become more social (families, teachers) and online (social media networks).[57] Young people highlighted the opportunity of leveraging social media influencers to increase awareness of the diversity of jobs across the green economy.

> *"I would like to see more jobs in these areas as well as acknowledgment in the media – positive praise from influencers.*

56 Terra.do, About Us, accessed 8 November 2023; Renew Economy, Climate "Australia's next big employer" Cannon-Brookes joins push for net zero workforce, 26 October 2023, accessed 8 November 2023. ChannelLife Australia, Climate career platform Terra.do launches in Australia with bold global goal, 26 October 2023, accessed 8 November 2023.
57 Tanya Notley, Michael Dezuanni, Hua Flora Zhong and Simon Chambers, How Young People Access, Perceive and are Affected by News Media, Western Sydney University, 2020, p 6, accessed 20 October 2023.

06

Providing more entry-level pathways for young people into the green economy

Employers within the green economy were broadly interested in recruiting young people. However, as noted in Section 4, most roles required some form of tertiary qualification (e.g. university or trade).

Though several employers had existing graduate, apprenticeship and cadetship programs to support recruitment of young people, there is an opportunity to provide more entry-level pathways for young people which do not require post-school qualifications or work experience.

I. Overview of current entry-level pathways in the green economy

Sector organisations shared that the most common entry-level pathway for young people into the green economy was to undertake a trade apprenticeship. For example, a key job within the ***Trades*** bucket of roles – electrician – was consistently identified as being in demand across green economy subs-sectors.[58] And there are initiatives underway to increase the number of ***Trades*** roles through trade apprenticeships and traineeships across Australia, which is expected to benefit the green economy. One such initiative is the Australian Government's Australian Skills Guarantee that will introduce new national targets to ensure one in ten workers on Australian Government funded major projects are an apprentice, trainee or paid cadet.[59]

Our consultations with employers, highlighted the limited number of non-trade entry-level jobs – with the exception of labourers and concreters for infrastructure projects. The lack of broader entry-level roles in the green economy has also been observed in the United States, where roles typically require tertiary qualifications.[60] The limited number of entry-level pathways is not unique to the green economy, with Australia experiencing a decline in full-time, entry-level, quality job opportunities over the last 20 years.[61] Entry-level roles across Australia made up one in ten vacancies in July 2022, compared to one in four in January 2006.[62] In 2022, there were fifteen people seeking work for every entry-level job, with this trend disproportionately impacting young people.[63]

Further, many employers prefer to hire staff who are able to contribute on the job from the first day, which has been identified as one of employers' biggest concerns about hiring entry-level young people.[64] Green economy employers expressed a similar preference for potential employees with prior work experience, given the health and safety risks associated with on-site projects.

58 The Clean Energy Generation – Workforce needs for a net zero economy, p 14
59 Department of Employment and Workplace Relations, Australian Skills Guarantee, Australian Government, n.d., accessed 2 November 2023.
60 Growing Quality Green Jobs – Driving Economic Advancement in the Green Economy, p 5
61 SVA, AEN and PwC, What Will It Take?, 2021, p 9, accessed 2 November 2023
62 Anglicare Australia, Creating Jobs, Creating Opportunity – Tackling long-term unemployment in Australia, 2022, p 9, accessed 2 November 2023.
63 What Will It Take?, p 9.
64 What Will It Take? p 15.

II. Opportunities to increase entry-level pathways for young people

Young people expressed their concern that jobs within the green economy are not accessible, alongside feeling unprepared and unsupported in terms of the skills and education required.

Our research and consultations identified a number of potential opportunities to broaden the entry-level pathways into the green economy for young people.

These opportunities can apply to all three buckets of *Tech*, *Trades* and *Trees* roles in helping meet the future employment demands of this growing economy. As outlined in the case examples, some of these opportunities are currently being deployed in different forms across the green economy.

Notably, many of these approaches require a range of different stakeholders (e.g. employers, secondary and tertiary education institutions, community organisations and policy makers) to cooperate closely, identifying and expanding the breadth of employment pathways.[65]

(a) Work Integrated Learning opportunities

Employer research has found that young people are more likely to be successful when they join an industry if they have prior training or on-the-job experience.[66] One opportunity to increase young people's skills and work experience in the green economy is expanding the number of Work Integrated Learning (WIL) opportunities across different sub-sectors. WIL is an umbrella term that refers to a range of practical experiences designed to give students valuable exposure to work-related activities relevant to their training.[67] These experiences are often provided within schools, TAFEs, universities and other educational institutions.

Research from the Foundation for Young Australians, comparing the journeys of young people who had secured full time work compared to those who had not, highlighted the importance of relevant paid work experience in accelerating young people's ability to gain full time work.[68] Undertaking 5,000 hours of relevant work experience alongside study and training accelerated a young person's transition to full time employment by 12 months.[69] Expanding WIL pathways in the green economy could provide more young people with the skills, work experience and exposure to prepare them for longer-term employment.[70]

An example of WIL supporting entry-level employment for young people is EcoCrews. EcoCrews is a social enterprise established by Campbell Page working to create employment opportunities and equip local individuals with lasting skills and qualifications that provide lifelong career pathways.[71] EcoCrews works with governments and commercial organisations on environmental, infrastructure and civil construction projects. Its approach involves recruiting within the local community with an emphasis on hiring young people. It offers entry-level employment pathways that provide skills, experience and accredited training in a range of areas.

65 Growing Quality Green Jobs – Driving Economic Advancement in the Green Economy, p 39.
66 What Will It Take?, p 15.
67 Universities Australia, Work Integrated Learning in Universities: Final Report, 2021, p 4, accessed 2 November.
68 Foundation for Young Australians, The New Work Reality, 2018, p 3, accessed 14 November 2023.
69 The New Work Reality, p 9.
70 The Clean Energy Generation – Workforce needs for a net zero economy, p 244.
71 EcoCrews website, About Us, accessed 8 November.

CASE EXAMPLE

EcoCrews

EcoCrews is a certified social enterprise created by CampbellPage, a non-profit employment, community and commercial service organisation that has over 80 offices across New South Wales, Victoria, Queensland and South Australia.

Established following the Black Summer bushfires of 2019-20, EcoCrews works with all levels of government and commercial organisations on environmental, infrastructure and civil construction projects.

EcoCrews' projects establish employment pathways and provide experience, skills, and accredited training for a diverse group of participants. The accredited training includes units towards a Certificate II in Conservation and Ecosystem Management, Chemical Application Certificate, White Card construction certification, and First Aid certification.

Crews are recruited with an emphasis on diversity and inclusion with an average age under 25. Crews create entry-level opportunities to get people into work and help to address local skill gaps by providing training opportunities.

Services include revegetation and maintenance, weed control, soft landscaping, wildlife corridor creation, environmental training, collection and propagation of seed, construction of rural fencing, flora and fauna surveys, minor erosion control, and marine and estuary debris clean-up.

EcoCrews' project approach includes designing the scope of works, recruiting within the community to build a diverse and engaged workforce that is supported by an experienced supervisor, completing the scoped works, and leaving a legacy for the environment and community.[72]

72 EcoCrews, Capability Statement, n.d., accessed 2 October 2023. EcoCrews, Your Environmental Works Partner, n.d., accessed 2 October 2023.

(b) Collaborative pre-employment training approaches

Collaborative pre-employment training models have also been identified as an option to overcome the challenges associated with employing young people in entry-level roles.

The strengths of these models are that employers provide input into the pre-employment training, increasing the likelihood of it meeting the needs of the business, whilst strengthening the employee-employer bond through a form of mutual commitment. This can help lower the attrition risk for employers (particularly for small and medium businesses) after they have invested in the young person's training. Training organisations are often involved in these models, providing the training, protecting young people's interests, and strengthening the ties between young people and the employer.[73]

These models can operate through VET arrangements. They may also take place outside of the school system for non-school aged young people in the form of industry-specific boot camps or academies set up by a consortium of employers in a particular industry.[74] NETTS is an example of a model that focuses on school leavers and it has a very high 98 percent retention rate.

Notably, research from the Prince's Trust and Public First also recommended that employers be "highly visible in their partnerships with training providers and youth employment charities" in order to attract and engage young people into green jobs.[75]

Another example of this pre-employment training model is the Sustainability Project Officer program (previously known as Retrofit) operated by Generation UK, a youth employment non-profit that supports young people facing barriers to employment. Established with funding from the Macquarie Group Foundation, Sustainability Project Officer participants undertake a full-time, 10 week training course and graduate as Sustainability Project Officers. The course is focused on developing participants' skills to support energy efficient improvements across existing buildings in the UK. Upon completion of the training course, Generation UK support graduates' recruitment with partner employers, with over 80 percent of graduates gaining employment.

73 What Will It Take?, pp 25-26, 30.
74 What Will It Take?, p 30.
75 Public First, Generation Green Jobs? Exploring young people's readiness for the Net Zero skills revolution, November 2023, p 4, accessed 13 March 2023.

CASE EXAMPLE

Sustainability Project Officer UK

Sustainability Project Officer is a green skills training and placement program operated by Generation UK and established with funding from the Macquarie Group Foundation. Generation UK is a youth employment non-profit that supports young people facing barriers to employment into life-changing careers.

The Sustainability Project Officer program maintains a focus on those who are not currently in education, training or permanent employment.

Sustainability Project Officer participants undertake a full-time, 10 week training course and graduate as Sustainability Project Officers. The course is focused on developing participants' skills to support improvements in energy efficiency within existing buildings across the UK, promoting the installation of various sustainable technologies (e.g. insulation, heat pumps, solar panels and smart boilers) in a process called 'retrofit'.

Sustainability Project Officer graduates are then supported by Generation UK through the recruitment process with relevant employers (e.g. housing associations, local councils, energy/utility providers, and specialist retrofit delivery and installation companies). Over 80 percent of Sustainability Project Officer recent graduates are now employed on an average starting salary of £24k and earning up to £30k when progressing into new roles after two years.

During its first year of operation the program had 49 participants from a diverse range of demographics: 50 percent women, 67 percent ethnic minority, 20 percent with a disability, 46 percent with dependants and 33 percent with English as an additional language.[76]

76 Generation United Kingdom, Green Jobs – Work in Sustainability, Generation website, n.d., accessed 7 September 2023; Macquarie Group, Press Release: Generation UK and Macquarie launch pioneering training programme for green jobs, Macquarie website, 1 September 2021, accessed 7 September 2023. Macquarie Group, One year on: Generation UK and Macquarie launch the pioneering training programme for green jobs, Macquarie website, n.d., accessed 7 September 2023.

(c) Place-based employment initiatives

Green economy employers expressed interest in employing members of the local community. With large green economy infrastructure projects expected to occur in regional, rural and remote areas, recruiting, upskilling and reskilling members of the local community can decrease the costs involved with 'fly-in-fly-out' employment models. Young people from regional areas have also expressed a desire to be trained for jobs within or closer to their communities, rather than having to travel or relocate elsewhere.[77] Sector experts also highlighted the significant opportunity for the green economy to create place-based employment models, tailored to the economic needs of the local community.[78]

An international example of this type of initiative is the Urban Corps of San Diego County (Urban Corps) in the United States. Urban Corps provides low-income young people (aged 18-26) with the tools to expand their career opportunities through education, life skills training and paid work experience on projects that benefit local communities. Following participation in the program, an average of 90 percent of participants are placed in employment or enrolled in tertiary education studies.

There are examples of these place-based models being deployed in Australia. For example, EcoCrews (mentioned in earlier case example) is one example of a community-based employment initiative supporting the green economy in New South Wales, Australia. The Green Army initiative, funded by the Australian Government, is another model which engaged young people in local communities to deliver environmental and heritage conservation projects.

77 The Clean Energy Generation – Workforce needs for a net zero economy, p 209.
78 Beyond Zero Emissions, Hunter Renewable Energy Industrial Precinct: Briefing Paper, April 2022, accessed 8 November 2023.

CASE EXAMPLE

Urban Corps San Diego

Urban Corps is a certified local conservation corps whose mission is to provide young adults with the tools to expand their career opportunities through education, life skills training and paid work experience on projects that benefit local communities.

Urban Corps has given thousands of underserved, low-income young adults ages 18-26 the opportunity to improve themselves while improving their own communities through green jobs. Its unique work-learn program allows youth to finish high school while earning income, learning real-world job skills and giving back to the community through professional services.

Participants attend school one day per week and work in the field four days per week. Through their participation in the program, participants receive employment income, on-the-job training in projects such as environmental services, fire fuel reduction, community improvement services, tree planting, habitat restoration, graffiti removal, landscaping, green building construction and recycling.

Other services are also available to participants during the program, including career and psychological counselling, life skills workshops, case management and one-on-one assistance with resumes, job and college applications, and job placements.

Young adults in the program may have dropped out of high school due to involvement with gangs or drugs, becoming a young parent or an undiagnosed learning disability. Some are refugees with limited English or aged out of the foster system without a graduate diploma. A growing number of participants are homeless.

On average 90 percent of graduates are either placed in jobs following commencement or are enrolled in higher education.[79]

79 Urban Corps of San Diego County, About Us, Urban Corps of San Diego County website, n.d., accessed 7 September 2023; Bree Steffen, 'Green jobs blooming among 'opportunity youth'', Spectrum News, 11 August 2022, accessed 7 September 2023.

CASE EXAMPLE

The Green Army

The Green Army program was an Australian Government initiative conducted from 2014-2018 to help local communities deliver environmental and heritage conservation projects through mobilising young people (aged 17-24 years).

The program delivered over 1,000 projects across Australia and engaged over 11,000 young Australians. Participants were paid between $614 and $996 a fortnight.

Projects were managed by community organisations, including land care groups, natural resource management organisations, environment groups, Indigenous organisations and local councils.

Participants engaged in projects for 20-26 weeks. Projects included weed control, revegetation, cultural heritage conservation, habitat protection, regenerating wetlands in urban, rural and remote areas, and community awareness.

The program's strategic objectives were environmental conservation; community engagement; participation, experiences, skills and training.

An evaluation of the program found that:

- It delivered effective environmental outcomes at the local level;
- The level of community awareness of the program increased over the life of the program, with a significant increase as a result of an awareness campaign;
- It was successful in bringing together a diverse range of young Australians, involving people from different backgrounds, abilities and ages;
- The training through the program provided opportunities for participants to improve future employment and study options (in one survey 60 percent of respondents reported they had obtained a job or undertook further study and training following program involvement).

The program ended as part of the Australian Government's saving measures.[80]

80 Department of Climate Change, Energy, the Environment and Water, Green Army, Department website, Australian Government, 10 October 2021, accessed 7 September 2023; Department of the Environment and Energy, Green Army Evaluation Report, Australian Government, December 2017, accessed 7 September 2023. Parliament of Australia, Environment and water – Budget Review 2015-16 Index, Australian Government, n.d., accessed 7 September 2023. Phillip Coorey, Malcolm Turnbull kills off Tony Abbott's Green Army, Australian Financial Review, 4 December 2016, accessed 7 September 2023.

(d) Intermediary support between employers and young people

Our research highlighted the desire from employers for more support structures to help young people and employers navigate the system into entry-level jobs. These supports can include intermediaries that act as the 'glue', coordinating all parts of the system and helping both the young person and the employer to be set up for success.[81]

These intermediary organisations generally have knowledge of the relevant industry, understanding of young people's circumstances and the needs of employers, and have the networks in place to facilitate job placements. One example of this model is that of Group Training Organisations (GTO) that directly employ apprentices or trainees, then place them with suitable host employers.[82]

The Y Careers initiative, auspiced by the Y Australia, is one example of an intermediary support model providing training, wraparound supports and employment placements to support young people into meaningful employment. The Y Careers initiative is currently being deployed in the caring economy, providing end-to-end supported work placement and skills development for young employees to support the development of their career portfolios.[83] More information about Y Careers can be found in the Foreword of this report.

81 What Will It Take?, p 29.
82 Apprenticeships Victoria, Group Training Organisations, accessed 8 November 2023.
83 The Y, Y Careers, accessed 8 November 2023.

Summary of overarching findings

The green economy is continuing to grow and will be critical to Australia's future economic, social and environmental success. The young Australians of today and tomorrow will need to play a significant role in the green economy workforce in order to meet the demands of this growing sector. Green economy roles can currently be broadly classified into three buckets:

TECH

professionals, including engineering, project management, logistics, digital and finance

TRADES

skilled tradespeople, including electricians, electrical workers, hydro or solar technicians, and construction workers

TREES

roles focused on the climate conservation, adaptation and regeneration, including environmental planning, community engagement and conversation roles

Young people are concerned about the environment and climate change. They are interested in green economy jobs, partly due to the green economy's alignment with young people's values.

Our research found that the green economy is largely a skilled workforce. Employers are experiencing recruitment demand in regional and rural Australia and are interested in hiring diverse candidates.

Young people, however, have little awareness about these jobs in the green economy, including the breadth of available roles across *Tech*, *Trades*, and *Trees* buckets and potential transferability of their existing skills. Consequently, they have limited knowledge about the available training and employment pathways. There is an opportunity to increase awareness through broader outreach, careers information, and leveraging social media.

There is also an opportunity to increase and broaden the entry-level pathways for young people, particularly those that do not require prior tertiary education or work experience, including through:

- Increasing the number of work integrated learning programs to provide young people with a pathway to relevant training, work experience and exposure across green economy jobs
- Offering more collaborative pre-employment training models where green employers are invested in the training and future employment of young people
- Providing more place-based employment initiatives to support the employment, upskilling and reskilling of local young people into green economy jobs in their community
- Deploying intermediary support structures which align the needs and interests of both green economy employers and young people

The green economy, its roles and skills required, is continuing to emerge. And the next horizon for the green economy should be one which holds people at the centre, focussed on both environmental sustainability and people sustainability. There is an opportunity for us to consider how putting people first can accelerate the transformation of the green economy, while also positively impacting the personal, professional and social health and equity of the people and communities it interacts with.[84]

84 EY, How can putting people first accelerate sustainable transformation, 9 November 2023, p 5.

APPENDIX ONE: OUR APPROACH

In developing the insights within this report, the Y Australia and SVAC began with a desktop review of key research and literature on the green economy. This involved a review of publicly available information on the green economy's key sectors, industry growth and expected recruitment demand.

Alongside this research the Y Australia and SVAC consulted with a number of green economy employers, sector agencies and leaders, to understand the opportunities and challenges in supporting young people with entry-level pathways into the green economy. This included consultations with the following organisations: Beyond Zero Emissions, The Clean Energy Council, Hydro Tasmania, Jacobs Solutions, Macquarie Green Investment Group, Rimfire Energy, The Skill Engineer Ltd, The Y Northern Territory, and Zenviron Pty Ltd.

YLab conducted further research and consultations with young people to understand their perspectives around green economy employment. YLab explored the available research that exists about young people's experiences and perceptions of the green economy. Several research papers were examined including a number that included survey responses from young people. The majority of these had a global perspective while one was focused on the Asia-Pacific region. This further reflected the lack of information relating to young people's perceptions of employment in Australia's green economy.

YLab's consultations involved two focus groups with young people, to test and expand on the findings of the desktop research:

- Focus group 1: Eight young people aged 17-26 years from Victoria (5), South Australia (1) and Tasmania (2). Five female, three male. Three were from a regional or rural area. All were in casual employment.
- Focus group 2: Twelve young people aged 15-17 years from South Australia. Five female, four male, three non-binary-identifying. All were high school students, with four currently studying a trade. Three were from a regional or rural area. All were in casual employment.

The level of consultations with young people conducted for this project was limited and is not being presented here as authoritative. However, the findings provide early insights into young people's perceptions on the green economy and the opportunities to better support them into employment pathways.

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Future Fair?

Securing better quality jobs for young people in Australia

November 2019

Contents

Executive summary

This report sets out to describe major trends in the Australian labour market that are shaping the future prospects of young people, particularly young people from less advantaged backgrounds. It considers current labour market program settings as well as the findings from a review of a number of smaller scale workforce-readiness programs. The goal of this report is to stimulate discussion about what can be done to improve the opportunities young people have to move into jobs that provide economic mobility and the opportunity to continue to learn. It identifies actions for employers, governments and those who develop or invest in workforce-readiness programs.

In recent years there have been many reports about the impact of new technologies on the 'future of work'. Some researchers have predicted that up to half of current jobs will be automated, bringing inevitable and substantial social upheaval. Other researchers have argued that though some jobs will disappear, many more will arise in their place. There is general agreement that what is described as the 'Fourth Industrial Revolution' will change the content and distribution of jobs. As a result, people seeking to enter the labour market will need to be prepared to keep adapting their skills. Meanwhile, people who already have work will need to acquire new skills and be equipped to move into new occupations if needed. It's almost certain many people will lose their jobs due to changes in the labour market. However, the size and impact of this displacement will be influenced by government policies and corporate and social decisions about how to manage and respond to structural change.

Young people, whether currently in work or entering the workforce over the next decade, have the most to lose or gain from workforce change. Already, young people's pathways both into and within work look very different from those of their parents. While young people have always borne the brunt of economic downturns, over the last decade young people's employment rates, in particular rates of full employment, have not rebounded as strongly when the economy improves. Even the most educated young people are taking longer to find full-time work. In addition, the pay gap between younger and older workers is widening and underemployment among young people is on the rise. Many young people end up in work that doesn't make use of their skills. At the same time there are skills shortages in many parts of Australia, and many employers argue that young people seeking employment are not adequately prepared for 'the world of work'.

Young people today are more educated than those in previous generations. However, entry-level job opportunities that offer career progression have declined. In addition, a closer look at post-secondary education and training highlights the risks for many young people in a labour market that favours those with higher level skills. University participation rates have increased markedly over the last decade, yet the overall rate of participation in post-secondary education has declined. Participation in the vocational education sector (VET) has been affected by a 'perfect storm' of changing community attitudes, poor policy decisions and lack of strategic investment. Even though the prospects for many VET-qualified workers are good, young people are not participating in VET education at a rate that reflects emerging employer demand. Creation of new apprenticeship and traineeship opportunities has fallen behind overall employment growth. Employer investment in skills training for existing employees has also declined, with those who start off with lower levels of education most likely to miss out. The risk is that existing inequities in access to training will be entrenched and exacerbated by labour-market change.

Schools and tertiary institutions have been asked to do more to teach 'employability' skills and to prepare their students for work. However the usefulness of teaching employability skills in the abstract – that is, in a way that is divorced from specific occupational or industry content – has been questioned. While it is clear that these skills are critical, there is little evidence that employability skills programs make a difference on their own. What is most important for many young people – particularly those who are more marginalised – is the opportunity to integrate learning with work.

Apprenticeships, provided they are well supported, offer a model for work-based learning that could be applied to many more emerging domains of work. This requires greater action from employers to create opportunities. Fragmented supply chains, use of more insecure forms of employment, and reduced investment in training have all made it much more difficult for young people to secure a foothold in the labour market and to develop skills in the workplace. While employers demand higher skill levels and experience from prospective employees, many appear to be doing less of the 'heavy lifting' regarding skills development themselves. In addition, wages have stagnated and the financial rewards to individuals from time spent acquiring skills on or off the job have become less certain.

This report recognises the work being done by many Australian governments to revitalise and renew the VET sector. It recommends greater investment in Technical and Further Education (TAFE) because of the critical role TAFE plays as an 'anchor' institution in local labour markets. Effective vocational education and training will also need greater involvement and support from employers through work placements and increased use of apprenticeships and traineeships.

This report notes that several State Governments have done important work to stimulate creation of new training pathways through mandatory training requirements in major infrastructure projects. It recommends that consideration be given to extending these types of training requirements to other suppliers and contractors. It also recommends that all levels of government ensure they provide young people from disadvantaged backgrounds with opportunities for career entry and progression.

In recent years there has been a recognition that Commonwealth Government investments in labour-market programs are not working as well as they could be for people who face more significant obstacles to employment. To date, the employment services reform process has not seriously addressed either problems of underemployment or the need to prioritise skill formation. Many of the jobs that unemployed people find through employment services are casual and offer limited prospects for skill or career progression. Fewer employers are using government employment services and there is a risk that these programs may contribute to, rather than work against, job polarisation.

This report recommends that Commonwealth-funded employment programs be reformed so they better support the development of a highly skilled workforce with the resilience to manage structural change. This includes ensuring that programs have an increased focus on placement into higher quality jobs. Programs also need to be able to respond to specific local challenges in regional communities affected by structural change.

Recognition of the inadequacies of current universal labour-market programs has sparked investments by philanthropic, community and government organisations in a range of complementary programs aimed at supporting young peoples' transitions into employment. While many of these programs have been funded, not much is known or reported about their effectiveness. Social Ventures Australia (SVA) reviewed some of these programs, gathering insights from providers, participants and employers involved. Many of these programs focused on trying to convince employers to increase their provision of both work experience and work opportunity. While there were some successes, there were also considerable challenges. Program proponents need to be given time to build a clearer picture of the support needs of young people and the size of the gap between employer expectations and young peoples' immediate capabilities. Given the diversity of young people, the pathways available to them and the set of available supports, SVA believes the most effective programs will be those that are long-term and tailored to specific local labour markets.

This report supports continued investment in this type of complementary program where their design reflects the elements likely to promote success. Critical among these is the inclusion of young peoples' voices in program design and improvement. The report recommends that funders provide multi-year grants, be flexible in their requirements so that programs can adapt, and ensure they capture and share what is learned.

While we may not be able to predict what types of jobs and opportunities will be available in the future, we can take steps to improve the odds that future risks and benefits are more fairly shared. We recommend that current systems of labour market regulation and social protection be reviewed and strengthened to ensure that structural labour market change improves, rather than reduces, income security and recognition of skills.

While government action is critical, it is employers who must decide how they structure employment opportunities, how they reward those who bring their skills to the workplace, and how much they invest in the future skills of their employees. If young people are to thrive in the changing world of work, employers must be willing to invest in providing opportunities for them to get their first job within their organisations, to continue to learn over time, and to share the economic and social gains from technological change. This report recommends that employers step up their efforts to nurture young people, particularly those who are disadvantaged in the labour market, both within their own enterprises, and through their supply chains.

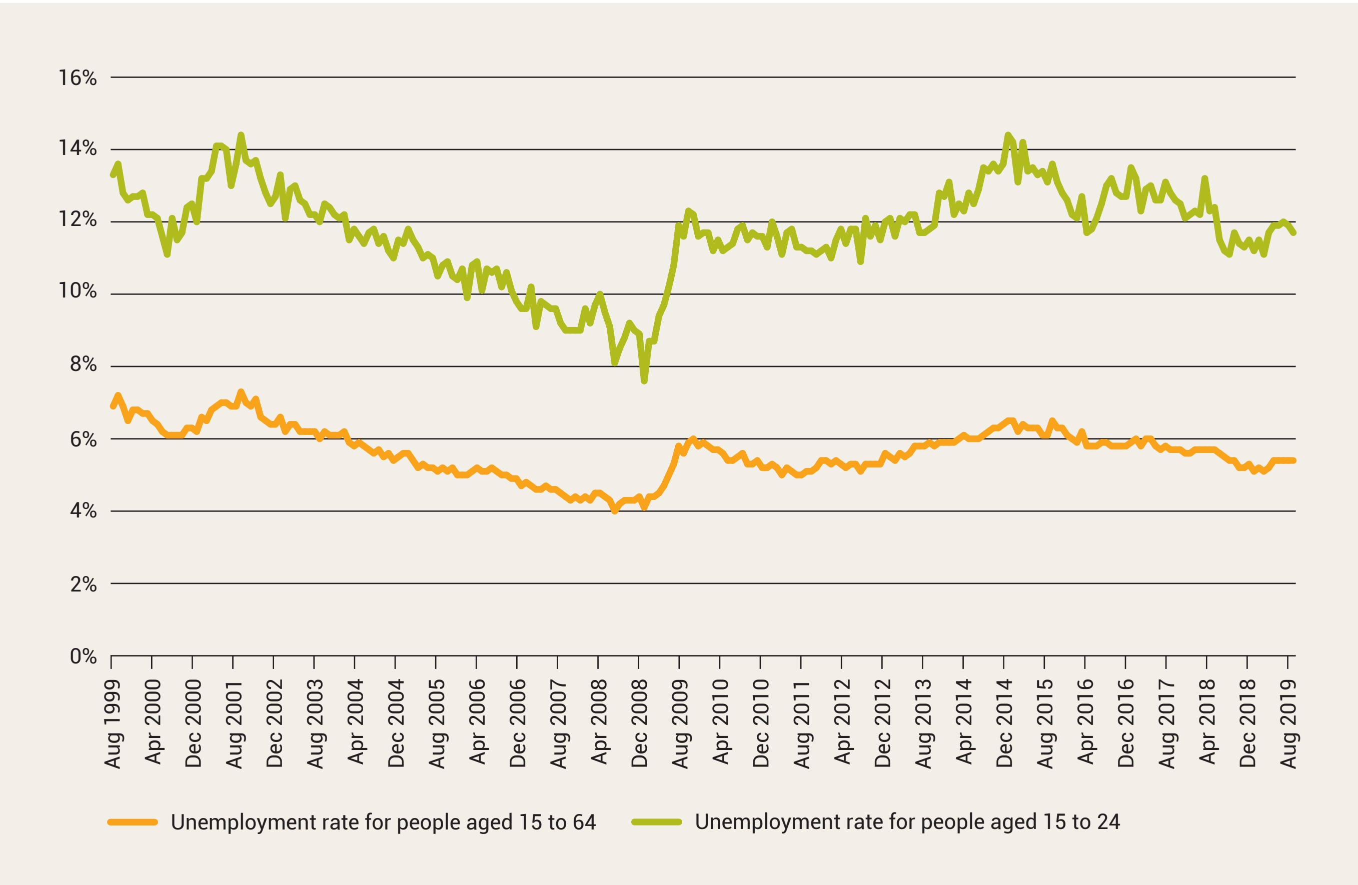
The current dilemma: youth unemployment and skills shortages

We are often reminded that Australia has enjoyed over two decades of continuous economic growth. During the 2008 Global Financial Crisis (GFC) growth slowed, but the economy did not contract. Australia's current unemployment rate of just over 5% is close to what the Reserve Bank has historically considered 'full employment'.

In Australia, as in most countries, young people's unemployment rates tend to change with the fortunes of the overall economy, but they do so more sharply. Young people have generally been the first to feel the effects of economic downturns, but their employment has usually rebounded with economic growth. However, since the GFC the gaps have grown between the unemployment and underemployment rates of young people and those of the overall workforce. Immediately before the GFC, youth unemployment reached a low of 7.6%. In the decade since it has averaged over 12% (Figure 1).

In August 2019 the national unemployment rate was 5.3%, while for young people it was 11.7%. For teenagers the unemployment rate was 17.1%. While Australia has historically outperformed other Organisation for Economic Co-operation and Development (OECD) countries on rates of youth unemployment, Australia's youth unemployment is now slightly above the OECD average.

Figure 1: Unemployment rate by age

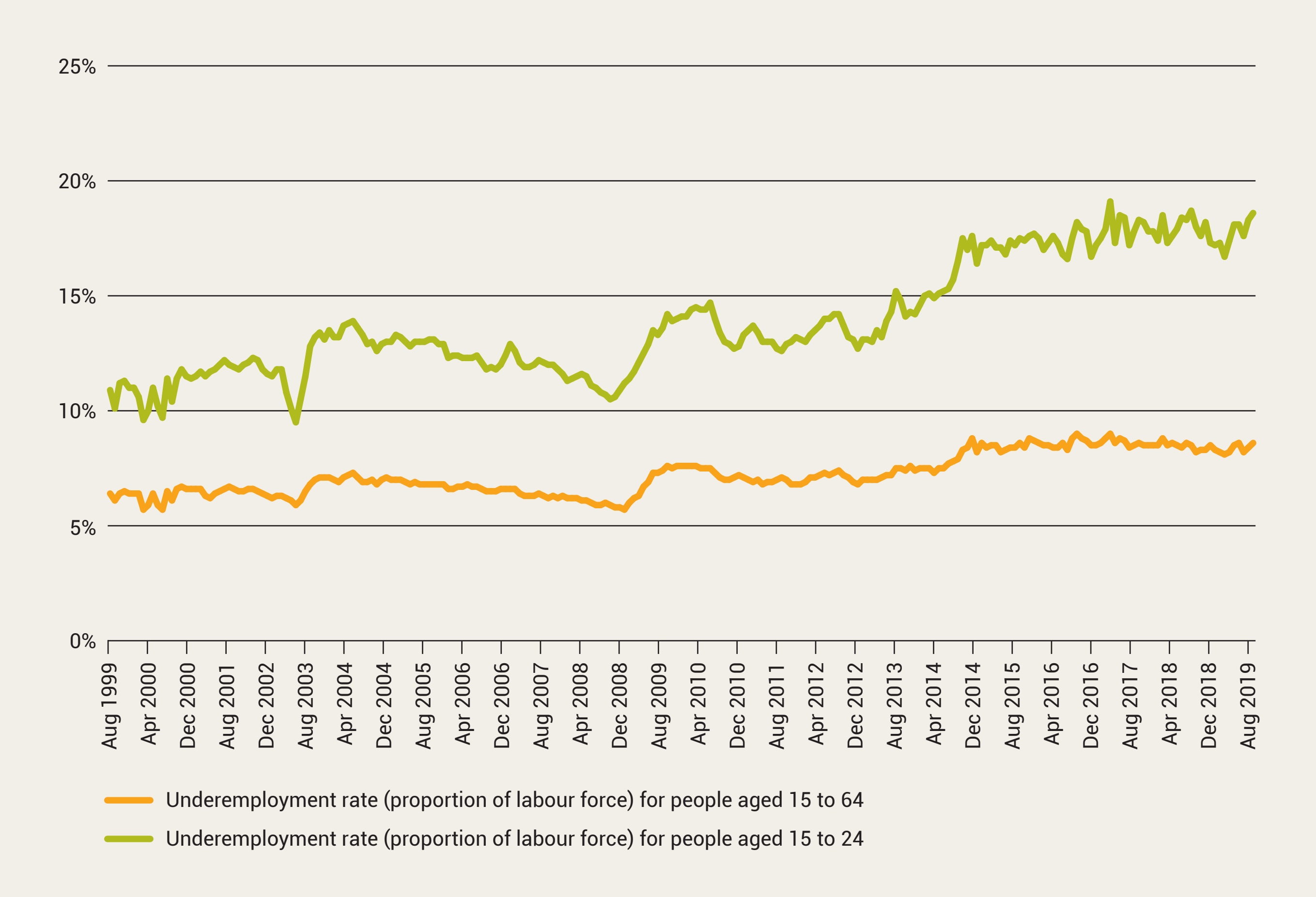


Source: ABS 6202.0, Labour Force, Australia, August 2019 (seasonally adjusted figures)

Along with the 259,400 people aged 15 to 24 who were unemployed in August 2019, another 414,300 were underemployed.[1] That is, they had some work but were looking for more. Of the 1.9 million people aged 15 to 24 who were working in August 2019 more than a fifth were underemployed.

While underemployment is a problem across the Australian workforce, the gap between the youth underemployment rate and that of the wider labour force rate has been growing (Figure 2).

Figure 2: Underemployment rate by age



ABS 6202.0, Labour Force, Australia, August 2019 (seasonally adjusted figures)

1. ABS 6202.0, *Labour Force, Australia*, August 2019 (seasonally adjusted figures)

Young people are much more likely to work in part-time and casual jobs than others. In 2016, 25% of the overall workforce was in casual work, while 76% of employees aged 15 to 19 years and 41% of employees aged 20 to 24 years were casual employees.[2] Young people are more likely to work in sectors with high rates of casualisation like the hospitality and retail sectors. In some cases this reflects a preference, for example where they are combining study and work. But high rates of underemployment, and recent increases in the numbers of young people who are long-term unemployed, show many young people are becoming trapped in low wage, intermittent work after finishing school or further education. The Foundation for Young Australians (FYA) has reported that, on average, young people are taking more than two and a half years to find their way from full-time education to full-time work.[3]

In the short term, some young people who are unemployed or underemployed face risks of poverty and homelessness. For example, households where the main source of income is Youth Allowance have a poverty rate of 64% or more.[4] Reductions in weekend penalty rates since February 2017 have disproportionately affected young people. The gap between median youth wages and those of workers aged 35 to 44 has widened since the GFC.[5] Youth homelessness has risen over the last ten years, with nearly 60% of those identified as homeless in the last census under 35 years old.[6] Over the long term, a person who is disengaged at age 24 is at greater risk of unemployment, low pay, and employment insecurity.[7] In addition, both unemployment and poor quality work are associated with poor mental health.[8]

2. Geoff Gilfillan, 2018, *Characteristics and use of casual employees in Australia*, Parliamentary Library Research Paper Series 2017–18, p.5
3. Foundation for Young Australians, *New Work Reality*, June 2018, p.9
4. ACOSS, 2018, *Poverty in Australia*, p.48
5. Zoya Dillon & Natasha Cassidy, 2018, 'Labour Market Outcomes for Young People', *Reserve Bank Bulletin*, June 2018, p.17
6. ABS, Report No. 2049.0, 'Census of Population and Housing: Estimating homelessness', 2016; www.abs.gov.au/ausstats/abs@.nsf/mf/2049.0
7. Stephen Lamb & Shuyan Huo, 2017, 'Counting the cost of lost opportunity in Australian education', Mitchell Institute Report No. 02/2017, p.15
8. Peter Butterworth, et al., 2011, 'The psychosocial quality of work determines whether employment has benefits for mental health: results from a longitudinal national household panel survey', *Occupational and Environmental Medicine*, 68 (11), pp.806–812

Young people are taking longer to find a secure foothold in the labour market, and this is having an impact on their wellbeing. Despite higher levels of educational attainment the Foundation for Young Australians summarised the position as follows:

> *By the age of 25, only half of young Australians have been able to secure more than 35 hours of work per week, which classifies them to be full-time employed (ABS definition). On the journey to reach full-time work, an estimated 21% work full-time hours in casual employment, and 18% do so through multiple jobs.*

> *Prolonged periods of unemployment and underemployment have serious implications on a young person's self-esteem and general mental health as they transition to adulthood. Today 40% of young people identify as having low levels of social and emotional wellbeing. Among 18 to 24-year-olds who are looking for work, 28% reported anxiety in the previous year and 41% said they were affected by stress.*[9]

The paradox is that while young people in Australia are finding it harder to find a secure foothold in the labour market, many employers are saying that they can't find people with the right skills. In 2018 there were over 80,000 temporary skill shortage visa holders in Australia of whom over 23,000 were technicians and trade workers, and over 1,000 were community and personal care workers.[10] Skills and labour shortages exist across many parts of the economy.

This is both a significant problem and an opportunity. Bridging the gap between employer needs and the skills and aspirations of young people will unlock economic potential and increase the likelihood that the next generation will be able to achieve what Nobel Prize winning economist, Amartya Sen, describes as 'lives they have reason to value'.[11] But we need to know more about how we've arrived at this point, and what we need to do to assist more young people to move into better quality work.

Key points

- **Youth unemployment and underemployment rates have increased relative to those of the general population, and relative median incomes for young people have fallen.**
- **Australia's position has worsened relative to other countries in the OECD.**
- **At the same time there are reported skills and labour shortages, suggesting that structural problems in the labour market, not just overall labour demand, are having an effect.**

9. Foundation for Young Australians, *New Work Reality*, June 2018, p.7
10. Steven Joyce, 2019, *Strengthening Skills*, Commonwealth of Australia, p.10
11. Amartya Sen, 1999, *Development as Freedom*, Anchor Books, New York, p.74

The 'future of work'

Over the last few years there has been a proliferation of reports into the 'future of work'. This intense interest has been sparked by what has been called the 'Fourth Industrial Revolution' – technological developments in areas like artificial intelligence, robotics and the 'internet of things' that promise to radically transform the way we work. Many routine and predictable tasks – whether physical or cognitive – are, or will soon be, readily automated.

Technology is not the only driver of change. Climate change, global migration and ageing populations in countries like Australia will all play a role in the structuring of future supply and demand for labour and skills.[12]

Some predictions about the future of work are dramatic, particularly those that attempt to look forward a number of decades. International studies have forecast future unemployment rates of above 20% across Europe, with a half of current jobs disappearing.[13] Other studies have argued that while automation will affect the nature of many jobs, fewer than 10% of current jobs are likely to be entirely replaced.[14] The current consensus appears to be that in most cases it will be specific tasks within jobs rather than whole jobs that will be automated. If this is correct, there is enormous potential for displacement. However, wide-scale unemployment could be prevented by implementing the right social and economic settings to equip people for change.

In 2015 the Office of the Chief Economist estimated that the tasks of 44% of Australian jobs are susceptible to automation over the next couple of decades.[15] In the same year, the Committee for Economic Development of Australia (CEDA) suggested that 40% of existing jobs were at a high risk of automation in the next 10 to 20 years.[16] McKinsey & Co. have predicted that between 1.8 and 5 million Australians will need to change occupations by 2030.[17] The OECD has suggested that fewer of Australia's jobs are at high risk of automation than in other countries across

12. Thereza Balliester & Adam Elsheikhi, ILO, 'The Future of Work: A Literature Review', March 2018, p.1
13. ibid., p.9
14. ibid., p.11
15. Office of the Chief Economist, 2015, *Mechanical boon: Will automation advance Australia?*, Department of Industry Innovation and Science, Canberra, p.1
16. CEDA, 2015, *Australia's future workforce?*, p.58
17. McKinsey & Company, 2019, *Australia's Automation Opportunity*, p.14

the OECD, with an estimated 10.6% of Australian jobs at risk of automation, and 25.1% at risk of significant change.[18]

While in the past, manual labourers performing routine tasks have borne the brunt of technological displacement, developments in machine learning mean that an increasing number of white-collar roles, ranging from clerical workers to lawyers, will be able to be performed by machines. However, the technical feasibility of automating tasks does not necessarily mean that it will occur. Uptake of automation will be affected by issues like cost and cultural preferences (for example, for human customer services officers over machines). It will also be shaped by the decisions of governments and corporations over issues like the degree to which they support the use of technologies to augment or replace human capabilities, and how this process occurs.[19]

As has occurred in previous periods of technological change, job destruction is likely to be accompanied by the creation of new jobs. The number of new jobs, their nature and distribution is difficult – maybe impossible – to predict. Some analysts have argued that the ability of new technologies to perform both physical and cognitive tasks means that the 'Fourth Industrial Revolution' is less likely to create jobs than previous technological transformations.[20] Others are more optimistic. Deloitte Access Economics, for example, suggests that creation of new jobs will outweigh job losses, arguing that: 'For every problem there's a job, and we're not running out of problems.'[21]

Demand for health and caring services is expected to continue to increase, opening up many more roles in what Deloitte describes as 'work of the heart'.[22] However, the ability of governments or individuals to address these problems will be determined by the way the economic benefits of change are distributed. Currently, many jobs in growth sectors like aged and disability care are associated with poor pay, underemployment and limited access to skills-based progression. Because these sectors are so heavily reliant on public funding, addressing this will require greater taxpayer investment. In the long run, the number and quality of jobs available, and the extent to which opportunities are shared, will depend as much on the choices we make as a society about how much we invest in our social and other infrastructure and how income and wealth are distributed, as on technological or other trends.

Even the most positive forecasts suggest that structural unemployment will emerge with changes in the nature and distribution of jobs, as David Peetz explains:

> *...the jobs that are lost will involve different skills to the jobs that are created, and the people who lose jobs may not have, or live in an area where they can obtain, the skills that are needed to occupy the new jobs that are created.*[23]

Regional areas which are highly dependent on specific industries are at particular risk.[24] Both public and private investment in structural adjustment will be necessary in order to reduce both the magnitude and duration of unemployment that arises.

Key points

- **The impact of technological, environmental and social change on future demand for labour in Australia is unclear, but not entirely outside our control. There are potential jobs that could be created to respond to social and environmental challenges but paying for them will require social investment.**
- **It is clear that many jobs will change significantly and that the impact of this will be felt more by some people and communities than others. Employer and government action will be needed to avoid short-term unemployment becoming long-term displacement and to avoid increasing regional disparities.**

18. OECD, 2019, 'The Future of Work: How does Australia compare?', *OECD Employment Outlook 2019*, Paris: www.oecd.org/australia/Employment-Outlook-Australia-EN.pdf
19. World Economic Forum, 2018, *Future of Jobs Report 2018*, p.23
20. op. cit., ILO, 'The Future of Work: A Literature Review', p.14
21. Deloitte Access Economics, 2019, *The Path to Prosperity: Why the future of work is human*, p.2
22. ibid., p.13
23. David Peetz, *The Realities and Future of Work*, ANU Press, 2019, p.97
24. Kim Houghton, 2019, *The Future of Regional Jobs*, The Regional Australia Institute, Canberra, p.24

Today's opportunities

Long-term job forecasts are important for those making decisions about what policies, institutions and infrastructure might be needed in the future. But their highly speculative nature means they are of limited value to young people entering the workforce in the short term.

There is a body of work that uses analyses of current workforce structures and trends to project the shape of the workforce within a 2- to 5-year timeframe. One of the most respected and comprehensive sources of this information is the Commonwealth Government's annual Australian Jobs report, key features of which are summarised in Table 1.

This shows that the health and community services sector is expected to continue to grow, adding nearly 300,000 new jobs. Despite the highly 'automisable' nature of many retail jobs and the impact of online shopping, this sector is forecast to remain the second highest employment sector in 2023.

The growth of jobs in different sectors is only part of the picture. More than half of job openings to 2024 are expected to emerge from the need to replace existing workers, rather than from net growth.[25] For example, despite a long-term decline in employment in the manufacturing sector, it will continue to generate new job openings as older workers retire, in addition to jobs created as the sector rebounds.[26]

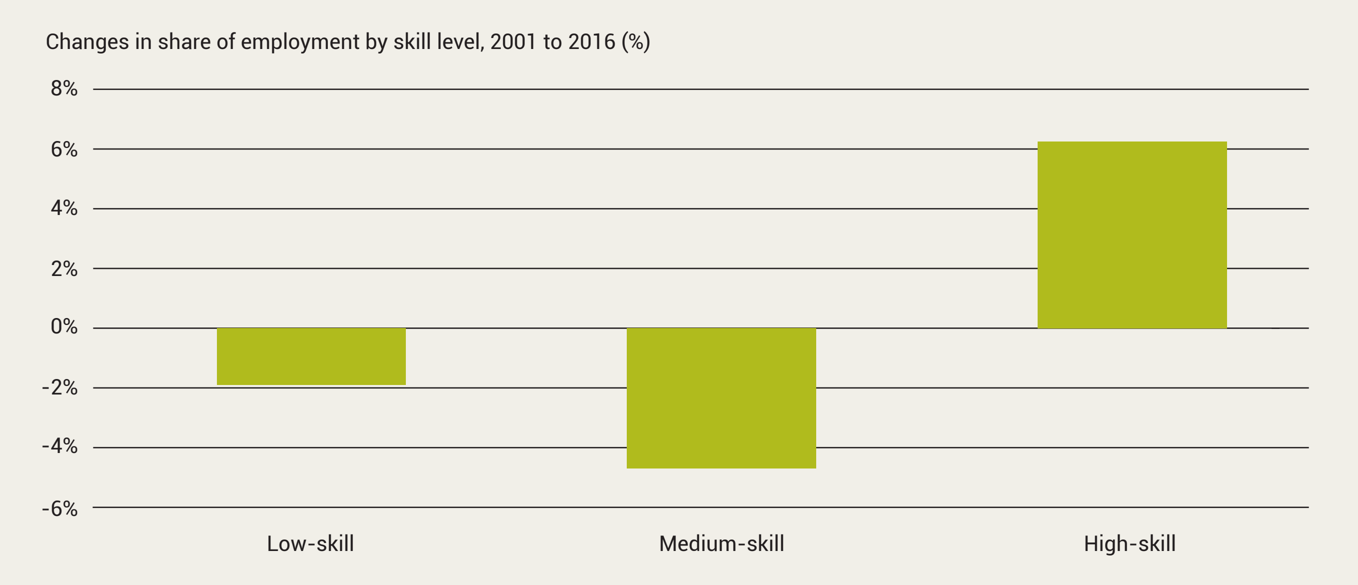
Table 1: Expected employment growth by industry to 2023

Industry & number employed	Top employing occupations	Expected growth to 2023	15 to 24 year-olds	Job quality indicators
Health care and social assistance **1,685,100**	• Registered nurse • Aged and disability carers • Child carers	+14.9%	9%	21% casual 45% part-time Median weekly earnings: $1000
Retail **1,272,000**	• Sales assistants • Retail managers • Checkout operators/cashiers	+3.7%	32%	36% casual 51% part-time Median weekly earnings: $700
Construction **1,166,900**	• Carpenters and joiners • Electricians • Construction managers	+10%	16%	25% casual 15% part-time Median weekly earnings: $1280
Professional, Scientific and Technical Services **1,082,100**	• Accountants • Software and applications programmers • Solicitors	+10.2%	10%	14% casual 23% part-time Median weekly earnings: $1380
Education and Training **1,035,400**	• Primary school teachers • Secondary school teachers • Education aides	+11.2%	9%	18% casual 39% part-time Median weekly earnings: $1150
Manufacturing **965,000**	• Structural steel & welding trades workers • Packers • Metal fitters & machinists	+0.9%	12%	19% casual 16% part-time Median weekly earnings: $1150

Sources: DESSFB Australian Jobs, 2019; Geoff Gilfillan 2018, Labour Market Information Portal[27] Note: median earnings $1066, share of full-time 68.3%

25. Chandra Shah & Janine Dixon, 2018, *Future job openings for new entrants by industry and occupation*, NCVER, p.11
26. ibid., p.40
27. Geoff Gilfillan, 2018, *Characteristics and use of casual employees in Australia*, Parliamentary Library, p.9

Figure 3: Changes in share of employment, by skill level



Source: Department of Jobs and Small Business, Australian Jobs 2019

Over the last two decades there have been changes in the skill profile of jobs in the labour market (Figure 3). There are proportionally more jobs requiring higher skill levels – like degrees – while jobs at lower and middle levels have declined. Projections of future growth suggest that, whether they emerge from net growth in jobs or from replacement of existing workers, there will continue to be proportionally more job openings for those with higher skills. Middle-skill jobs are forecast to decline, but it is important to recognise that jobs in this middle band will continue to play a critical role, particularly for young people, in providing good long-term jobs or pathways into higher skill jobs.[28]

The strongest growth in jobs is forecast to be in professional occupations, including in areas like health care, information and communication technologies (ICT), and teaching.[29] The next highest growth is expected to be among managers and trades and technical workers. In some of these areas, like traditional trades, there are already significant, long-running skills shortages. In others they are only beginning to emerge. And while jobs may be available, there are, as Table 1 highlights, substantial differences in the quality of jobs that are emerging. Personal care work, for example, is often characterised by low wages, underemployment and poor job security. People who work in the ICT sector are more likely to enjoy higher wages and conditions.

While forecasts of likely growth sectors and occupations are valuable for those attempting to plan for the future of institutions and communities they are, in our view, less useful for individual young people trying to plan their own careers. The Australian Jobs report warns against too much reliance on predictions, advising its readers:

It is important to remember that the labour market can change quickly. It isn't easy to forecast future labour-market conditions and it isn't advisable to base employment and training decisions solely on predicted shortages. It is better to train in an area in which you have an interest and aptitude than to choose a career solely based on expectations about future conditions.[30]

While labour market information may have some value for young people, careers advisers and families, what is likely to be more critical is access to material and – even more importantly – experiences, that allow exploration of a wide range of job options. Regardless of what industry or occupation young people move into, we can expect that most jobs will require ongoing adaptation as a result of technological, social and environmental change.

Key points

- **It is expected that the strongest growth will be in jobs at higher skill levels.**
- **Jobs will also be available in lower and middle skill levels but, particularly at the lower end, wages and conditions are often poor.**
- **Labour market data is useful for policy makers and educators, but exploration of a range of pathways that reflect individual interests and abilities is probably of more value to young people.**

28. Sara Lamback, Carol Gerwin & Dan Restuccia, *When is a job just a job – and when can it launch a career?*, JFF, p.17
29. Department of Jobs and Small Business, *Australian Jobs 2019*; Chandra Shah and Janine Dixon, 2018, Future job openings for new entrants by industry and occupation, NCVER, pp.11–12
30. Department of Jobs and Small Business, *Australian Jobs 2019*, p.2

The future of skills

Alongside predictions about the types of jobs available in Australia in the future (and whether some will have them at all) there has been considerable discussion about what skills might be needed by future workers, particularly so they are equipped to adapt to changing workplaces.

(i) STEM skills

The need to boost science, technology, engineering and mathematics (STEM) skills in young people in Australia is often raised in the context of preparing them for the future world of work. In Australia this is occurring against a backdrop of declining participation in higher level STEM subjects by school students, and a lack of improvement in proficiency in maths, ICT, and science in schools over the past decade. STEM skills are seen as critical to research and innovation as well as drivers of economic growth. The rise in the use of automation, of information technologies, and the increasing demand for health services are all driving demand for expertise in STEM disciplines. In 2019, for example, the Commonwealth Department of Employment, Skills, Small and Family Business reported that between November 2013 and November 2018, employment in STEM occupations grew by 16.5%, which was 1.6 times higher than the growth rate in non-STEM jobs.[31] It forecast that this trend was likely to continue, with expected growth of over 271,000 jobs in the 108 job categories identified as STEM jobs.

It's important to note that the links between STEM qualifications and employment opportunities are not straightforward. Many university science graduates struggle to find work following graduation.[32] Only 52% of information technology graduates from the VET system are employed 6 months after training.[33] 72% of those graduating with university ICT qualifications found full-time employment after graduation.[34] While a range of factors are involved, employers have expressed concern about a lack of real-world experience among graduates. The CareerTrackers initiative (see case study) is one attempt to address this issue through a paid internship model. Another issue has been the neglect, at least in some discussions, of the importance of VET-qualified workers in STEM. According to the Office of the Chief Scientist there are about 2.3 million Australians in the workforce with STEM qualifications, with 32% of them having university qualifications, and 68% holding VET qualifications. The same report, however, went on to focus almost entirely on university-qualified workers. Public discussion about VET, on the other hand, has tended to focus on construction and other traditional trades.

The STEM debate also highlights the need to focus on both labour supply and labour demand. Private sector capital investment and investment in research and development have declined, as has public funding for research and development. Future demand for STEM qualifications in many areas will depend on innovation and growth in export sectors. For young workers, the prospects of future, high-quality employment in this sector are inextricably linked to efforts to diversify and strengthen Australia's economy.

31. Department of Jobs and Small Business, 'STEM jobs are growing faster than other jobs', 27 March 2019 www.employment.gov.au/newsroom/stem-jobs-are-growing-faster-other-jobs
32. Anna Patty, 'Not enough jobs for science graduates challenges STEM hype', Sydney Morning Herald (online), 14 April 2019, www.smh.com.au/business/workplace/glut-in-demand-for-science-graduates-challenges-stem-hype-20190327-p517zj.html
33. Department of Jobs and Small Business, *Australian Jobs 2019*, Australian Government, Canberra, p.32
34. Social Research Centre, 2019, *2018 Graduate Outcomes Survey: National Report*, p.2

Case Study:

CareerTrackers

CareerTrackers is a national non-profit organisation which seeks to create pathways and support systems for Aboriginal and Torres Strait Islander young adults to graduate from university with high marks as well as high-quality employment experience. Recognising the need for young people to establish work skills and a desirable resume alongside academic learning, CareerTrackers established a paid internship model to facilitate real work opportunities for people during breaks between university semesters. These internships provide these young adults with experience and a chance to transition into employment once they complete their studies.

Operating for over a decade, the program's close links to corporate partners have enabled the completion of 5,397 internships that align with the academic and future work aspirations of CareerTrackers participants. The internships include the establishment of a development and work plan for each intern with real projects and deliverables. The program receives funding from philanthropic and corporate foundations, as well as payments from corporate partners via a user-pays model. Corporate partners benefit from participating in the program through the creation of development opportunities for their existing staff and the opportunity to develop a pipeline of future employees. Their commitment to the program has enabled sustained growth and success over many years.

Young people are referred to the program via universities and referral partners. They are then assessed for the program on the basis of their level of commitment and drive to be part of the program. Interns are taken through a pre-employment training process; a series of activities that test behaviours employers look for. To prepare interns for an interview they complete a minimum of 20 hours of pre-employment training, including participating in a series of workshops to develop interview and other work skills. Where necessary, pre-employment support is longer, depending on when a participant is ready to undertake a placement. Every participant has an advisor who supports them throughout the program's duration.

Through the program, interns are provided opportunities to engage with the world of work while studying. University students share their experience of what it's like to work through peer-to-peer role modelling, and industry professionals run workshops where participants learn about the workplace, how to navigate and build relationships within the workplace, and survival tips for 'fitting in'. The final step supports young people to consider and understand the financial elements of employment, including starting salaries.

Results have shown that CareerTrackers students complete their university courses at higher rates than their non-Indigenous peers and that 95% are in full-time employment in their field of expertise within three months of graduation.

(ii) Employability skills

A lot of recent analysis emphasises the importance of a range of broad employability or 'generic' skills. In 2017 the Foundation for Young Australians released an analysis of over 4 million 'early career' job advertisements over a three year period. They found that there were substantial increases in demand for digital literacy (up 212%), critical thinking (up 158%), creativity (up 65%) and problem solving (up 26%) over the three years.[35]

A 2017 review of key frameworks and evidence identified nine key skills that were most commonly identified by those attempting to identify '21st-century skills'. These were:

- critical thinking
- creativity
- metacognition
- problem solving
- collaboration
- motivation
- self-efficacy
- conscientiousness, and
- grit or perseverance.[36]

In its examination of efforts to embed the development of these skills in schools, the report noted that while there was substantial activity, reliable mechanisms for measuring or assessing many of these skills were scarce.

Efforts to assess and to teach employability skills have also been included in many post-school, pre-employment programs. However, the similarities in words used to describe what makes people 'employable' mask underlying differences in what different employers actually want when they try to recruit employees. In the recruitment process, the difficulties in describing and measuring some of these 'employability skills' mean that there is significant potential for their application to entrench socio-economic and other biases.[37]

Rather than being 'generic', some experts argue that employability skills are learned and applied in specific industry or occupational contexts.[38] The Core Skills for Work Developmental Framework outlines the core non-technical skills identified by Australian employers and industry as important for successful participation in the workforce. However, while it seeks to describe performance of core skills in ways which are applicable across different work and educational contexts, it states that:

35. FYA, *The New Basics*: Big data reveals the skills young people need for the New Work Order', p.4
36. Stephen Lamb, Quentin Maire & Esther Doeke, 2017, *Key Skills for the 21st Century: An evidence-based review*, NSW Department of Education, p.3
37. Alison Taylor, 1998, 'Employability skills: From corporate 'wish list' to government policy', *Journal of Curriculum Studies*, 30:2, 143-164; David B. Bills, et al., 'The Demand Side of Hiring' *Annual Review of Sociology*, 43, pp. 291–310
38. John Buchanan, et al., 2018, *Future Frontiers Analytical Report: Preparing for the best and worst of times*, NSW Department of Education, p.20

> *...performance is not automatically transferrable to new contexts, as application of skills, knowledge and understandings in a new context requires an understanding of that context. Hence, an individual who has only ever applied their skills in a classroom setting will need to learn about the protocols and expectations of a work situation, and gain practical experience in applying their skills in a work environment before they can demonstrate their skills at the same stage of performance within that work context.*[39]

John Buchanan, et al. argue that employability skills can only be developed in context, and in conjunction with specific technical knowledge, saying:

> *...the development of specialist expertise of some kind is essential for the development of more generally applicable capabilities like problem solving. Furthermore, such specific expertise would bolster key aspects of self-determination, autonomy and competence, which foster enhanced performance, persistence and creativity.*[40]

Questions about the value of attempting to teach employability skills in isolation were reinforced by a recent systematic review of youth employment programs that found no consistent evidence for the efficacy of programs to develop 'soft skills' on employment outcomes.[41]

This does not mean there is no value in highlighting the importance of employability skills. However, it suggests they are best learned and measured in the context of particular occupational and/or industry settings. Essentially, young people will need to develop a combination of vocational and 'soft' skills to succeed, and it is likely these two qualities need to be developed together. While educators are important, they cannot make up for a lack of opportunity to learn employability skills within workplaces. Experience with employers and employment is critical to help young people build the skills they need for the world of work.[42] This is likely to mean increased and more consistent investment in schools and the TAFE sector, to support employer engagement.

39. Departments of Industry, Innovation, Climate Change, Science, Research and Tertiary Education; and Education, Employment and Workplace Relations, 2013, *The Core Skills for Work Developmental Framework*, Australian Government, p.6
40. op. cit., John Buchanan, et al., *Future Frontiers Analytical Report: Preparing for the best and worst of times*, p.31
41. Jochen Kluve, et al., 2019, 'Do youth employment programs improve labor market outcomes? A quantitative review', *World Development*, 144 (2019) pp.237–253.
42. Education and Employers, 'What is a meaningful encounter with the world of work?', 18 September 2019. www.educationandemployers.org/wp-content/uploads/2019/09/What-is-a-Meaningful-Encounter-with-the-world-of-work-final-1.pdf

(iii) Skills mismatch, adaptability and vocational streams

While many employers report skills shortages, there is also a plethora of people working in jobs they are overqualified for or that do not use their skills. One view of the reason for this is the structuring of vocational qualifications around narrowly defined workplace competencies at the expense of broader definitions of skills that foster adaptability across multiple settings. To that end, some researchers have argued that vocational education should be reoriented towards 'vocational streams' which reflect families of job types that share common practices, knowledge, skills and attributes.[43] This would link, for example, work in aged care with that in the disability sector – acknowledging a shared practice of 'care work'. While the specific skills required in particular jobs may change, the purpose of many jobs – whether they involve maintaining electrical systems or providing care – is likely to remain the same. The idea of vocational streams seeks to prepare workers to adapt their skills, while recognising the importance of domain-specific skills and experience.

The Foundation for Young Australians (FYA) has started to grapple with these issues through identifying job clusters which have overlapping needs for both technical and 'enterprise' skills. In its work with TAFE and industry partners in South West Victoria, it has started to explore the combinations of qualifications, career navigation tools and micro-credentials that can equip young people to change and adapt with changing labour market opportunities (see the New Work Mindset in Action case study).

Key points

- **Development of a STEM workforce is inextricably linked to diversification and innovation within the Australian economy. While the focus has been on university qualifications, most of the people who work in STEM roles are VET qualified, and many of these skills are in short supply.**
- **The focus on employability skills is important, but they should not be seen in isolation. Employability skills are best developed in context. Educators, particularly schools and TAFE, need to be funded to maintain active relationships with employers.**
- **Future-oriented vocational qualifications should be built around technical and soft skills that can be applied across similar occupations, so that employees are not locked into narrow roles.**

43. Leesa Wheelahan, John Buchanan & Serena Yu, 2015, *Linking qualifications and the labour market through capabilities and vocational streams*, NCVER Adelaide, p.10

Case Study:

New Work Mindset in Action – South West Victoria

With funding through the Victorian Government's Workforce Training and Innovation Fund (WTIF), South West TAFE, FYA and three industry partners Lyndoch Living, Western District Health Service and Eventide Homes embarked on an ambitious collaborative project to engage current and future workers and the institutions, organisations and systems that support them to learn, gain and succeed in the new world of work.

The South West region of Victoria is undergoing a period of change in its economy, industry and local work landscape. While agriculture remains the largest employer in the region and is central to the local economy, there has been significant growth in the health care and social assistance sectors, with further growth projected. The expansion of these sectors, along with an ageing local population, is creating employment opportunities and the chance for job seekers to gain a foothold in growth industries with rewarding career prospects.

FYA analysed job advertisements across South West Victoria to map changes to skill requirements for roles advertised within the region. The resulting 'New Work Mindset in Action: South West Victoria' report detailed the most prominent skill and capability clusters. The research captured both technical skills and what it describes as 'enterprise skills' (similar to employability skills), looking for areas of overlap. These clusters were then mapped to skills gaps which could be filled through training or other experiences, identifying challenges and opportunities to support young people in the region to gain and refine crucial enterprise skills. In identifying the growth sectors in the region, the skills clusters which were most important for those entering health and aged care roles were established.

In response to the research, the 'New Work Mindset in South West Victoria' place-based initiative presented an opportunity for the region's aged care and related sector to take a hands-on, innovative approach to local talent development, establishing a platform to support the development of staff to deliver the highest levels of care. South West TAFE, which has strong connection to industry, was well positioned to prepare workers for evolving roles in these growth industries through innovative approaches to skill development.

The project was used to develop, test and trial a number of new career development and management tools to help young people gain appropriate skills, while also working to change the mindsets of employers and job seekers from one focussed on job-specific skills to supporting a wider portfolio of transferable skills within what might be called a vocation. The learning products created through the initiative were:

- An online career navigation tool named 'Pivot' that helps people identify the skills that they already have and how these link to emerging job opportunities in the region, thought of in terms of job clusters. This portal is supported by a workplace support guide for educators and employers.
- A series of micro-credentials for TAFE students and industry employees delivered by South West TAFE, which are designed to help people bridge gaps between occupations by adding to existing domain-specific qualifications and skills.
- A workforce planning model that maps transferable skills of existing workers (against the New Mindset clusters and skills) to determine the training needs for the jobs of today and tomorrow within a particular sector.

Job quality

Along with questions about how many jobs and what types of work will be available to people, the quality of that work – its ability to offer people a secure income and good quality of life – is frequently raised in discussions about the future of work. The emergence of the 'gig' economy or digital platform work has generated increased attention to a decline in what was once 'standard employment' – that is, full-time, permanent work. Companies like Airtasker and Uber use digital platforms to connect people who are seeking services from individuals who perform work on a 'piecework' basis, often supplying their own tools and equipment. In many cases services are delivered at rates that are significantly below rates in the regulated sector, often below the minimum wage.[44]

The size and significance of the gig economy itself is highly contested.[45] In Australia a recent survey found that 7.1% of respondents had accessed work through digital platforms but only 15% of these relied on this work to meet their basic financial needs.[46] Most workers reported that they were happy with the flexibility the work offered, but were less satisfied with the income they earned or the fees charged by the platform. But, as Jim Stanford from the Centre for Future Work has pointed out, the working arrangements of platform workers are not really new. They reflect a resurgence of old forms of work in which employers paid workers when they needed them, or on a piecework basis, and avoided long-term employment obligations.[47] New technologies have coincided with the weakening of labour-market regulation to enable this resurgence to occur.

Gig work is a prominent example of a wider rise in insecure or non-standard work. Less than half of Australia's workforce are now in 'standard' employment.[48] Around 12% are in permanent part-time employment. In some cases this is their preference, but the steady increase in rates of underemployment shows that, for many, it is not. Around 25% of all employees are in casual work.[49] Casual employment has risen most among the young – from 47% to 54% over the last decade.[50] A study of mental health effects of employment and unemployment found that while unemployment was associated with poorer mental health, moving from unemployment to a poor quality job was 'more detrimental to mental health than remaining unemployed'.[51]

Non-standard work is not the only form of job insecurity. David Peetz points to the emergence of what he calls 'not there' employment: arrangements in which a central entity (for example, a company or government entity) contracts with other dependent entities which, in turn, employ workers (or sub-contractors) to do the work.[52] Control is retained by the central entity, while risks and responsibilities, including to employees, shift to other firms. As well as these arrangements being associated with greater insecurity for workers, increased uncertainty and reduced scale tend to reduce the likelihood of investment in the training of new workers or the upskilling of existing workers. Companies that once would have engaged hundreds of apprentices or trainees each year now outsource much of this work. Middle-skill jobs that once provided a stepping stone to career progression have disappeared. Restructuring of work has been accompanied by a reduction in labour markets within organisations, so instead of promoting from within, companies look outside to recruit.[53]

44. Paula McDonald, et al., *Digital Platform Work in Australia: Preliminary findings from a national survey*, June 2019, p.19., available at https://engage.vic.gov.au/download_file/view/16340/2303
45. ILO, *The Future of Work a Literature Review*, pp.18–20
46. op. cit., Paula McDonald, et al., *Digital Platform Work in Australia: Preliminary findings from a national survey*, p.5
47. Jim Stanford, 2017, 'The resurgence of gig work – historical and theoretical perspective', *Economic and Labour Relations Review*, Vol. 28 Issue 3, pp.382–401
48. Inga Laß, & Mark Wooden, 2019, 'Non Standard Employment and Wages in Australia', paper presented at the 2019 RBA Conference, Sydney, 4–5 April 2019
49. ibid.
50. Greg Jericho, 'We should be concerned about the casualisation of fulltime work', *The Guardian* (online), 16 January 2018, www.theguardian.com/business/grogonomics/2018/jan/16/we-should-be-concerned-about-the-casualisation-of-full-time-work
51. Peter Butterworth, et al., 'The psychosocial quality of work determines whether employment has benefits for mental health: results from a longitudinal national household panel survey ref note that insecure employment was one of a number of factors used to define poor quality jobs in this study', *Occupational Environmental Medicine*, 2011, 68:806e812, p.5
52. David Peetz, *The Future of Work and Workers*, ANU Press, 2019, p.159
53. David B. Bills, et al., 2017. 'The demand side of hiring: employers in the labour market', *Annual Review of Sociology*, 43, pp.291–310

These work structures – the use of non-standard employment and the shift away from direct employment by larger organisations – have substantial implications for individuals, for the economy and for our social institutions. Even though casual employment attracts a loading that is meant to compensate for lack of traditional employee entitlements such as holiday and sick pay, there is clear evidence that casual employees are paid less than their permanent counterparts, and that in many cases this wage penalty persists over time.[54] Lack of permanency makes it harder to borrow money, accumulate retirement funds or find a place to live. There is evidence that job insecurity contributes to stress. While many employees are at risk of displacement as their jobs change, it is those in insecure jobs or working in organisations that rely on others to secure work who are most vulnerable. Importantly, when considering the likely need for higher-skilled workers, these insecure forms of work are associated with lower employer investments in training and a lack of opportunity for workers to develop expertise in particular domains.

Restructuring and casualisation also make it more difficult for workers to unionise. Combined with changes to industrial relations laws that increase employer flexibility and reduce the power of unions in the workplace, workers have less ability than they once did to bargain for improvements in job quality, including the provision of training. Poor bargaining power contributes to low rates of pay for workers, even when they invest in their own training. Wage stagnation and increasing wage inequality are emerging as key issues in the Australian economy. While many argue that the Fourth Industrial Revolution promises prosperity, current trends provide little confidence that these will be equitably shared. Young people entering an increasingly insecure and fragmented labour market are particularly at risk.

Key points

- **While 'gig work' is a recent development, it is a small part of a larger trend towards fragmentation of work, so that a large proportion of the workforce are now in jobs that are poorly paid and insecure.**
- **Labour market deregulation and restructuring of organisations have made it more difficult for workers to bargain. This has affected access to training and the ability for employees to achieve benefits from their skills.**
- **Current trends are to increased polarisation, the effects of which will be particularly felt by young people from less advantaged backgrounds.**

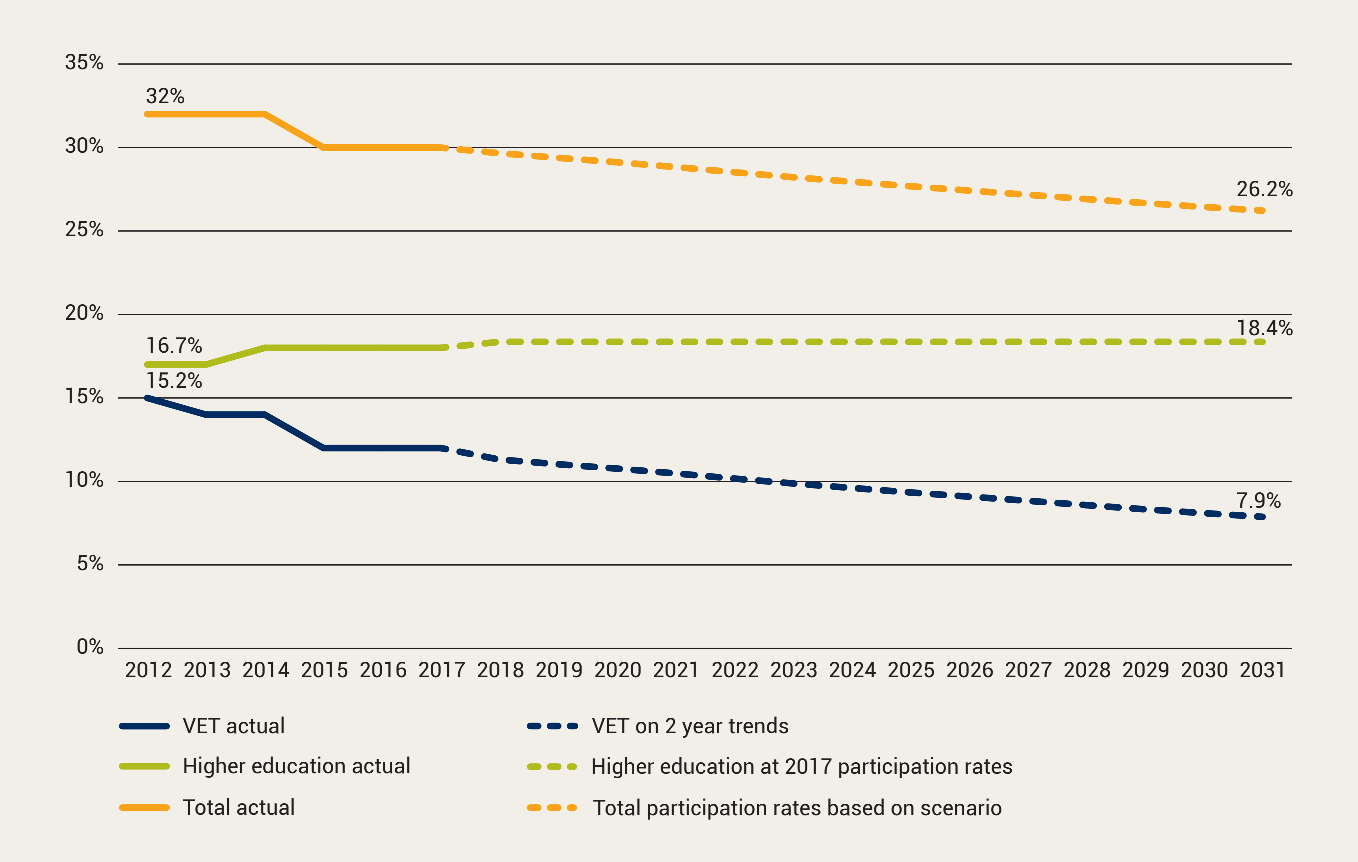
54. Irma Mooi-Reci & Mark Wooden, 2017, 'Casual employment and long-term wage outcomes', *Human Relations*, Vol. 70(9), pp.1064–1090

Skills formation in decline

It is clear that many emerging jobs will require higher levels of skill. However, there are worrying signs that many Australians are not participating in post-school education, and employer investment in skills training has declined.

The good news is that there has been a significant increase in the number of young Australians going to university, and that this growth has been highest amongst those from lower socio-economic backgrounds.[55] Over half of young people who left school in 2017 applied to do university courses straight out of high school.[56] From 2012 to 2017 university enrolments of people from low socio-economic backgrounds increased by 29.8%, exceeding the overall growth in the number of university enrolments of 17.7%.[57] Despite the growth in university education, a recent Mitchell Institute report has warned that overall rates of tertiary participation are in decline (Figure 4).[58] This is due to a decline in participation in VET. Participation in VET peaked in 2012, with 7.06% Australians participating.[59] By 2017 that figure had fallen to 5%.

Figure 4: Tertiary education participation rates: 15 to 24-year-olds, actual and projection



Source: Peter Dawkins, Peter Noonan & Peter Hurley, 2019, Rethinking and Revitalising Tertiary Education, Mitchell Institute, Melbourne. p. 7.

55. Peter Dawkins, Peter Noonan & Peter Hurley, 2019, *Rethinking and Revitalising Tertiary Education*, Mitchell Institute, Melbourne, p.9
56. Andrew Norton & Ittima Chersatidtham, 2018, *Mapping Australian higher education*, Grattan Institute, p.18
57. Paul Koshy, 2018, 'Equity Student Participation in Australian Higher Education: 2012 to 2017', National Centre for Student Equity in Higher Education (NCSEHE), Curtin University, Perth, p.7
58. op.cit., Peter Dawkins, Peter Noonan & Peter Hurley, p.1
59. ibid., p.8

While the problem of shortages of vocationally qualified workers is not unique to Australia, our VET sector has faced particular challenges. The Australian VET sector is highly responsive to policy change, and such changes have been frequent and, on occasion, destructive. Confidence in the VET system was undermined by the actions of private training organisations which inappropriately enrolled thousands of students in order to access government funding. Some employers appear to have enrolled workers in traineeships with limited value in order to access incentives or pay trainee wages. The complex regulatory and funding arrangements for VET – which are shared across Commonwealth and State jurisdictions – have contributed to a system that is widely regarded as too slow to adapt to emerging industry trends. The sector's health has not been assisted by a decline in funding of 7% in real terms over the past decade, at a time when government funding for universities increased by 28%.[60]

Many of these challenges were canvassed in the Joyce Review of the VET sector, which was commissioned by the Commonwealth Government.[61] The Commonwealth is currently implementing some of the Joyce Review's key recommendations, including establishing a new National Careers Institute and a National Skills Commission to develop a new national funding model for VET education. Some State Governments have also moved to increase their investment in public VET provision through TAFE. At a policy level there is public support for the revitalisation of vocational education and training from major political parties, business and trade unions. However, years of disinvestment, TAFE campus closures and retrenchment of skilled TAFE teachers are expected to have a long-term deleterious effect. The revitalisation of TAFE is particularly important to young people facing disadvantage and those in regional and rural areas.

Alongside the structural and systemic barriers that have had an impact on vocational education delivery, young people who experience disadvantage can face other barriers to accessing VET pathways. Interviews with young people for a joint report by NSW Youth Action, Uniting, and Mission Australia found that many struggled financially while trying to study.[62] Tuition fees and the low rate of income support were key factors that led to some being unable to complete their qualification. The financial disincentives to VET participation were also highlighted by the Mitchell Institute which found that:

> *In the current tertiary education system, the VET student often ends up paying similar or more money, for a course that receives less public subsidy, to end up in a job that pays less than the university equivalent.*[63]

While many State Governments offer full or partial fee waivers for some students, these are inconsistent and often change, making it extremely difficult for young people and their families trying to choose between different pathways.

60. Steven Joyce, 2019, *Strengthening Skills*, Commonwealth of Australia, p.28.
61. ibid.
62. Vocational Education and Training in NSW, Report into access and outcomes for young people experiencing disadvantage. Youth Action, Uniting, & Mission Australia, p.4.
63. Peter Dawkins, Peter Noonan & Peter Hurley, 2019, Rethinking and Revitalising Tertiary Education, Mitchell Institute, Melbourne, p.15

The enormous response to the Victorian Government's recent decision to offer free TAFE courses in a number of high-demand sectors highlights the level of pent-up demand for skills acquisition. The initiative was announced in the Victorian Budget 2018/19 as part of a $644 million package to strengthen TAFE and apprenticeships and provide 30,000 extra government-subsidised training places.[64] Newspaper reports suggested that enrolments almost doubled.[65] However, at least some of those attempting to enrol in key skill shortage areas – like mental health and disability services – were prevented from doing so by a lack of availability of work placements with employers.[66]

Damian Oliver has noted that some of the pressure on the VET system arises from employers' increased reliance on the sector to deliver skills that were once acquired on the job. He argues that increased job precarity means that 'individuals are more reliant on the VET system to provide a solid foundation of not just technical skills but also contextual knowledge and ways to make sense of work, occupation and career'.[67] The Victorian experience highlights the importance of employer support for the VET sector and its students. A key recommendation from the Joyce Report was that, over time, all VET qualifications should include a work-based component.[68] This is an important and useful recommendation, but its implementation will be challenging without more active engagement of employers.

While employers are demanding higher levels of skill, their investment in the skills of their own workers has declined. Figures from the Australian Bureau of Statistics (ABS) show that the number of people participating in work-related training has dropped from 35.9% in 2005 to 21.5% in 2016-17.[69] What training takes place is not evenly distributed. Participation in work-related training is highest amongst those who live in areas of higher socio-economic advantage, and who have higher levels of post-school education.[70] In other words, the gap is widening between those who have higher skills and better prospects in the labour market and those who don't.

Key points

- **The importance of the VET sector to students and the economy has been recognised by Commonwealth, State and Territory Governments, but the task of rebuilding the sector – particularly TAFE – is substantial.**
- **Young people from disadvantaged backgrounds are more likely to rely on this sector to build their employment prospects, but inequitable and confusing fee structures, combined with inadequate levels of income support, can make it difficult to participate.**
- **Employers need to do more to support the VET sector and to invest in the skills of their own workforces. This must include investing in those who start with lower skills.**

64. Victorian Department of Premier & Cabinet, *Free TAFE expanded*, www.premier.vic.gov.au/free-tafe-expanded-as-latest-tech-school-opens/
65. Henrietta Cook, 'TAFE suspends mid-year enrolments amid student influx', *The Age* (online), 9 July 2019
66. ibid.
67. Damian Oliver, 2016, *VET: Securing Skills for Growth*, CEDA, p.38
68. Steven Joyce, 2019, *Strengthening Skills*, Commonwealth of Australia, p.33
69. Australian Bureau of Statistics, 4234.0 – *Work-Related Training and Adult Learning, Australia, 2016–17*, 'Work-related training' is defined here as training that is not leading towards a formal qualification.
70. ibid.

Lessons from apprenticeships

One part of the solution to supporting young people to find quality skilled jobs lies in one of our oldest labour-market institutions – apprenticeships. Apprenticeships can be seen as a tripartite arrangement between the apprentice, the employer and the training provider. International evidence suggests that in countries with stronger apprenticeships systems, young people have smoother transitions from school to work, and tend to have lower youth unemployment rates.[71]

In Australia, 'apprenticeships' are generally associated with traditional trades (e.g. plumbing, electrical), while traineeships are more common across the services industries. Traineeships are based on a similar tripartite model, involving earning while learning. They cover a wider range of industries and occupations, can be studied part-time, and can often be completed more quickly than apprenticeships. Traineeships have been important in extending work-based training to more sectors and occupations, although the value of some lower-level traineeships has been questioned. For simplicity, references to apprenticeships in this paper include traineeships.

The apprenticeship model enjoys strong support from those employers who use it, but the regulatory, policy and funding arrangements surrounding apprenticeships are seen as holding back employer uptake and limiting the extension of apprenticeships and traineeships to new areas.[72] Despite skills shortages and strong employment outcomes following training (Figure 5) apprenticeship placements have been stagnant or in decline. While much commentary has focused on 'supply side' factors – that is, the level of interest and capacity of young people to take up opportunities – Tom Karmel's analysis of training rates across key occupations suggests that the problem is largely one of employer demand.[73] He shows that while training rates have matched employment growth in some trades (like electrotechnology), in most areas they have not. It is employer interest in creating opportunities rather than the enthusiasm of potential applicants that is driving declining commencements.

Figure 5: VET graduate employment outcomes

77.3%
of VET graduates employed six months after training

Trade apprenticeship or traineeship
91.2% employed

Non-trade apprenticeship or traineeship
77.3% employed

Training not an apprenticeship/traineeship
76.5% employed

What apprenticeships or traineeships are considered to be trades?
There is a wide range of occupations regarded as trades. Some examples are construction trades workers, hairdressers, mechanics, metal trades workers, electricians, telecommunications workers, aircraft maintenance engineers, locksmiths, cabinetmakers and chefs.

Source: 'Education Employment Outcomes', Australian Jobs, Australian Department of Employment, Skills, Small and Family Business

71. ILO, 2013, *Apprenticeship Systems – what do we know?*, (adapted from Michael Axmann & Christine Hofmann, 'Overcoming the work-inexperience gap through quality apprenticeships – the ILO's contribution', ILO Skills and Employability Department, www.ilo.org/beirut/media-centre/fs/WCMS_214722/lang--en/index.htm
72. Margo Couldrey & Phil Loveder, 2017, *The future of Australian apprenticeships: Report of the Stakeholder Forum*, NCVER, Adelaide, p.12
73. Tom Karmel, 2017, *Factors affecting apprenticeships and traineeships*, 'Part II Demand side factors affecting apprenticeships and traineeships'. Research Report 3/2017 for the Fair Work Commission, February 2017, p.54

This issue of poor commencement rates into apprenticeships has been compounded by poor rates of completion. Of those who started their apprenticeship or traineeship in 2014, only 56.7% completed – down by 2.3% from those starting in 2013.[74] Major drivers of poor completion rates are workplace based, including problems with co-workers and supervisors, or disliking the work itself. Larger employers of apprentices typically have better support and supervision structures in place and achieve better completion rates.

Recent evidence has shown that Group Training Organisations (GTOs) have been effective in achieving better apprenticeship and traineeship completion rates, particularly for younger and more disadvantaged groups.[75] Group Training Organisations act as employers for apprentices and trainees, placing them with host employers. One of the reasons for the development of GTOs was to manage the risk associated with fluctuating workloads in small to medium employers. GTOs assist in ensuring that apprentices have enough work to complete their training. They also provide pastoral care and conflict resolution. In 2018, 8.3% of apprentices were employed by GTOs.[76]

The benefits of apprenticeships are not simply the provision of employment to apprentices. John Buchanan et al. have also highlighted how the structure of apprenticeships can offer young people informal social support that is often missing in more precarious work environments.[77] The apprenticeship structure, when it is done well, provides mentoring and nurturing of both technical and soft skills in a way that is integrated into day-to-day work – rather than being delivered externally, for example through a formal mentoring program. Apprenticeships can set young people up to be resilient and healthy workers in a labour market where these things will be increasingly important.

A range of demand-side factors have shaped the rate of apprenticeships. These include privatisation and corporatisation of public utilities that once employed large numbers of apprentices, and changes in the construction sector which have resulted in much of the work being devolved to sub-contractors who have less capacity and appetite to take apprentices on. Recent jobs growth has been in part-time, rather than full-time, employment and much of it has occurred in labour hire and casual employment – forms of employment in which commitment to long-term training is less likely.[78]

Several State Governments are responding to declining skills by setting targets for apprentices and trainees in companies involved in major infrastructure projects. One successful example has been the workforce development strategy deployed for Sydney Metro – a large, multi-year public rail project. Minimum targets for training and employment were embedded in contracts, including:

- Specific apprenticeship targets, set on the basis of the specific program of work in each location;
- 20% of jobs set aside for the local workforce, with workers employed for a minimum of 26 weeks;
- 20% of the workforce must undertake upskilling accredited training. Training required to be above business as usual standards to support workforce transferability and mitigate skill shortages/gaps;
- Employment and training targets for under-represented groups, including Indigenous workers, women, young people, long-term unemployed, humanitarian program entrants, and people from culturally and linguistically diverse backgrounds.[79]

In addition to setting targets, Sydney Metro established a stakeholder advisory group which included employers, industry bodies, government and training providers to ensure that long-term employment and training outcomes were met. This stakeholder engagement enabled the organisation to identify and respond to emerging issues – for example, by developing arrangements with a lead GTO to assist in engaging and supporting apprenticeships. As of July 2018 the project had exceeded its targets for apprenticeships, diversity and inclusion of people who are disadvantaged in the labour market.[80]

74. NCVER, 2019, *Completion and attrition rates for apprentices and trainees*, 2018, NCVER Adelaide, p.5
75. Lisel O'Dwyer & Patrick Korbel, 2019, *Completion rates for group training organisations and direct employers: How do they compare?*, NCVER, Adelaide, p.7
76. ibid., p.9
77. John Buchanan, et al., 2016, *Beyond mentoring: social support structures for young Australian carpentry apprentices*, NCVER, Adelaide, p.9
78. Peter Noonan & Sarah Pilcher, 2017, *Finding the truth in the apprenticeships debate*, Mitchell Institute, Report No. 03/2017, Mitchell Institute, Melbourne, www.mitchellinstitute.org.au/reports/finding-the-truth-in-the-apprenticeships-debate/
79. OECD, *Engaging Employers and Developing Skills at the Local Level in Australia*, OECD, Paris, pp.79–91
80. ibid., p.84

Case Study:

Apprenticeship Employment Network: Multi-Industry Pilot

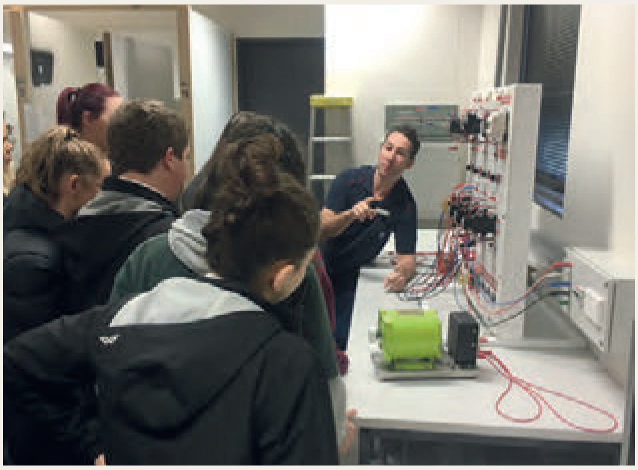
In Australia, around 40% of apprentices and trainees do not complete their qualification and almost 30% cancel within the first 12 months. One of the factors that affects completions is poor matching of the young person's needs and aspirations with the apprenticeship placement.

Past studies of pre-apprenticeship programs have shown that they have the potential to improve rates of entry into and completion of apprenticeships.[81] However, there are wide variations in the types of pre-apprenticeship programs that have been implemented, and funding for these programs has been ad hoc.

To show the value of pre-apprenticeships and start to codify good practice in delivery, the Apprenticeship Employment Network (AEN) developed a pre-apprenticeship pilot program called the Multi-Industry Pilot (MIP) with funding from the Commonwealth Government. The aim of the pilot was to provide support to both potential employers and participants through three to four industry-themed short-term work experience placements. The industries involved included engineering and automotive, building and construction, land, food and fibre, and business and community care services. Providing young people with a range of industry experiences helped them make informed choices about further study and employment pathways in apprenticeship industries. With more knowledge and experience of skilled pathways, unemployed young people are more likely to commit to and complete apprenticeships, traineeships and work because they are pursuing a career that suits them.

Between 2016 and 2018, MIP projects provided over 2,500 participants – 1,258 school-based and 1,328 unemployed youth – across New South Wales, the ACT, Victoria and Tasmania with the opportunity to trial multiple industry experiences. Group Training Organisation-designed courses provided participants with a range of work experiences. These were based on local employment opportunities and crafted to meet employer needs. GTOs were funded through the MIP project.

At the beginning of the program, young people spent time with the GTOs and Field Officers to discuss what they would like to do and what they already knew about the different industries.



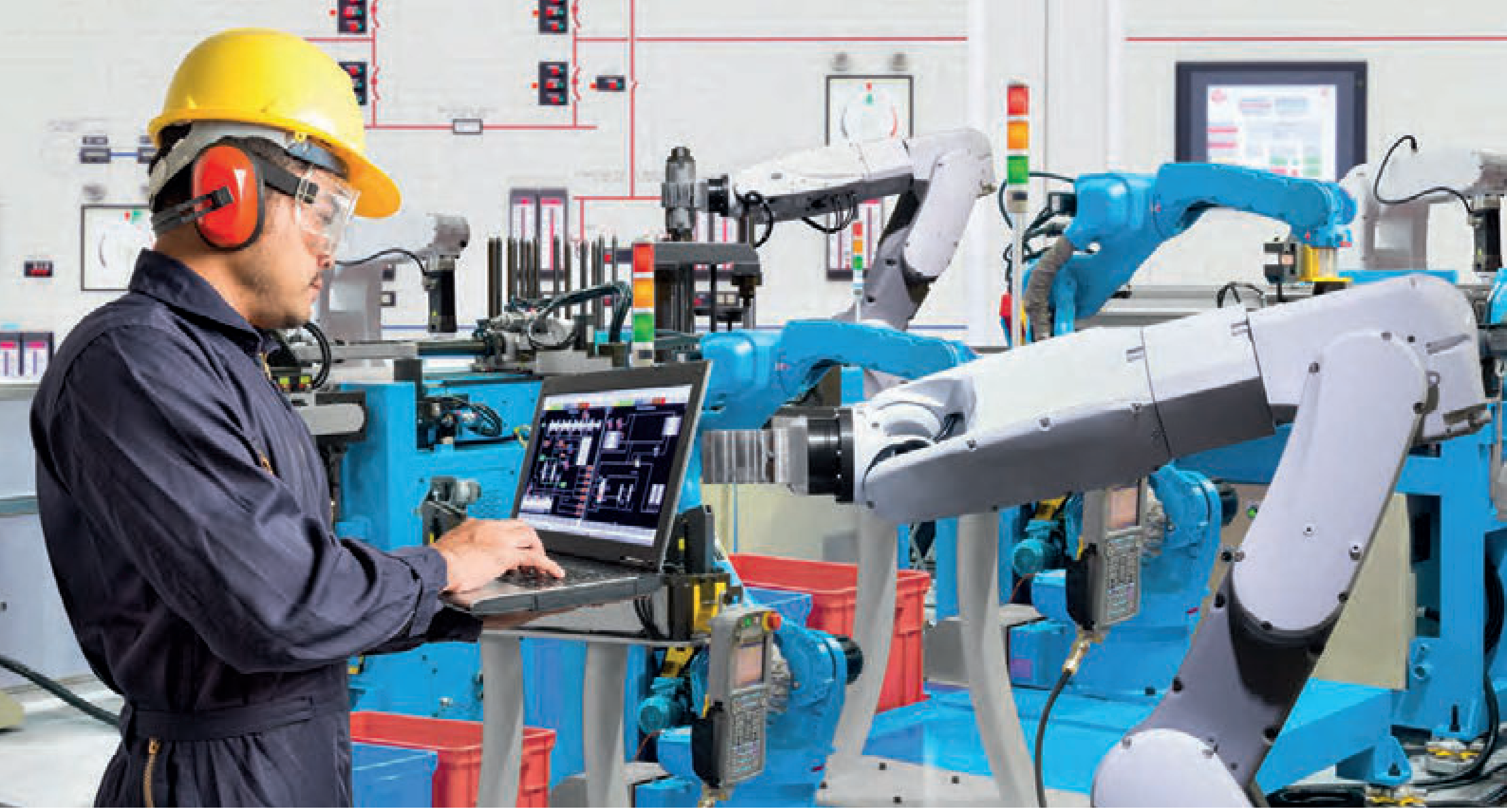
They then went into training and work experience which included modules of either a Certificate 1 or 2, or unaccredited training and a block of work experience based on the industry they had chosen. The GTOs designed various structures for this component, but most programs ran for 3 to 4 days per week for 12 weeks. Accredited training modules were usually delivered by TAFE. In this component a minimum of three trades were introduced. Young people were taught work-ready skills including language, literacy and numeracy skills, resume-writing skills, and training in interview technique.

Some of the key successes from the pilots include:

- 92% of participants reported the program helped them to make a career decision
- 66% of participants' work readiness was rated 4.5 out of 5 by employers
- 72% of unemployed youth said they would definitely pursue an apprenticeship or traineeship
- 56% of participants changed their preference of career by undertaking the pre-apprenticeship program
- 83% of participants enjoyed the practical workshops and work experience the most.

A key focus of the program was to ensure that work experience placements aligned with local employment opportunities. Because of their ongoing engagement with employers who host apprentices, GTOs were well placed to identify emerging opportunities and to advise young people on pathways into careers.

81. Phillip Toner & Chris Lloyd, 2012, *A study into pre-apprenticeship delivery models and their labour market outcomes*, Group Training Australia, Sydney, pp.12–14



In addition to boosting traditional apprenticeships and traineeships, there has been recent interest in the development of 'higher apprenticeships' that is, apprenticeships aimed at Diploma or Associate Degree level, rather than the usual Certificate 3 or 4 level.

In September 2016 the Commonwealth Government provided funding to two higher apprenticeship pilot projects. One of these involves a collaboration between the Australian Industry Group, Siemens Limited and the Swinburne University of Technology and focuses on developing advanced technology skills, with an initial vocational qualification design to articulate to a Bachelor's Degree. The second pilot project, which focuses on the professional services sector, is being run by PricewaterhouseCoopers and aims to provide an alternative to university pathways into that sector.

The National Centre for Vocational Education Research (NCVER) recently published a report which looked at the emerging interest in higher apprenticeships in Australia, and some of their complexities.[82] It identified three types of objectives:

- To develop technical skills of a higher level than those developed through current apprenticeships
- To add skills other than technical skills, such as management and supervisory, project management, problem-solving, and facilitation skills
- To provide a bridge between VET and university education, either by combining elements of the two sectors into a higher apprenticeship, or by providing a pathway from VET to university.[83]

The report noted that the ability already exists to employ people in higher level apprenticeship pathways in many industry sectors, but take up by employers has been limited. It found a degree of confusion in discussions about higher apprenticeships as to what they might entail – for example what degree of regulation of employer obligations might be expected, or how these higher apprenticeships might relate to industrial awards.[84] Nonetheless, the interest in higher apprenticeships is a positive sign of employer interest in equipping employees for higher skill work.

Key points

- **The apprenticeship model is a proven model for supporting school-to-work transitions and provides a pathway for young people into quality, skilled work.**
- **Pre-apprenticeships contribute to increased take up and completions. But, despite the evidence, funding for these pathways remains ad hoc and poorly integrated with labour market assistance.**
- **The Group Training Organisation model can be harnessed to increase use of apprenticeships and to respond to the demands of an increasingly fragmented labour market.**
- **Higher apprenticeships have the potential to address the need to increase skills of existing workers and to provide new pathways into non-traditional areas. However, delivery at scale is some way off.**

82. NCVER, 2019, *Higher apprenticeships in Australia: What are we talking about?*, NCVER, Adelaide.
83. ibid., p.8.
84. ibid., p.18.

Current national labour-market program settings

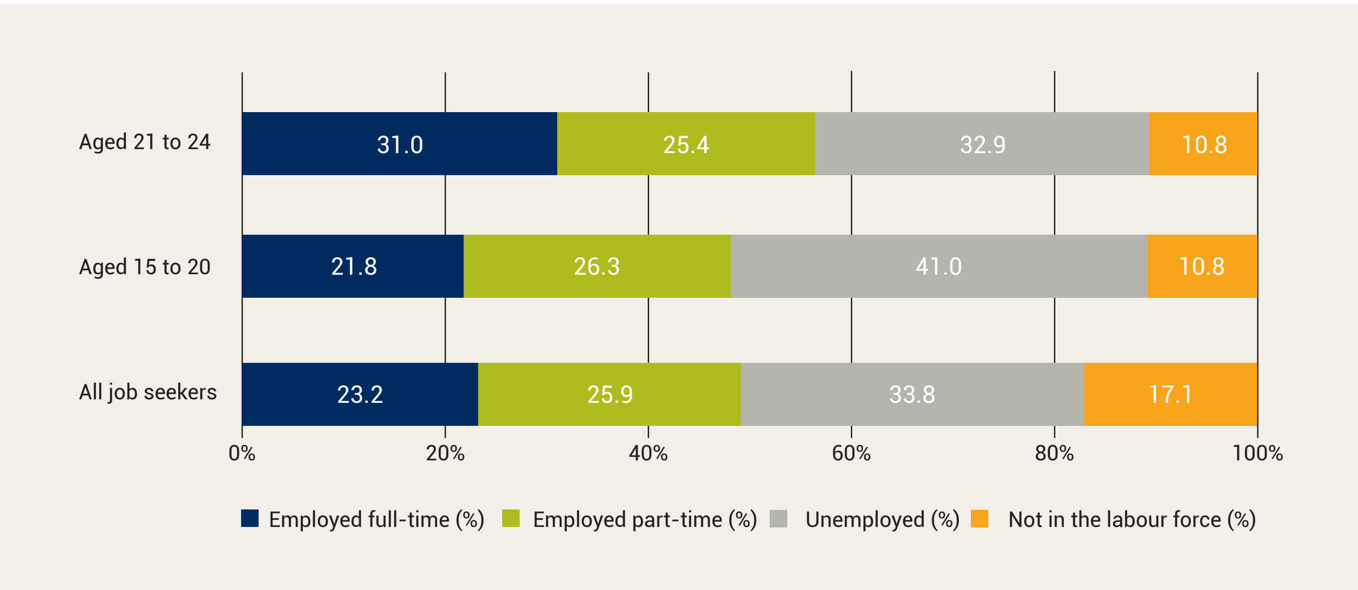
It seems clear that young people will need to be able to acquire and update their skills over time if they are to find and maintain a secure foothold in the labour market. However, placing people into skilled employment, or into jobs that offer skills development, are not current objectives of our major labour-market programs.

Since 1997, Australia's labour-market assistance programs have been based on the principle of 'work first'. That is, rather than focusing on training or skills development, programs are designed to provide light-touch assistance and keep people actively looking for work in order to move them into employment as quickly as possible.

Australia's largest labour-market program is jobactive. Participation in jobactive is mandatory for people who are in receipt of unemployment benefits.[85] Its focus is on moving people quickly and efficiently into sustainable employment – where 'sustainable' is defined as 26 weeks of continuous employment. A key feature of the program is its emphasis on job search activity. Participants in jobactive who are able to work full-time are required to apply for twenty jobs each month. Failure to do this triggers a 'demerit point' for the participant and can lead, eventually, to loss of income support. Providers have a small employment fund they can draw on to invest in training but this training tends to be short term, often targeting a specific job requirement like a workforce health and safety certificate. Because the emphasis of jobactive is on placing people quickly, referral to longer-term training – for example training required to achieve a qualification – can reduce providers' performance ratings. Similarly, the system encourages placement of job seekers into immediately available jobs rather than allowing job seekers to wait for a higher quality job or one that better suits their skills and aspirations.

In April 2019 there were just over 620,000 people in jobactive, of whom 115,000 were under 25.[86] Relative to others in jobactive, young people are more likely to move into employment following participation. However over a third remain unemployed three months after assistance (Figure 6).

Figure 6: jobactive employment outcomes



Source: DESSFB 2019 Employment services outcomes report, July 2017–June 2018 (outcomes measured around three months later).

85. Unemployed people with a disability may be referred to Disability Employment Services. Young people may also be referred to the Transition to Work program, (see further below).
86. DESSFB, 'Transition to Work Caseload Cohorts by Employment Region, Provider and Site', 30 April 2019

While jobactive emphasises employment that is sustained over 26 weeks, program arrangements do not place any greater value on jobs that are ongoing over those that are casual or temporary. Nor is there any weighting for jobs that involve the application or acquisition of skills – like apprenticeships or traineeships. As Table 2 shows, most jobactive participants are placed in casual or seasonal work.

Table 2: jobactive employment outcomes – by employment status

jobactive employment outcomes by employment status, 1 July 2017 to 30 June 2018			
	Permanent employee (%)	Casual, temporary, or seasonal employee (%)	Self-employed (%)
Streams A–C	35.2	55.0	9.8
Stream A	36.8	53.7	9.5
Stream B	33.3	56.7	10.1
Stream C	30.4	58.6	11.0

Source: DESSFB 2019 Employment services outcomes report, July 2017–June 2018

Nearly half of the participants placed in work in the scheme are still looking for work three months following assistance. Many are part-time and underemployed (Table 3).

Table 3: jobactive employment outcomes – underemployment

jobactive Employment Outcomes: Underemployment 1 July 2017 to 30 June 2018			
	Employed, seeking more work (%)	Full-time employed, seeking more work (%)	Part-time employed, seeking more work (%)
Streams A–C	46.7	19.4	63.1
Stream A	45.5	18.7	67.4
Stream B	48.2	20.5	57.1
Stream C	50.6	24.5	63.6

Source: DESSFB 2019 Employment services outcomes report, July 2017–June 2018

A key justification for the 'work first' approach is the idea that even though initial employment may be in jobs that are poor quality, these will provide a 'stepping stone' to better work. Evidence for this theory is limited. The most recent publicly available Commonwealth Government analysis was a 2008 report which looked at outcomes for participants in its employment programs at both 3 months and 16 months after participation.[87] It reported improvements in wages and hours over time, although there was no net improvement in the skill level of jobs people were employed in. Those who were Indigenous, who had been unemployed longer, people with disabilities and men were less likely to have stayed in employment over the period. Even though permanency rates improved between 3 and 16 months, more than half of those who were classified as more disadvantaged were still in casual employment at 16 months. Of the entire sample, only 30% had received structured training internally or externally to their employer organisation during their employment. In 2008 there was only limited evidence that people who faced greater labour market disadvantage were able to use poor quality jobs as a 'stepping stone'. In the decade since, increased labour market polarisation and reduced workplace training have made upward mobility even less likely.

Critics of the 'stepping stone' theory argue that people who take on poor quality work – including work that is casual or does not use their skills – tend to get trapped in this work over time. This is not the case for young people who participate in casual or part-time work while still in education – in fact, for these young people, this work is positively associated with future employment. However, a report by Tom Karmel and others found that young people who start out in low-skill jobs after leaving full-time education tend to have lower wages than their counterparts over the longer term.[88] 'Scarring' effects from low-skill and casual work tend to have more impact on men. Karmel et al noted that, after a year without work, prospects for young people weaken – in other words it is important that job entry is not delayed too long. However, in the short term finding a job at a higher skill level, that uses or develops skills, is likely to be better than taking the 'first available' job. Jobactive is likely to be doing a disservice to young people by prioritising placement speed over job quality.

William Mitchell and Riccardo Welters argue that the chances of getting trapped in poor quality jobs is greater in sectors with industries that have high rates of casualisation and in small to medium-sized firms that offer limited internal mobility.[89] Again, this raises questions about how well jobactive is serving the long-term interests of young people. The Government has estimated that only 4% of employers use jobactive for their recruitment, down from 18% in 2007.[90] Around 30% of jobactive placements are in the accommodation and food services or retail sectors – characterised by high rates of casualisation and relatively low rates of post-school qualifications.[91] 14 of the top 20 employers that unemployed people were placed in were labour hire firms, while the top two employers were Woolworths and Coles.

In other words, the current jobactive system tends to place people in a relatively narrow range of jobs and industries, and in jobs that are precarious and do not provide enough work for those placed. As noted, these precarious jobs are less likely to provide workplace training or the opportunity to acquire a post-school qualification. The increasing prevalence of higher skill jobs is likely to make transitioning from low quality jobs even more difficult.

Transition to Work and the National Youth Employment Body

While most unemployed young people participate in jobactive, in 2016 the Commonwealth Government established a new program called Transition to Work for young people who were assessed as more disadvantaged. This program still has an emphasis on employment, but outcome payments are also available for education and training, and there is less focus on speed to placement.

In 2018 the Brotherhood of St Laurence was funded to establish a National Youth Employment Body which was designed to capture and foster good practice amongst those delivering these services. It is engaging with employers, providers and government decision makers to mobilise efforts to address youth unemployment.

87. Department of Education, Employment and Workplace Relations, 2008, *Labour Market Assistance Long Term Outcomes,* Commonwealth
88. Tom Karmel & Damian Oliver, 2013, *Starting Out In Low-Skill Jobs Longitudinal Surveys of Australian Youth*, Research Report 64, NCVER, p.10
89. William Mitchell & Riccardo Welters, 2008, 'Does casual employment provide a "stepping stone" to better work prospects?', Centre for Full Employment and Equity, University of Newcastle, p.13
90. Australian Government, 2018, 'I want to work', Employment Services 2020 Report, p.8
91. Australian Government, 2018, *The next generation of employment services discussion paper*, appendices, p.98. (NB: calculation excludes 'other services' category)

In 2018 the Commonwealth Government announced planned changes to employment services to be implemented from 2022. Under these changes, job seekers who are considered 'job-ready and digitally literate' will interact with employment services online. They will 'access assistance such as an online jobs board, job matching and training modules'. Those identified as needing additional support will have access to a level of face-to-face assistance, which might include training to use the digital service. The most disadvantaged will participate in an 'enhanced' service that provides individualised assistance. Key features of the proposed arrangements are currently being trialled in two regions. While the changes have been put forward as a means to redirect program funds to those who are most in need, they bring with them considerable risks for young people attempting to find work, including young people being exposed to an even narrower range of career and training options; and, in the absence of intervention by human intermediaries advocating for the candidate, employers may be even more reluctant to consider those without experience.

After more than two decades of experience of active labour market programs, the international evidence is that work-first approaches may have a positive effect on short-term employment, but programs that combine skills training and employment assistance have stronger outcomes over the long term.[92] Given what we know about the importance of skills for future work, this effect will only become more important. Unless there is change, labour-market assistance programs will entrench the position of many young people in poorly paid, low-skill jobs which offer little prospect of long-term security.

Key points

- **Australian employment assistance is focused on moving people into work, regardless of the quality of the work or whether it allows for the development or use of skills.**
- **The assumption that poor quality jobs will be a stepping stone to better work is not well supported by available evidence. The polarisation of the labour market that is already occurring, and is expected to accelerate, appears to make these transitions less likely.**
- **Analysis of international experience suggests that approaches that combine investment in human capital with employment assistance are most effective in the long run.**

92. David Card, Jochen Kluve & Andrea Weber 2015 (revised 2017), *What Works? A Meta Analysis of Recent Active Labor Market Program Evaluations*, NBER Working Paper No. 21431.

Approaches to assisting young people experiencing disadvantage to secure better quality jobs

Alongside large-scale national programs attempting to assist young people into work, there have been, and continue to be, many smaller initiatives, often framed as pilots or 'innovation projects'. Among these have been the Commonwealth's Empowering Youth Initiatives, which operated from 2016 to 2019, and a number of projects funded through the Commonwealth Try Test and Learn Fund that were focused on young people. State Governments have also implemented youth programs, like the NSW Smart Skilled and Hired Innovation Challenge. While evaluation strategies have been established for these initiatives, very few findings, and no systematic evidence, from these projects have been released to date.

Philanthropic foundations have also been active in funding workforce-readiness initiatives for young people. Social Ventures Australia reviewed several such initiatives which received funding from the JP Morgan Chase Foundation. In each case the programs aimed to assist young people to access jobs in growth areas of the economy (like ICT and professional services) and that provide an opportunity to develop and apply higher level skills.

SVA gathered insights from program providers, program partners, participants, educators, employers, and other stakeholders. Through this work SVA identified a number of factors that had affected past performance, and should be considered by those designing and funding future programs. SVA's recommendations are as follows:

1. **Programs need to be designed with input from the stakeholders who will be involved in the program. The design of programs needs to be reflected in project lead times.**
   - Program stakeholders – including delivery partners, industry, employers, and program participants – should be engaged and involved at key points throughout the scoping, design and implementation of the program.
   - Effectiveness of program design for workforce-readiness programs can be increased through strategic engagement of key stakeholders and the alignment of activities and outcomes with the needs of these stakeholders.
   - There is a need for a clear understanding of the size and nature of the 'gap' between the learning and support needs of the participants of the programs and the expectations of relevant employers and/or an ability to adjust program arrangements if issues arise.
   - During the design phase it is important to draw on the personal experiences and perspectives of people with lived experience or expertise.
   - Creating a shared understanding of the roles, accountabilities and value-add of each program partner is imperative.
2. **Teaching cycles, holiday periods and recruiting cycles are critical considerations when designing and implementing a workforce-readiness program.**
   - The school calendar is extremely busy, especially for Year 12 students, so programs which involve discussions of study and career pathways need to be planned and implemented well in advance.
   - Similarly, apprenticeship intakes often occur at set times of the year, to align with TAFE schedules. Funding cycles need to be aligned to these schedules.
   - Building trusting relationships between program partners and participants takes time and cannot be established in shorter delivery periods.

3. **School-based learning and post-school training curricula need to reflect industry needs.**
   - Industry, future-focused, and cohort-appropriate content is imperative to ensure students are equipped with the skills and capabilities needed by industry.
   - Delivery of program activities needs to be flexible enough to adapt to participant and industry needs.
   - Employers have noted the need for candidates to possess soft skills, hard skills and enterprise skills.
   - If qualifications or certifications are included, these need to be at the appropriate level to meet the needs of employers.
   - Early engagement with employers is important in managing expectations.
4. **Program outcome targets and KPIs need to be informed by market needs and minimum requirements.**
   - Establishing a market need is critical to informing both the design of training programs and in determining the appropriate target for placements into employment.
   - Difficulties in engaging employers willing to hire entry-level jobseekers with minimal work experience or post-school education was common in programs which sought to connect school leavers to ICT and STEM roles.
   - Programs that involved employers with diversity targets, for example Indigenous recruitment targets, had less difficulty in engaging employers and in illustrating the value to business of participating in these programs.
   - Service providers should provide feedback to employers on whether their expectations are reasonable and achievable, both within the scope of their program activities and in reference to the wider candidate pool, to ensure the expectations of both parties can be appropriately met.
5. **Projects should provide work experience or, at a minimum, experience of relevant workplaces.**
   - Work placements create the chance for candidates to test their skills and determine whether their aspirations align with the industry.
   - One of the common reported outcomes from pre-apprenticeship programs in the trades is that many participants realise they are not interested in a specific type of work, so they don't go on to do the apprenticeship. This insight should be incorporated into future programs to save stakeholders' money and time.
   - The ability of participants to function in a workplace is often untested until they start work or work experience. Building in a work experience element allows general work readiness to be tested.
   - Employers of entry-level jobseekers reported that participants lacked evidence of the basic work readiness skills that would give employers the confidence to recruit them. A period of work, or work experience, even outside the industry, could have improved outcomes.
   - Work experience is important for young people who do not have strong family or personal networks with employers.

6. **There needs to be a match between the target job/sector and the interests and skills of individual participants.**
    - Jobseekers need to be matched with a program, educational/development pathway or employer appropriate for their skillset, strengths, capabilities, personal circumstances and aspirations.
    - Screening of candidates can be a useful tool for determining motivation and interest levels of candidates before they are referred to a program, pathway or employer.
    - By understanding the capabilities and capacity of the individual, the gap between their current state and the requirements of the program or employment opportunity can be determined.
    - Understanding the gap between an individual's current state and future requirements allows the person's support needs to be identified so they receive the appropriate intervention and support services to help them meet these requirements. A mismatch between the size of the 'gap' and the program length and/or structure sets both the program and participants up to fail.
7. **Some young people will need more than training/classroom support. Support strategies for those with more complex needs should be part of the program design.**
    - The delivery partner or partners need to be equipped and resourced to provide the level of support that is needed by the specific cohort.
    - This risk can be mitigated by:
        - careful selection and/or research of the participant group; and/or
        - recruiting additional partner agencies to address more complex support needs.
    - There is a need to acknowledge that the period of support needed by participants will vary.
8. **Employers need to be adequately equipped to support the relevant young people to succeed.**
    - Preparing the workplace and staff to support candidates from diverse or disadvantaged backgrounds can increase the likelihood of the candidate meeting employer expectations and in boosting retention rates.
    - Setting clear expectations and providing ongoing support to key stakeholders in any education and employment pathway creates empathy, shared understanding and accountability.
    - Information sessions with key staff of employers who are hosting participants can ensure they are adequately prepared to support participants. These sessions should ideally include an explanation of program requirements and additional topics like cultural awareness.
9. **Opportunities may be substantially affected by wider policy settings, and programs should be designed with this in mind.**
    - Federal and State Governments are responsible for different components of both the education and employment systems, which can complicate the ability to implement education and employment programs.
    - Uptake of a program by employers can be influenced by initiatives like Closing the Gap and Reconciliation Action Plans.
10. **The program-learning cycle indicates that even with good design, it should be expected that the first attempt at an approach may encounter unexpected challenges.**
    - The review of programs illustrated the extent to which knowledge, insights and experiences from facilitating similar programs was an indicator of the likelihood of program success.
    - Programs with established networks of committed employers achieved significantly higher success rates than newly established pilots which were establishing relationships while delivering program activities.
    - Models which were delivering variations on core business achieved success because these functions already existed within the organisation.
    - Provision of multi-year funding is beneficial to organisations seeking to improve their practices and increase their impact through action research and iteration of program design.
11. **Sound measurement and evaluation practices are imperative to iterating innovative program models, informing practice improvements and understanding impact.**
    - Programs which included a mechanism for collecting data, measuring outcomes and iterating models during the implementation phase were able to improve practice and impact throughout delivery.
    - Notably, all of the programs used user feedback in the form of surveys, interviews or both, to inform practice which provided benefits for the organisations and their participants.

A well-supported pathway seeks to provide guidance through learning and program activities. Support for people is critical through the crucial transition points which present a risk of derailing participants whose capacity, capabilities and life circumstances may interfere with their progress. Engagement of employers in the design and ongoing support of these pathways can increase the potential for people to transition directly into employment. Linking learning outcomes with employer needs can increase the potential for people moving into job opportunities.

Findings from this work reinforced findings from the international literature reviews.[93] They highlight the diversity of the challenges faced by young people and the complex training and employment pathways they must navigate. There is clearly no single best approach. The more able project proponents are to tailor their strategies to local circumstances and to young people's aspirations, the better their chances of success. The reflections of US research organisation Manpower Demonstration Research Corporation (MDRC) are also relevant here:

> *No one program or model is the answer for all young people who are struggling. First, most programs tend to be relatively short. A 6- or even 12-month program is not enough to remove barriers to employment and education that have been years in the making. Second, any given program can only do so much. If progress toward success is viewed as a ladder, the most successful programs typically move young people up only one or two rungs.*[94]

Key points

- **Philanthropically funded projects, as well as those supported by government 'innovation' funds, have great potential to respond to local or sectoral needs, and to highlight new approaches.**
- **The best programs will be designed after a period of working with young people and employers who are expected to participate, and will be given time to evaluate and adapt their practices over time.**
- **More needs to be done to share the findings from these projects so that sector practices can be improved.**
- **SVA has started to do some of this work through its Review project, which aims to help providers of these programs measure and improve their practices.**

Review for Outcomes project

The ten characteristics of effective youth employment programs

In 2018 SVA conducted a project to identify the features of effective community-led employment programs. It reviewed available research, interviewed program providers and experts and, based on this work, identified 10 characteristics of program that were likely to improve program effectiveness.

1. A way of recognising a young person's strengths and aspirations
2. A way of identifying personal goals; employment specifically and life goals if relevant
3. A way of identifying, and responding to, the range of issues that may be affecting the young person
4. A way of developing trusted relationships
5. Inclusion of activities that develop employability/personal skills (relevant to the young person and employer), e.g. resilience and confidence
6. Inclusion of activities (that might include training) that develop technical skills that meet employer/job needs
7. The provision of high quality, relevant information that supports the search for employment
8. Provision of practical experience of the world of work (e.g. work experience)
9. A way of extending a young person's network of contacts and connecting them with employers
10. Active support of the young person for the amount of time that is required to meet their goals.

The project was supported by Citi Foundation, Lord Mayor's Charitable Foundation and The Jack Brockhoff Foundation.

reviewforoutcomes.com.au

93. Jochen Kluve, et al., 2019, 'Do youth employment programs improve labor market outcomes? A quantitative review', World Development, 144 (2019) pp.237–253.
94. Dan Bloom & Cynthia Miller, 2018, *Helping Young People Move Up: Findings from Three New Studies of Youth Employment Programs*, MDRC, www.mdrc.org/sites/default/files/Youth_Employment2018_1.pdf

Role of employers

In 2019 Anglicare Australia released its latest snapshot of entry-level jobs,[95] which showed that only 18,200 of the jobs advertised in May 2019 were likely to be available to someone without qualifications or work experience. At the time, over 113,000 people under the age of 25 were registered as looking for work with jobactive. The Department of Employment, Skills, Small and Family Business has reported that only 25% of employers are willing to consider applicants without workplace experience – with higher rates among those recruiting for roles like cashiers, kitchenhands and labourers.[96] Young people without qualifications or work experience face competition from their more qualified peers as well as older workers who have been retrenched or need more work.

Reduced availability of entry-level work reflects a shift to the services sector, technological change and shifts in the organisation of work. These organisational changes include the dismantling and restructuring of large public utilities and of corporate entities that once recruited large numbers of school leavers into apprenticeships, clerical and junior roles. Governments, too, have reduced their intake of young people, particularly those without university qualifications. For example, the percentage of Commonwealth Government employees under 30 declined from 18.3% in 2000 to 12.5% in June 2019.[97] Only 1.3% of employees were identified as trainees or graduates, the majority of whom were university graduates.

The loss of internal training pathways across the private and public sectors has had a significant effect on young people from disadvantaged backgrounds. Even when university qualifications are not required for a role, they may be used to select for other characteristics.[98] The use of unpaid internships presents a barrier for young people who need to work to sustain themselves, while hiring processes can disadvantage people whose profile doesn't match those already employed.[99] The lack of entry-level pathways into employment with larger employers and the public sector means there are fewer opportunities for people from more disadvantaged backgrounds to prove themselves in the workplace. Instead they must try to navigate recruitment channels that often favour those who are already advantaged.[100] Employers, in turn, may find their ability to nurture the development of young workers has been diminished by such things as a lack of supervisors with the skills and experience to provide training and support. Persistent trades shortages, for example, mean that it can be difficult for large employers to provide the required level of supervision, even when the employers want to employ apprentices.

So, while many discussions about the future of work focus on what young people (labour supply) might need to do to prepare for workplaces, there is much to be done on the demand side to ensure that employers are creating opportunities that will support skills for our economic future. This includes employers considering both direct engagement and pathways throughout their supplier and other networks (see Microsoft Traineeship Program case study). Governments are large employers in their own right – some could be doing more to provide pathways for young people from less advantaged background. As noted in the earlier discussion of Sydney Metro, governments can use their purchasing power to increase availability of training pathways. The Victorian Government's ambitious social procurement program – which extends across all of its agencies – suggests a possible way forward.

Key points

- **Supply-side measures can have little impact on young peoples' ability to secure good quality work if employers do not create opportunities.**
- **Employers have a critical role in developing the skills of young people both through direct employment and, in some cases, in fostering skills development through their supplier and contractor networks.**
- **Governments can affect the creation of opportunities through procurement policies and through direct employment.**
- **Models like Talent Rewire's Rewire Lab may be useful in bringing employers together to develop initiatives in their organisations.**

95. Anglicare Australia, 2019, *Jobs Availability Snapshot 2019*, Canberra, p.10
96. Department of Jobs and Small Business, *Australian Jobs 2019*, p.39
97. Australian Public Service Commission, 2019, *The Shape of the APS 2019*, Commonwealth Government Canberra, www.apsc.gov.au/section-2-size-and-shape-aps
98. David B. Bills et al., 'The Demand Side of Hiring', *Annual Review of Sociology*, Vol. 43, pp.291–310
99. ibid.
100. ibid.

Case Study:

The Microsoft Traineeship Program

The Microsoft Traineeship Program was launched in November 2018 with the dual aims of creating a new, diverse pipeline of information communication technology (ICT) talent while also addressing the technical skills shortages in Australia. For Microsoft customers and partners, this presents an opportunity to gain access to new and emerging talent from a diverse pool of candidates. For aspiring trainees, it provides an alternative to traditional university pathways, a foot in the door to a meaningful and rewarding career in a growth sector, and an opportunity to earn an income while learning.

> *By 2024, Australia will face a shortfall of 100,000 workers in the ICT sector. As industry leaders, playing a more direct role in growing and nurturing talent will be one of the ways to solve this problem.*
>
> *Steven Worrall, Microsoft Australia Managing Director*

Microsoft partners are organisations that provide Microsoft-related products or services, or the support for such. In Australia, Microsoft's 10,000+ partners are diverse in both their core business model and size, ranging from smaller specialist ICT companies to multinational organisations. Many businesses within this network understand the pressing need to establish pathways into skilled employment, in order to meet the demands of the growing ICT sector and the digitisation of a diverse range of industries. With a significant predicted skills shortage for trained workers with ICT expertise, the need to act is driving organisations to support alternative approaches to training and recruitment in order to attract talent.

Working in partnership with the non-profit group training organisation MEGT, Prodigy Learning and TAFE, the Microsoft Traineeship Program combines structured learning via a Certificate IV in Information Technology (IT), with paid employment during the traineeship. The broad and foundational information technology content of the Certificate IV is delivered by TAFE, offering trainees knowledge and experience across multiple systems and software. Trainees also work towards achieving Microsoft Certified Solutions Associate certification, which includes seven Microsoft certifications and in-demand specialisation areas like Microsoft Azure (cloud computing). The length of the traineeship is approximately two years, with support and mentoring provided throughout.

Creating a pathway to employment which provides a broad, base-level qualification, a series of industry-relevant certifications, and experience in a workplace that allows these skills to be applied and for additional skills to be gained, equips trainees with a unique toolkit to prepare them for employment now and into the future in the rapidly evolving world of work. Catering to those entering the job market or those looking for a career change, the program links learning outcomes to real employment prospects. Recruitment processes have been designed to support and encourage the participation of culturally diverse groups, Aboriginal and Torres Strait Islander applicants, candidates with disability, and to create a gender balance to increase the number of women in ICT. For employers, this provides an opportunity to hire from cohorts which best represent their business ambitions.

Acting as the legal employer nationally for the trainees, MEGT manages the recruitment and placement support for the hosting companies involved. Microsoft customers and partners are given the opportunity to access and interview this pre-screened pool of talent for their traineeship roles and support is available from MEGT throughout the traineeship. The additional support and guidance that this model enables provides peace of mind for employers, in particular SMEs or those which haven't previously hired trainees.

The Microsoft Traineeship Program's objective is to support over 150 people to take their first steps into a technology career. With more than 4,000 applications submitted in the first six months, the program is attractive to people seeking a paid learning pathway within an organisation with global brand recognition and gaining a transferable skillset. Programs have now been established in Sydney, Canberra, Adelaide and Melbourne, with ambitions to expand to more cities and regions in 2020.

Case Study:

Talent Rewire: Rewire Lab

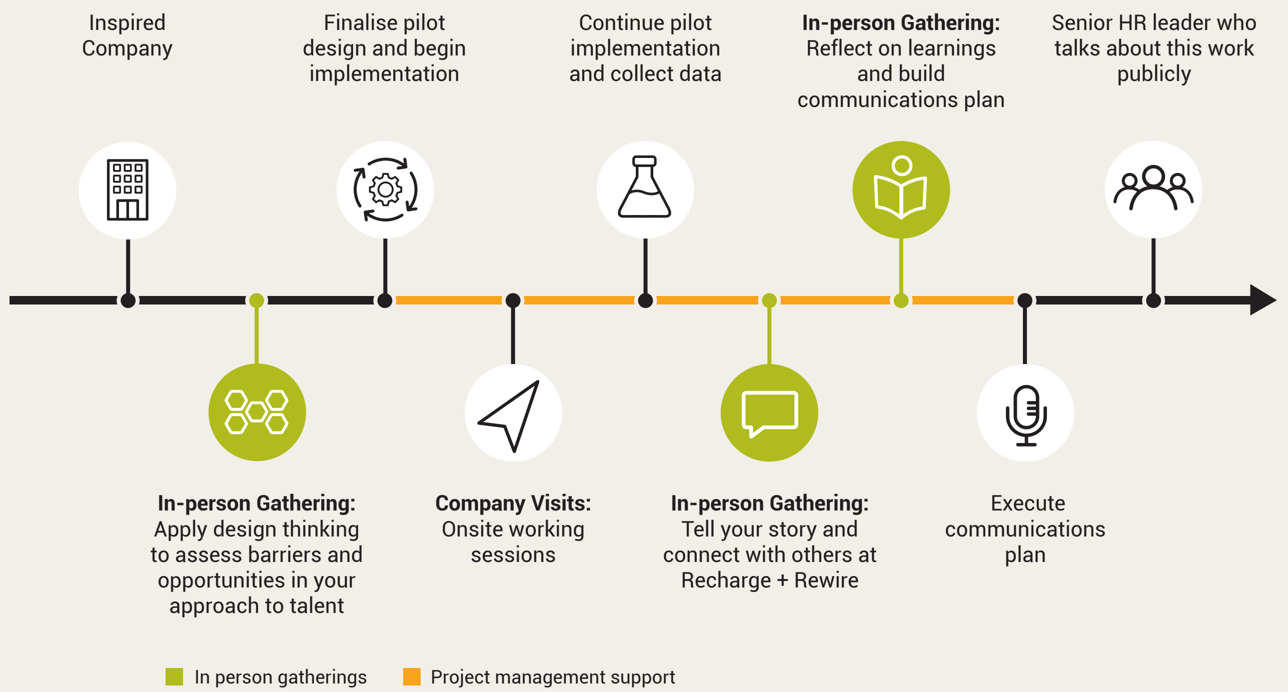
While not specifically targeting skills, a United States approach to supporting employers' inclusive employment initiatives offers an interesting model that might be applied to this approach. Talent Rewire recruits companies that are interested in piloting innovative and evidence-based approaches to 'Opportunity Employment' – the hiring, supporting, retaining and advancing of people from marginalised groups. Examples include projects targeting ex-offenders, young people and people from ethnic minority groups. Companies assign managers from across human resources, corporate social responsibility departments and/or operational areas to participate in a year-long Lab to support the design, implementation and assessment of these approaches. The intention is that by the end of the pilot these companies will go on to expand their pilot projects and/or embed changed practices across their organisations, as well as communicate about their pilots externally at conferences and in the media to inspire other employers to adopt these practices.

Rewire Lab employers commit to the following activities:

- Active participation of three staff members over a 12-month timeframe, which includes three in-person gatherings lasting three days each
- Designing and implementing a small-scale pilot to test an inclusive talent strategy that addresses a business need within the company
- Tracking and sharing data and/or impact stories related to the pilot with the aim of contributing to the broader business case for 'Opportunity Employment'
- Sign-off from senior leadership to participate in order to ensure organisational buy-in.

One of the key features of the Rewire Lab is the development of an internal business case for change and/or scaling up of initiatives. Companies are encouraged to calculate their turnover costs using a calculator tool developed by Talent Rewire which uses direct costs, indirect costs and loss of productivity to help determine the total costs of churn for entry-level staff.

Figure 7: Rewire Lab



Continued overleaf...

Case Study:

Talent Rewire: Rewire Lab ...continued from previous page

Since Talent Rewire started offering the Rewire Labs in late 2016, all of the companies that have completed the program have scaled or are in the process of scaling their pilot programs. Additionally, the experience from having participated in the pilot program has helped identify and generate wider practice changes across their organisations and beyond.

Take Caterpillar Inc., for example. To meet their growing talent needs as well as improve outcomes for their community of Peoria, IL, Caterpillar partnered with Peoria Public Schools to pilot a new program, 'E4Life', with the aim of attracting and retaining new technical talent. Not only is E4Life creating a pipeline of diverse, young talent for Caterpillar, it's also providing Peoria students an opportunity to acquire new skills while earning a good wage (in some cases, higher than what their parents are making). The program is also improving educational outcomes within the district, inspiring neighbouring school districts to adopt and scale the model.

Moving forward: Recommendations from Social Ventures Australia

Projections of the likely shape of future employment are necessarily speculative. However, if there is a consensus it is that there will be significant change in the way many people work, and that there is a high risk of short-term job displacement. Low-skill jobs will continue to grow, but new opportunities are likely to favour those with more skills. Technological change will allow new ways of distributing and allocating work among workers, increasing the opportunity for use of contract labour and piecework.

Many of these developments are simply extensions, or more extreme versions, of existing trends. And if our current experience is a guide, there are reasons to be worried about what the future of work holds for many young people. Already many young people are becoming stuck in poor quality jobs without job security, with insufficient hours and with limited prospects of skills development. Governments are starting to try to reinvigorate vocational education, but any efforts will be fruitless without employer willingness to invest in the skills of future generations. Through this report SVA has identified some promising initiatives, but we need a wider, more inclusive program of action. SVA's recommendations are as follows:

Reinvigoration of VET institutions and structures

The need to reinvigorate the VET sector has been identified as a priority for Commonwealth, State and Territory Governments. This must include a program to rebuild and renew key institutions that have proven their value in fostering social mobility:

- TAFE needs to be recognised as a critical and unique institution that has the capacity to anchor initiatives bringing together employers, schools and community members. Realising this capacity will require greater investment in its people and infrastructure.
- Vocational qualifications should include work placements, as proposed by the Joyce Review. This is likely to require investment in TAFE to rebuild its industry linkages, as well as a broader program of work to secure employer support.
- The importance of ensuring continued relevance and take up of apprenticeships and traineeships cannot be underestimated. The use of government purchasing power to increase employer investment in these pathways should be extended beyond infrastructure projects into other sectors, including professional services. Young people need to be consulted about the barriers they face to taking up VET pathways and be involved in their reform.
- Group Training Organisations have proven their ability to engage and support young people into and through apprenticeships and traineeships both in their ordinary operations and through programs like the Multi-Industry Pre-apprenticeship program. Additional, ongoing support should be offered to GTOs to allow them to extend their work to new employers and to increase engagement with young people experiencing disadvantage.

Realignment of labour market assistance

- Labour market assistance should support the development of a highly skilled workforce that has the resilience to manage structural change. The Commonwealth Government should develop a framework for its new employment services that encourages placement into jobs that offer economic stability and the opportunity for people to apply or develop skills.

- In addition to assistance with job entry, consideration should be given to establishing additional services to assist people whose jobs are changing or who need advice and assistance to move into better, high-skilled employment.
- Specific labour market and economic investment strategies will be needed in areas affected by structural change.

Better practices for learning within and from community-led workforce-readiness programs

- Smaller, tailored work-readiness programs can play an important role in responding to specific needs. They are particularly important for emerging cohorts and in working to address issues specific to particular geographical areas. Governments and philanthropic investors should continue to support these efforts.
- More needs to be done to capture learning from these smaller-scale efforts and to embed effective practices more widely. Any evaluations of particular programs should be made public.
- Among the practices that funding bodies should encourage through their practices are inclusion of young people in project design, providing adequate time for project learning, and ensuring that projects focused on employment connect young people directly with employers.

Employers need to do more

- The consequences of restructuring large workplaces and of increasingly precarious employment can be seen in declining skills investment and chronic shortages in key occupations. Too many employers expect other employers or educators to provide young people with technical and employability skills, or rely on availability of skilled labour from other countries.
- More employers need to nurture young people, particularly those who are disadvantaged in the labour market, within both their own enterprises, and in organisations in their supply chains.
- Governments can do more to support these efforts, not just by using social procurement, but by ensuring that they nurture young workers – particularly those who face employment barriers – within their own organisations.

The need to rethink how risks and rewards of change are distributed.

Changes in both labour-market regulation and in systems of social protection will be needed to arrest current trends in income inequality and instability. The risks of future uncertainty should not be borne by individuals, or governments, alone. Similarly, social dialogue and proactive investment are needed in communities that are likely to be significantly affected by change.

Photo credentials

All images used in the report are stock photos, except for:

Page 13: images provided by Career Trackers
Page 25: image provided by Multi-Industry Pilot
Page 36: image provided by Microsoft

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Cover sheet: Supporting document #3

PwC Consulting

What Will It Take? –

A research paper by SVA and AEN, with analysis by PwC, about some possible solutions that may help rebuild career paths for young people

Creating better, more sustainable jobs for young people

October 2021

Disclaimer

This report is not intended to be used by anyone other than Social Ventures Australia (“SVA”) and the Apprenticeship Employment Network (“AEN”).

We prepared this report solely for SVA and AEN’s use and benefit in accordance with and for the purpose set out in our engagement letter with SVA and AEN dated 16 June 2021. In doing so, we acted exclusively for SVA and AEN and considered no-one else’s interests.

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Project background

Background

Understanding what can be done to rebuild career paths for young people.

The objective of this project is to gain a better understanding of what factors are shaping an employer's willingness to hire and train young workers, and what actions can be taken to substantially increase the availability of opportunities for young people to get work that uses and develops their skills.

The research is focused on the demand-side (employer) drivers, with the intention of identifying options on what it will take to enhance and strengthen skilled employment opportunities for young people to promote further discussion.

To inform this discussion, research for this report includes reviewing policies designed to increase employer provision of career paths for youth, with a focus on evidence from examples such as the Training Guarantee (Australia); the Apprenticeship Levy (UK); use of procurement (such as the Major Project Skills Guarantee) and evidence from pilot projects e.g. higher apprenticeship pilots.

Project objectives

In June 2021, PwC was engaged by Social Ventures Australia (SVA) and the Apprenticeship Employment Network (AEN) to provide analysis on:

- gaining an understanding of the factors shaping employers willingness to hire and train young people;
- building an understanding of the actions governments have taken, including internationally, to increase opportunities for young people to get into work and develop their skills; and
- identifying what action(s) can be taken to substantially increase the availability of those opportunities for young people in Australia.

Research of available literature was undertaken to inform the view on what are the current obstacles and what has been done elsewhere and/or in the past to try and address these. Upon completing the analysis of the literature review, survey and consults, a number of initiatives that may help increase opportunities were identified and their impact tested with participants at the roundtable. There was support for each of the five options presented (see page 25). And while no other options were identified during the discussion, the list should not be considered exhaustive. There has also not yet been any thorough validation of these options and we propose further testing, for example through pilots or more detailed design consultation with employers will be advisable in order to investigate the potential efficacy of them.

Methodology

The approach to provide analysis for this research project included the following:

- an in-depth literature review of over 70 documents;
- targeted employer survey (50 respondents);
- one-on-one consultations with employers, academics, youth advocate bodies and training bodies; and
- a roundtable focused on testing the impact of potential solutions.

Executive summary

Context

Over the last decade quality job opportunities for young people in Australia have appeared to decline. The Productivity Commission in 2020 reported that young people are experiencing an increase in underemployment*, a reduction in average working hours, and a decline in average income in real terms. The Productivity Commission found that young people are starting further down the career ladder and climbing it more slowly. It suggested that rather than predominantly focussing on unemployment, we need to start talking about the types of jobs young people are getting. Despite long term skills shortages across many parts of the labour market, there is a lack of employment pathways for young people that allow them to apply and develop their skills.

This is likely to worsen in response to COVID-19, as it has in response to past economic shocks. Uncertain economic times appear to make employers reluctant to make long term commitments to new recruits and tends to reduce their inclination to hire inexperienced workers. Training budgets are often the first to be cut.

It is clear that government action can make a difference. The Boosting Apprenticeship Commencements scheme has been effective in increasing hiring of apprentices and trainees, including amongst employers new to the apprenticeship system. Governments have successfully used major infrastructure projects to drive investment in construction skills. Individual employers, too, have developed innovative pathways for young people into and within their organisations, proactively engaging with low income and marginalised groups.These are great examples of what can be done. But too often these initiatives are temporary, fragmented or ad hoc.

They appear not to be working at the scale needed to address the immediate problem, let alone build the skills and prosperity we need for a future in which more skilled workers are required. A cultural and behavioural shift is needed across the labour market toward greater long term workforce planning and greater investment, by employers, in nurturing the long-term development of our young people. Employers are central to this change, but they cannot do it alone. Government policies and decision making are critical to creating incentives for change and ensuring that the wider ecosystem of employment and training supports employers in their efforts to create more job opportunities.

This project set out to take a closer look at what this would look like. We asked what it would take to shift employer behaviour at scale to create more, quality jobs for young people, and equip them for long term skills development. While the findings are relevant across the labour market, our specific focus was on non-university pathways, recognising the critical importance of ‘middle skills’ to income mobility and to future prosperity.

Key findings

While many employers identify cost as a significant barrier to investing in young people, wage subsidies are not always the most effective way of addressing cost barriers. On their own, they are not enough to address the challenges employers face.

Some employers have the knowledge, experience and scale to build employment pathways within their own organisations. They are reaching into schools and communities, working with VET providers, and creating support structures within their own organisations. But most employers lack this capacity and find themselves having to navigate a complex, and often costly, system. We found that they often find themselves in a vicious cycle in which their inability to find new skilled workers means that they keep experienced workers fully deployed ‘on the tools’, rather than using them to train future workers. As the workforce ages and the economy changes, these obstacles to developing our skills base will become more critical.

Employers told us that they want to see better-designed incentives, more coherent and comprehensive intermediary support and a quicker return on investment when they hire young people.

It is clear from this research that a combination of measures is needed to generate change. We identified five broad approaches, some combination of which should be considered:

- Financial levers including more tailored subsidies and consideration of schemes to promote training investment
- Stronger and more coherent intermediary support models for employers
- Collaborative pre-employment (training) models which are directly linked to employers
- Use of integrated work and learning, particularly in sectors without strong existing apprenticeship systems
- Use of Government procurement and contracting to drive skills development.

We have identified a number of possible next steps to test and refine these ideas. Importantly, we need to develop a more coherent response which recognises the need to address skills development and employment together, not as separate problems. The specific solutions will vary from sector to sector, reflecting different cultures and practices in relation to workforce development. Ultimately, however, reversing the declining prospects for young people requires economy wide action.

*The ABS underemployment framework classifies persons who are not fully employed according to whether they are looking for and/or available to start work with more hours.[1]

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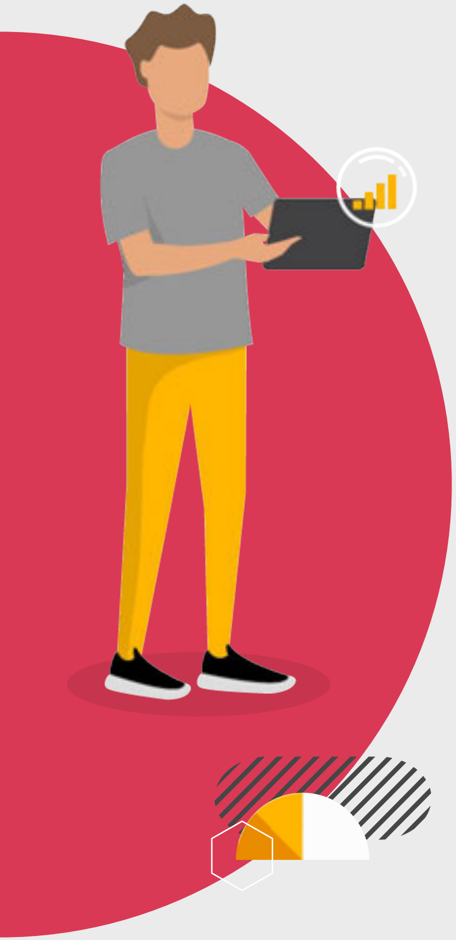


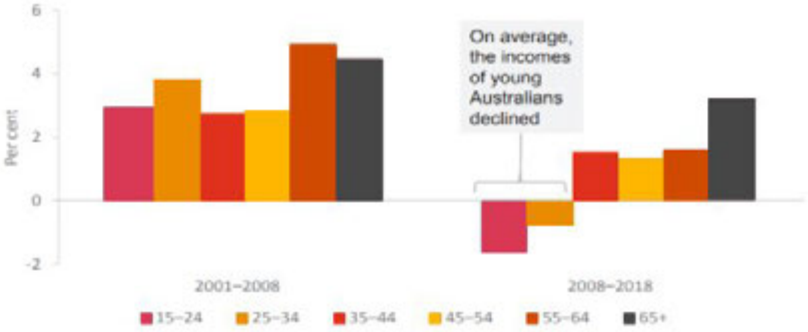
1 The problem

What is happening

Australia continues to improve its employment ratio of young people (61%)[2]. But many young people cannot secure jobs that enable them to develop skills that are in demand now or expected to be in demand in the future...

-1.6%

Young people in Australia have seen their average income decline by **-1.6%** in real terms from 2008 to 2018 (Productivity Commission)[3]. The Productivity Commission suggested that the decline was the result of a combination of increased underemployment and young people finding jobs further down the career ladder, meaning young people were "worse off by 2018 than in 2001"[4] and face an increasingly difficult labour market.



Source: Productivity Commission, Why did young people's incomes decline? July 2020

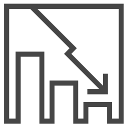
Key facts about young people (aged 15 to 24 years old)

Young people are starting further down the career ladder, where wage rates and hours vary with market forces

In June 2020, the number of young people employed full time (and not studying) was 21%[5]. In 2019, young people made up 46% of all short-term casual employees[6].* Additionally, by June 2021, 10.2% of youth experienced underemployment[7].

Young people face a weaker labour market

There has been a 50% reduction in the number of entry-level jobs since 2006.[8] In addition, some middle-skill jobs that once provided a stepping stone to career progression have disappeared.



Employers are reducing investment into training, which impacts young people's ability to progress

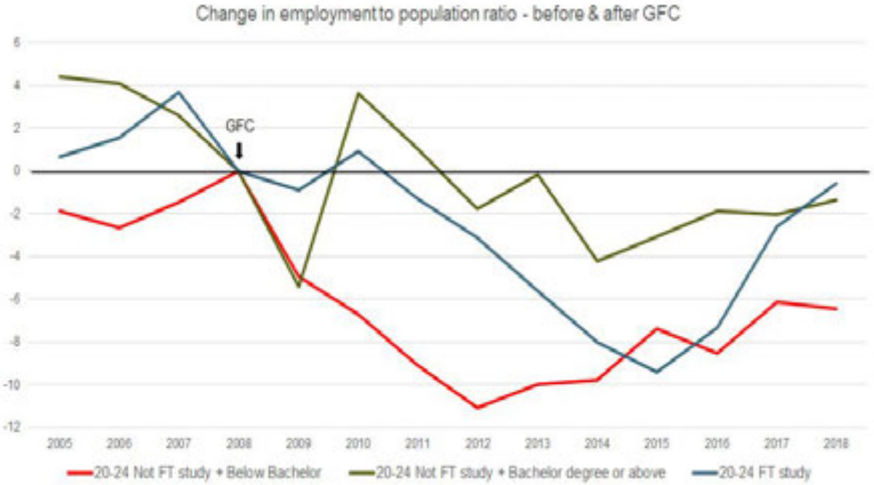
It now takes, on average, 4.7 years for a young person to move into full time employment[9]. The slow climb up the ladder of employment and earnings is resulting in long-term societal and economical impacts, such as remaining on a low-scored job trajectory for longer[10].

What is happening (cont'd)

…and the hardest hit young people are those without degrees, who are more likely to struggle climbing the career ladder than their counterparts in previous generations.

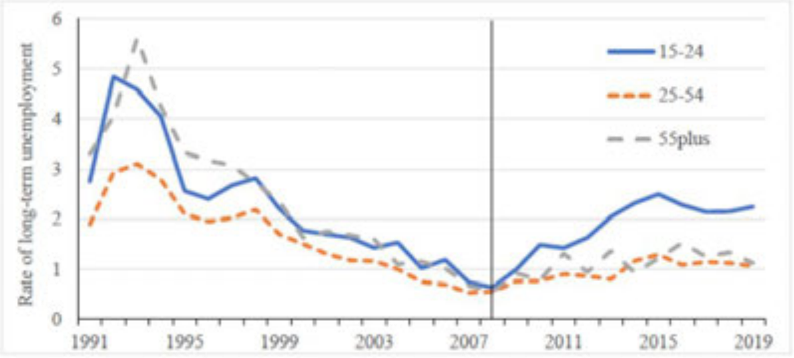
According to the National Skills Commission, 53% of new jobs created in the next five years will require skill level 1 – equivalent to a university degree education[11].

Young people not in full-time study and who do not have a bachelor's degree face a much lower likelihood of employment compared to their peers with bachelor degrees or above and those in full-time study[12]



Young people are 2.5 times more likely than the adult labour force to be long term unemployed[13]

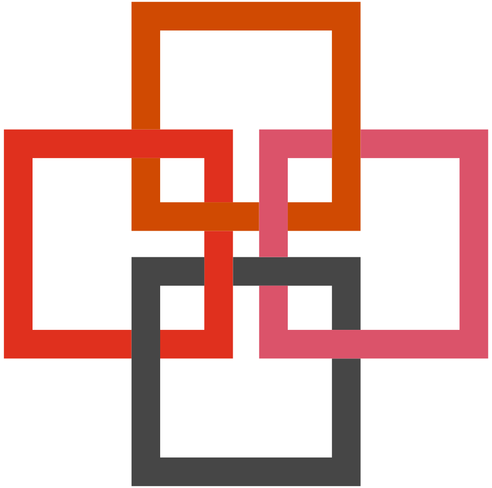
Rates of long-term unemployment, by age, persons, 1991 to 2019 (August)



Source: ABS, Labour Force Australia, Detailed – Electronic Delivery, catalogue no. 6291.0.55.001, UM3.

Themes* from literature review

To understand what is happening in more detail, PwC conducted a thorough analysis of literature that focuses on the employment of young persons and sourced evidence on what has been used to improve youth outcomes. Below are some of the key themes.



*These themes are drawn from the literature review on pages 38 to 75
**In this context, “quality jobs” is defined as full-time work that uses and/or develops the skills of a young person

Theme 1: Over the last twenty years, there has been a reported reduction by the Productivity Commission in the range and availability of full-time entry-level quality job opportunities (including employer efforts to nurture and train) and young people have been disproportionately impacted.
Traditional labour market entry points into quality jobs** for young people have been in decline (e.g. demonstrated by the decline in apprenticeship numbers). Declining investment in training and reduced employer commitment to maintaining their workforces over time signals a loosening of the bonds between employers and workers.

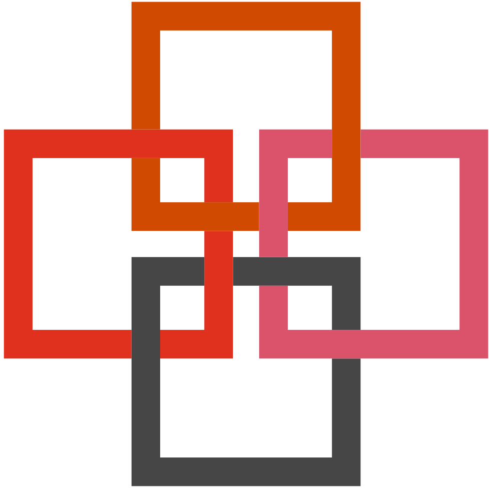
Theme 2: While there are some differences between industries, employer contribution to training and education funding has been falling.
Training staff and career pathway creation appears to not be top of mind for some employers; in some cases there is often only interest when a training guarantee/cash incentive is available. Further, past initiatives to address this issue have not remained in force long-term, leading to inconsistent employer contributions to training (e.g. the removal of the Training Guarantee saw a decrease in investment in training amongst some smaller employers).

Theme 3: The problem may be being compounded by employer attitudes towards young employees. For example, many have long-standing misconceptions about hiring young people in Australia.
Attitudes towards hiring young people vary between different industries, demographics and individuals’ previous experiences. Some industries, for example mining and construction, are well-known for having a business culture that is highly favourable towards providing young people with meaningful career pathways. However, being employed in a quality job with a decent wage and commitment from the employer has proved elusive for young people, particularly those without university degrees (compared to previous generations). Some underlying attitudes may mean employers see young people as expendable.

Theme 4: There is also the added impact of corporatisation, change in industry composition, increases in contracting arrangements and weakened industrial relations.
The privatisation and corporatisation of public utilities that once employed large numbers of apprentices have resulted in work being devolved to sub-contractors who have less capacity and appetite to take apprentices[14]. Fragmented supply chains, use of more insecure forms of employment, and reduced investment in training have all made it much more difficult for young people to secure a foothold in the labour market and to develop skills in the workplace.

Themes from literature review (Cont'd)

To understand what is happening in more detail, PwC conducted a thorough analysis of literature that focuses on the employment of young persons and sourced evidence on what has been used to improve youth outcomes. Below are some of the key themes.

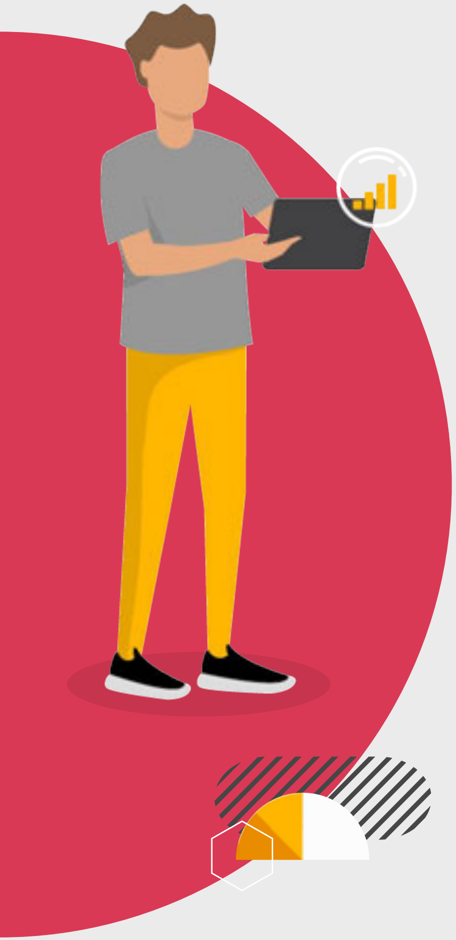


Theme 5: Rapid technological innovation and workforce transformation have increased employers' expectations of prospective employees and increased competition for entry-level positions typically sought by young people.
The adoption of increasingly agile and remote ways-of-working, and additional rules and regulations across industries that employ young people, have resulted in fewer entry-level jobs. Of the jobs that are left, employers often demand greater experience and qualifications for people entering the workforce. Many entry level jobs have been eliminated as a result of technologies introduced to do the same work – without the pay check. Employers are also making choices about how they structure the jobs and, therefore, how they select employees (e.g. using internships to replace paid entry-level jobs). Recent analysis of over 4 million job posts on LinkedIn showed that 35% of postings classified as 'entry-level' requested years of prior relevant experience, demonstrating that first entry jobs are becoming harder to get.[15] In May 2019, Anglicare Australia reported only 10% of job vacancies were suitable for applicants with no qualifications or work experience[16]. A recent analysis of 'entry-level' software and IT Service jobs showed 60% required three or more years of experience.[17]

Theme 6: There is goodwill amongst some employers and a desire to employ more young people, but limited capability, capacity and knowledge about how best to achieve this operationally, administratively and financially is leading to inaction.
there is a growing importance for companies to increase their focus on social responsibility to set themselves apart in the eyes of customers and investors. However, findings suggest there may be a lack of awareness among businesses of how to provide these opportunities[18], especially amongst SMEs, and a lack of support needed to encourage action.

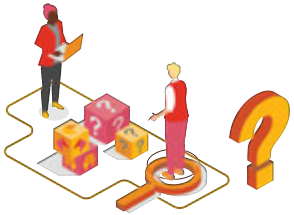
Theme 7: Employer hiring and training processes can be improved to benefit employers and young people seeking employment.
Employer and external recruitment processes could benefit from career pathway mapping and better use of employment data. It is suggested that there is misalignment between the way Jobactive works and the goal of increasing the number of young people moving into quality careers, as Jobactive is being outperformed by other services (e.g. Transition to Work) to deliver sustainable placements for young people[19].

Theme 8: There appear to be barriers to employers engaging with reliable alternative training and employment models. The ad hoc and stop-start nature of initiatives is limiting their take-up amongst employers. Evidence of what works therefore needs to be explored in greater depth to understand what is getting in the way of wider adoption of initiatives.



2 Why is this happening?

Drivers of employer demand



Over the last twenty years, there has been a reported reduction in the range and availability of full-time entry-level quality job opportunities, suggesting employer demand has shifted, with negative consequences for young people without degrees.

From an in depth literature review it was found that key drivers and trends that influence employer demand include the following:

Labour market changes

Macro trends occurring in the labour market means young people are increasingly finding it challenging to secure a foothold on the career ladder in order to develop skills in the workplace compared to previous generations.

Credentials creep

Employment growth has occurred in sectors of the economy that are perceived as not having well-developed career structures or concentrated in areas with substantial levels of casual and part-time employment. (e.g. retail and hospitality). New jobs in more career-structured sectors (e.g. business) instead require higher skill levels as a prerequisite for entry. Young people with degrees are therefore likely to have “pushed those with vocational degrees further down the ladder” (Productivity Commission 2018).

Rise in insecure forms of employment

Casual, short term and irregular work is rarely connected to longer-term career paths with opportunities for further formal and transferable skill development for young people without degrees. Insecure work may fill the space between unemployment and full-time employment; but there is evidence that it may have long-term scarring effects on career trajectories and earnings for young people.

These key drivers suggest the following things are occurring with employers*:

1 Expectations

- Hybrid occupations (combining skill sets that didn’t used to be found in the same job, such as marketing and statistical analysis) are among the fastest growing in the labour market due to technology, and remote ways of working, which require a diverse mix of skills. The Burning Glass report argues that in-demand jobs increasingly require a range of specialised and digital skills[20].
- As a result young people are subject to “upcredentialing,” where employers’ inflate the credentials required for advertised jobs. Entry-level administrative jobs, such as registration clerks are declining as businesses increasingly incorporate automated workflow technologies. This means that businesses expect new skills mixes in entry-level jobs that didn’t previously exist.

2 Attitudes

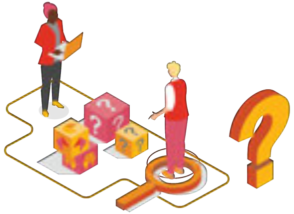
- Employers that have had negative experiences in the past have reservations around the business etiquette, reliability and commitment of young people.
- There is also a perception that the cost of equipping first year apprentices and inexperienced employees with the required skills and knowledge is too expensive, relative to the work they produce. Many employers believe that it is unlikely to be profitable to hire young people new to work as resourcing required for work placements is often high and does not always make sense for employers to invest in, regardless of subsidies.

3 Behaviours

- Employers need to be able to recognise the benefits and opportunities associated with developing a long term employment relationship with young and entry level employees. Employing and committing to the skill development of young people is “an essential precondition for young people’s positive transitions to work”[21].
- Some employers find their ability to nurture the development of young workers has been diminished by a lack of supervisors with the skills and experience to provide training and support. Employers need knowledge and resources in navigating the challenges of employment of a young person to ensure employer behaviour matches intent.

*See Annex C, slides 38 to 75 for more information on drivers identified in the literature review

What employers think – Survey results



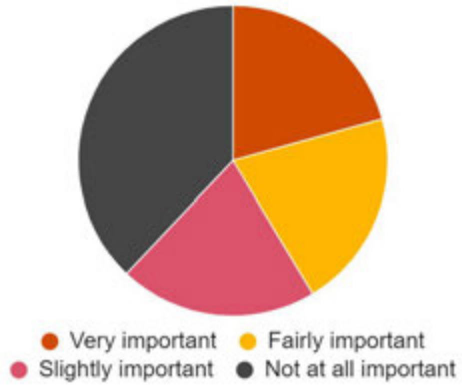
A targeted employer survey indicates that while the cost of training is a key consideration, wage subsidies alone are not deemed sufficient to ensure that there are enough workers available for future demand.

Key call-out

The survey results show a mixed picture on wage subsidies. For some employers, subsidies are critical, and for some they are not important at all. All employers we consulted noted the cost associated with nurturing young people's careers, and for some the transaction costs associated with securing individual wage subsidies and/or incentives were seen as too high to make them worth claiming (although the Boosting Apprenticeship Commencements scheme has helped encourage new employers into the system).

The insights from the survey, consultations and roundtable suggest that incentives may not currently be high enough (survey findings show that over 40% strongly agreed that they would take on more young people if incentives increased). There may be better ways of providing financial support that – in combination with other measures – are more likely to generate larger scale change and be more in-tune with what employers want. Employers recognise (and are concerned) that when hiring a young person, there is clearly a cost around training, mentoring and supervising. There was a sense that if there were better designed incentives that more readily offset all these costs in a simpler way, that might change the behaviour and attitudes of more employers.

“Importance of wage subsidies in encouraging your organisation to create career opportunities for young people entering the labour market”



Organisation capabilities

1 in 2

respondents agreed that managers need more skills to manage and support young people

Open positions

40%

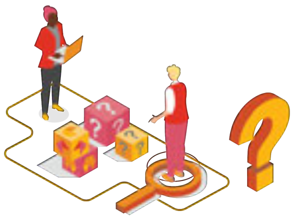
of respondents said that their organisation frequently has difficulty filling roles

Open positions

3 in 4

respondents said their organisation would be willing to employ more young people if government incentives were increased

What employers think – Survey results



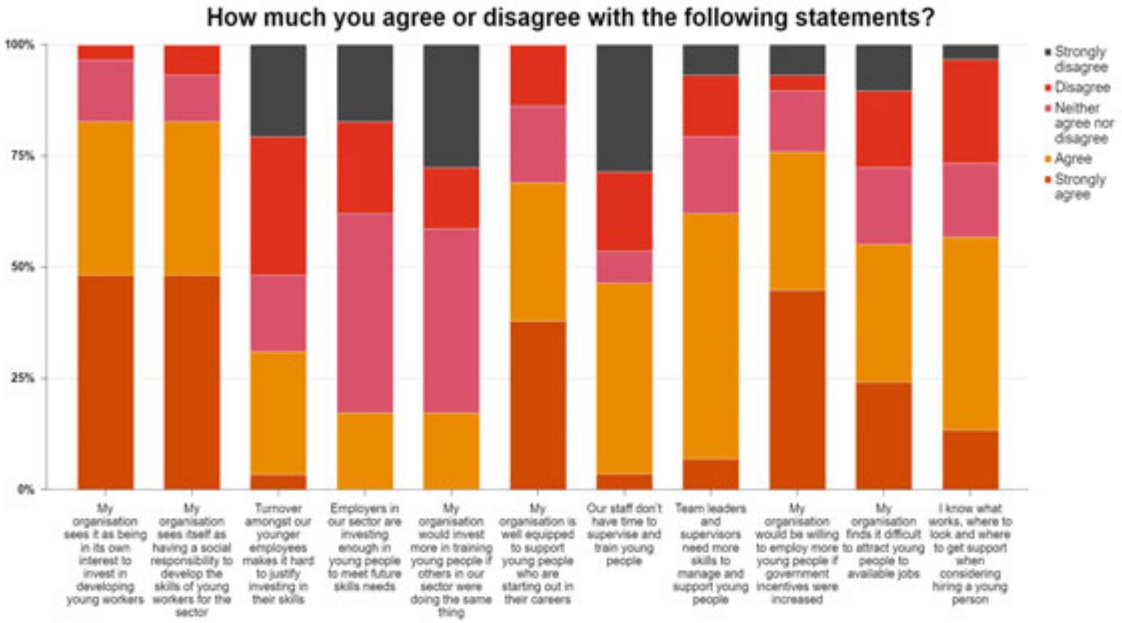
The survey results tell us that a lot of employers do see themselves as having a responsibility to develop young workers, but there is concern over the cost of training and the lack of time and skills of supervisors involved in managing and supporting young workers.

Additional survey results

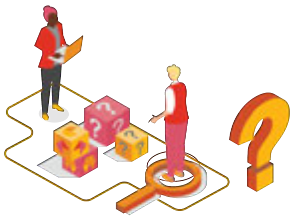
77%
of survey respondents were likely to upskill or reskill existing staff when experiencing difficulties in filling skilled or semi-skilled roles

62%
of survey respondents said that it was likely that their organisation will face difficulties in meeting its skills needs in the next 5 to 10 years

61%
of survey respondents said that the cost of training is “very important” or “fairly important” factor that has limited their organisation’s career opportunities for young people



What employers think – Consultations



Employers indicated in one to one interviews they want to hire young people, but this does not always align with the desire to have employees that can contribute on the job from day one.

Employers are seeking employees who are able to contribute on the job from day one

The majority of the employers consulted stated that one of their biggest concerns around hiring young, inexperienced workers is that they need employees who are able to make a meaningful contribution from their first day once they are on the work site. Many stated that they would be happy to make a commitment to employing young people full-time upfront – during training, before they are in a workplace – so as to lessen the risk of losing the investment after training is completed. This commitment may come in the form of a guaranteed interview for a position, a guaranteed internship which may lead to a position, or through full-time employment throughout the training process. One employer expressed their concern that some on the unskilled or semi-skilled roles in administration that they recruit young people into currently may not exist in the future, but they want to know what works elsewhere to continue to support non-uiversity degree holders.

Young employees benefit from additional mentoring and support

Employers stressed that young people who are entering the workforce benefit from additional mentoring and support, above and beyond what would normally be provided to new hires. The type of mentoring and how the mentors were selected differed between the organisations we spoke with. However all stated that it was an important support for young new joiners, and the role is vital in ensuring the upfront investment in the young person (e.g. training) pays off. Some organisations stated the need for mentors and appropriately trained supervisors has impacted their decisions around hiring young people; the time and resources required can outweigh the immediate business need and commercial pressures.

One employer mentioned their social impact stream for disadvantaged youth requires so much specialised support, that it is difficult to meet this Government target when resources are constrained.

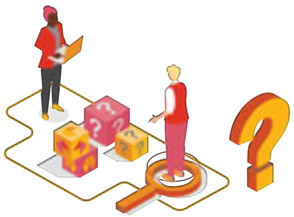
External incentives are often viewed as just a 'cherry on top of the cake'. They do not tend to directly influence employer hiring decisions, particularly for large organisations.

Many of the organisations that we spoke to said that external incentives, such as wage subsidies, often do not materially impact on the number of employees they will seek to hire. One organisation said that chasing 'poorly designed' incentives in the past left them with workers who did not meet their needs, or it encouraged them to hire more workers than they needed in the long term which is unsustainable. While incentives no longer directly influence the hiring decisions for the organisations we talked to, many said that they do take advantage of incentives where they are available and they match the existing plans of the organisation. One employer explained "we do it because it is the right thing to do. Government incentives are not the driving factor". They went on to says that in their view, Government procurement targets have done more good than bad, particularly in raising awareness.

Finding the right young people is critical

In our discussions, many of the organisations shared a commitment to hiring young people. However finding the right young person with the right attitude and goals was critical. One employer explained this is a challenge in such a tight labour market; they want more young people, but they need to be where the leadership and support is, in the ACT, where young people are not as keen to move to. There was also feedback that young people are successful in organisations where they are joining an industry that they have an interest in, and have prior training or on-the-job experience (e.g work experience). Without this, employers found that the young person struggled to stay committed and would leave, which means a loss of investment for the employer. Employers explained that without the young people having more exposure to the industry ahead of trying to commit to a career, they struggle to find young people who have already had a chance to test their interests and therefore are at less risk of pulling out.

What change makers think – Consultations



In addition to employer interviews, we also conduct interviews with researchers, peak bodies and change makers in the youth employment sector. Below we have called out some of the key insights from these consultations.

01

Skills over qualifications

Employers are seeking skilled employees and many use qualifications as a prerequisite for roles because it allows them to easily identify the skills of an applicant. This is resulting in qualifications being used as a proxy requirement, even where they are not required for a role. A shift towards skills being recognised in other formats is critical for both employers and young people.

02

Employer engagement and commitment is needed from the beginning

Engagement from employers at the beginning of the career and learning journey for young people is critical. Programs where employers are engaging with young people from the beginning and where they are investing in the program are seeing success.

03

Job mobility is increasing

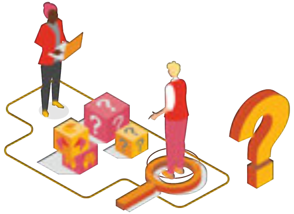
People have more jobs and individuals are less likely to stay with the same organisation for their entire career than they were in the past. As a result investment in upskilling individuals may need to be thought of at an industry level and not an individual organisation level.

04

There need to be alignment between employment and skills development

Programs and initiatives need to be aligned across the supply and demand side to integrate both employment and skills development. At the moment initiatives often target only one side which can lead to frustration as there is not a commitment on both sides. Initiatives that target skills in demand with a connection to an employer may lead to improved outcomes.

What all this tells us



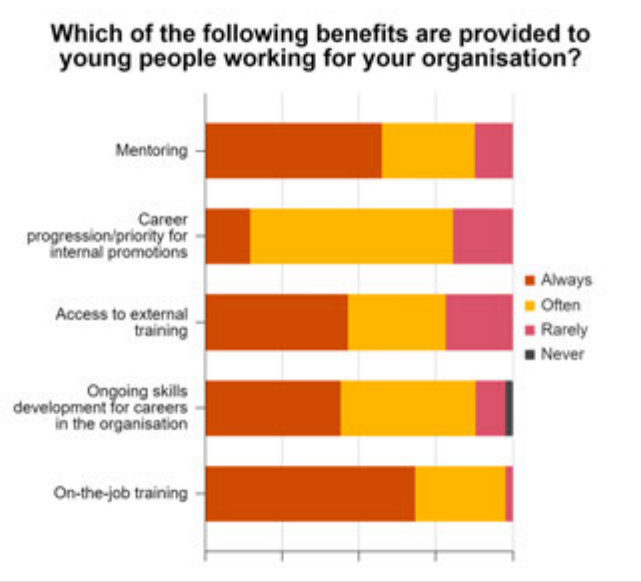
We need to shift the emphasis to understand why employers are not developing young workers, even in the face of demand for higher skills, and what it might take to get them to do more.

Drawing from the literature review, survey and consultations, our research shows that while government action is critical, it is not enough. The risk of inaction contributes to the long-term skills shortages and aging workforce issues many industries are experiencing, indicating that current settings are not addressing these issues. Something needs to change, and employers need to make a decision about their role in developing young workers as part of the change. Employers decide how they structure employment opportunities, how they reward those who bring their skills to the workplace, and how much they invest in the future skills of their employees; it is these decisions that determine the opportunities available to young people to build their careers and help address current skills and workforce issues.

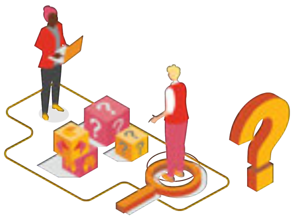
Learning Creates'[22] research and policy paper refers to the growing issue that employers need to 'shape the production line' and currently face a critical choice on whether to 'drift and defend' or 'engage and invest' when it comes to hiring young people. This choice over what kind of 'voice' employers want whilst navigating the tension of doing the right thing by young people versus the challenging market conditions employers face means there is a need for everyone involved to play a renewed active role to invest early in building a future workforce.

There is an overarching assumption that, provided quality training is delivered, employers will respond to an increase in trained candidates by hiring young people. It is also assumed that wage subsidies and other incentives will be taken up by employers to reduce the direct cost of employing young people. In other words existing policy settings frame the 'problem' as a combination of (i) lack of adequate preparation of young people and (ii) employment costs. However our research suggests there are obstacles to hiring young people that are more complex and more difficult as outlined in the themes on pages 9 and 10. An incentive may only provide a temporary 'sugar hit' to overcome the obstacle, and to date on face value they haven't solved the problem of young people climbing the career ladder slower. If we are to improve the ability of young people to move into jobs with long-term career prospects, we need something more to better increase the willingness to hire and train young people, and what action can be taken to substantially increase availability of opportunities for young people to get work that uses and/or develops their skills.

While organisations who responded to our survey provide a number of benefits for their employees, they said career progression opportunities for current employees remain low in comparison to other benefits.



What employers need



Employers clearly articulate they have a number of needs that are not currently being met. The gaps are resulting in employers finding it more and more challenging to hire, train and retain young people, which in turn drives their hiring behaviours and attitudes.

"Due to difficulty in recruiting and retaining young people that have a tertiary education, there has been a tendency to recruit older persons...as they are more likely to stay in more remote locations"

"we need other financial incentive models for employers that encourage planning and provision of additional supervision and coordination to identify and pay for key partner support agencies"

" employers need to be able to invest in an approach so that they own it themselves"

" the single most important factor is attitude...this is affected by how much exposure the young people has had to our industry/business and their interest in it. Someone keen with the right hard working attitude can still go a long way"

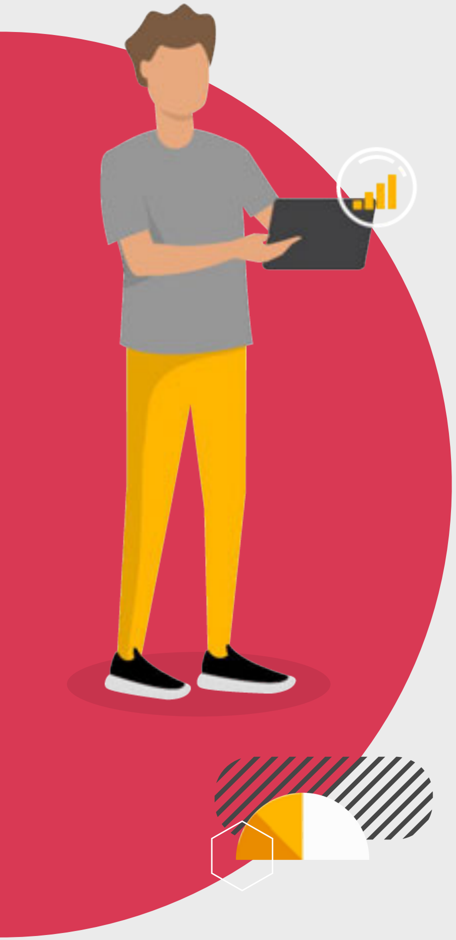
"Need for skilled workers has increased, cost of apprenticeships have also increased, but so has uncertainty about future work to support employing apprentices"

"The increased demands made on employers to cover the training cost, travel and accomodation cost for regional apprentices, the need to cover the costs of apprentices travel to and from work, increased workers compensation costs have added to the lowering of demand for apprentices"

"Government incentives are clearly important, but does the focus on them reveal an employer culture in Australia that may not increase their engagement with young people and education without more incentives…do we need to look abroad to employer cultures that are more engaged already (e.g. Switzerland) and work towards that future state"

"Sustainable governance structures within local employment ecosystems are important to ensure opportunities for employer investment endures beyond programmatic delivery"

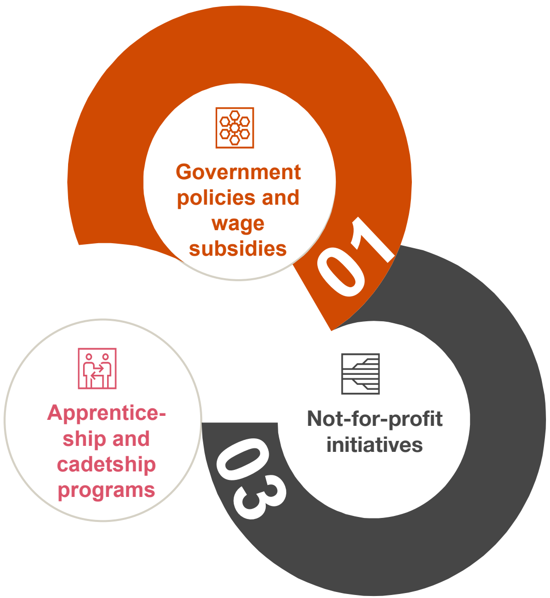
"Automation has been one factor (affecting hiring young people). Also challenges with retention around young people compared to older hires"



3 What has been tried to build career pathways in Australia

Local efforts – examples of what has been tried

A combination of policies, initiatives and programs is likely needed when considering options. Previous efforts have struggled to link these areas together and a response that improves the employment of young people will likely require a 'package' approach.



1. Government policies and wage subsidies

Over the years a number of government programs, policies and wage subsidies have been implemented and trialled at a State and Federal Government level. These programs may provide funding for employers to take on workers. Alternatively, government funded projects may implement targets for apprentices and trainees, or for a disadvantaged groups (e.g in NSW, construction contracts over $10 million and up to $100 million must embed an apprenticeship target of 20% of the trades workforce, which helped establish the Sydney Metro Apprentice and Trainee program). These programs often have a positive impact on employment, however it may only be short-term and not financially sustainable for employers if the subsidies are removed.

Examples:

- Australian Apprenticeship Incentives Program (AAIP)
- PaTH Industry Pilots
- Boosting Apprenticeship Commencements
- Training Guarantee Levy

2. Employer apprenticeship and cadetship programs

Apprenticeship programs combine education and on-the-job experience. A number of organisations are implementing or trialling apprenticeship-style programs in non-traditional fields. These programs allow individuals to enter organisations without a university degree, opening up the pool of applicants. Apprentices complete varied, challenging work, combined with a nationally recognised qualification or skill set, and are supervised and coached by existing workers in their organisation.

Examples:

- Higher Apprenticeship Program – PwC Australia
- Higher Apprenticeships Pilot Project – Workforce Innovation & Development Institute (WDI)
- 4.0 Higher Apprenticeships Program – AI Group

3. Not-for-profit initiatives

A number of initiatives have been created with the support of not-for-profits to improve skilled employment outcomes for young people.

Examples:

- National Skills Trial Pilot – Brotherhood of St Laurence
- Multi Industry School Based and Pre-Apprenticeship Support Project – AEN

The latter was run via GTOs who provide support for both employers and individuals by taking on the employer responsibilities for the quality and continuity of the apprentices' and trainees' employment and training, and manages the additional care and support necessary for successful completion of the training contract.

Case studies – What has been tried

There are many examples of programs and initiatives that already exist in Australia to support a young person's employment that ideas and lessons can be drawn from.

Multi Industry School Based and Pre-Apprenticeship Support Project (MIP) *AEN*

The MIP pilot - aimed at supporting school based and unemployed youth - provided participants with the opportunity to have a "hands on" trial of 3-4 different industries during a course. The aim was to assist them to make an informed choice into further study or employment pathways in vocational (apprenticeship) industries. The fact 50% changed their mind shows the value of giving young people a safe space to test career aspirations. The project also supported host employers as it enabled them to engage with a number of young participants through the project to find the best possible "fit" for their business. The pilot also involved GTOs from Victoria, New South Wales and Tasmania who designed courses to provide participants with a range of experiences.

Projects completed between 2016-19 resulted in supporting over 2,586 youth, with over 37% participants with apprenticeship outcomes, and 50% found their career aspirations had changed

Futurefit Academy *BHP*

The BHP Futurefit Academy provides individuals with a job from day 1 while they work towards an accredited traineeship or apprenticeship. Futurefit hubs are currently located in Mackay and Perth. The program looked to re-work the model of traditional apprentices and targeted groups who are typically underrepresented in apprenticeships. Their first intake was approximately 80% female and 20% Indigenous Australians.
The BHP investment in the Futurefit academy has opened up a labour market for BHP that would not have been possible without the new model.

Turnover rate reduced by 30% at the 2 year mark

Higher Apprenticeship Program *PwC Australia*

This program gives young people the opportunity to complete a fully-funded qualification in technology or business (e.g. Diploma of Information Technology) while working in professional services. Higher apprentices complete varied, challenging client work and/or internal projects, are coached by experts in their field, and are paid a competitive starting salary.

100% of employers agreed that the Higher Apprenticeship program addresses a gap in the training landscape

Youth Employment Scheme (YES) *State Government of Victoria*

The YES provides young people, aged 15 to 24, with an opportunity to work in the Victorian Public Service for 12 months while completing accredited training by registering with one of the GTOs involved. The program boosts the participation of young people in the workforce, while assisting communities to meet future skills and employment needs.

A focus on addressing barriers to employment

State based Industry Training Levies *Multiple*

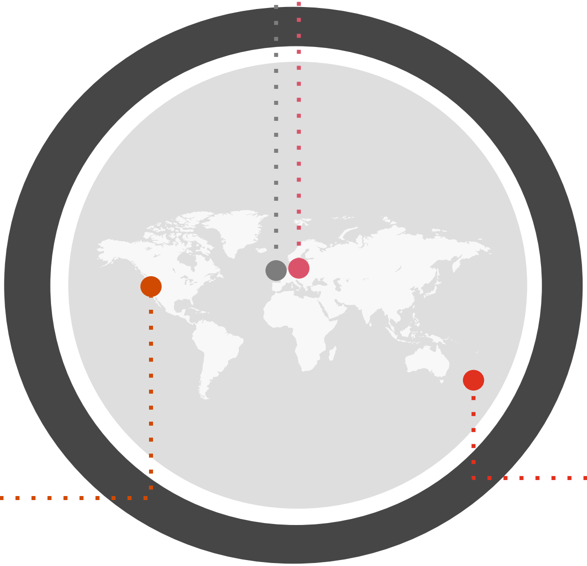
State based Industry Training Levies replaced the Training Guarantee Levy (1990) and now exist in Queensland, Western Australia, South Australia, Tasmania and the ACT for the construction industry. These levies often apply to construction projects that are above a certain value.

All money is reinvested in training in the industry

4 International evidence of what has been tried

International evidence

Inspiration can be taken from international experience. PwC's literature review considered programs and initiatives that have been trailed or implemented around the world. Below are some examples of successful programs.



United Kingdom

Apprenticeship Levy[23]

The Apprenticeship Levy (2017) is an amount paid at a rate of 0.5% of an employer's annual pay bill. Employers with an annual pay bill of more than £3 million pay the levy monthly.The UK Government also tops up the employer contribution to be used for accredited training by 10%. The levy has also undergone a few enhancements to make it more flexible, which allowed expansion into higher level apprenticeships (although attention must be paid to ensure this does not mean younger and lower level apprentices miss out).

Employers can only use the funding in their account (2 years expiry) to pay for training offered by one of the certified training providers. It can be used towards training any eligible learner, whether a school leaver or an existing employee. Any unspent levy funds are used to support existing apprentices to complete their training and to pay for apprenticeship training for smaller employers.The 'redistributive tax' model means small businesses only pay 5% of the cost (whilst the remaining 95% is paid by the government).

United States of America

The Hire Opportunity Coalition (HOC)[24]

The HOC is a national movement of employers, foundations, and community organisations that are committed to hiring and training young people. The HOC's mission is to " build the capacity of American companies to hire, retain, and upskill Opportunity Youth." The HOC's vision is that "every employer in America will demonstrate a meaningful commitment to hire and develop youth who face the greatest systemic barriers to employment." To achieve this, the HOC builds coalitions of aligned corporate members who commit to hiring, supporting, retaining and upskilling Opportunity Youth to advance equity in the workforce, utilise diverse talent, and connect future leaders with key stakeholders.

Germany

Dual pathway[25]

In Germany, more than half of each age-group graduate from dual training programs in which they simultaneously earn academic credentials along with gaining work experience, rather than attending classes alone, as in many other countries.

Approximately 68 percent enter the workforce in the company where they were trained immediately after completing their qualification.

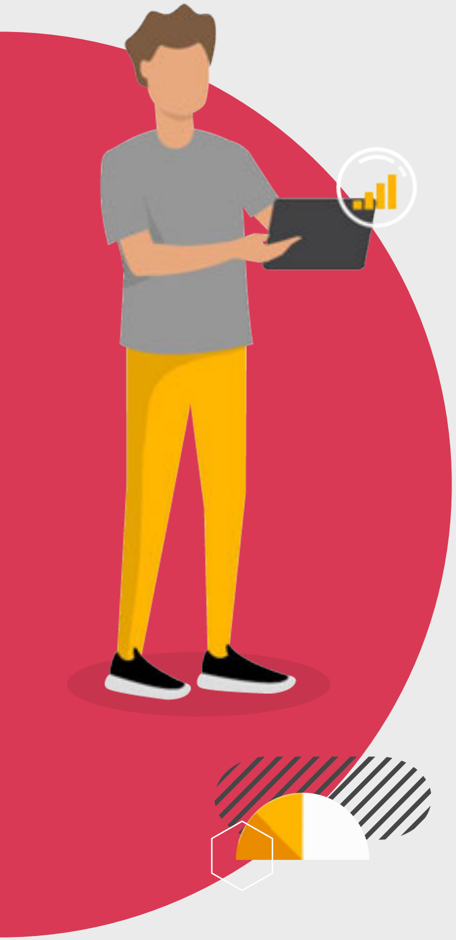
New Zealand

Otorohanga youth initiative[26]

In response to high youth unemployment in the local government area, the Otorohanga community committed to eight projects to meet the needs of youth in the community. This initiative was driven by local community leaders and it focussed on connections with local leadership, training and pastoral care for young people in the area. Some of the programs included a youth drop in centre and holiday program, a new branch of a training institution being opened in the area and an annual celebration of the apprentices.

One of these projects provided local apprentices with a tutor. The support provided by this tutor included literacy and numeracy support, along with support with social issues.

As a result of the programs introduced in Otorohanga the apprenticeship completion rate rose to 90%, compared to 34% before the initiation of the programs.



5 Rebuilding career paths for young people

Summary of some options* that may help address employer needs

Employers tell us that obstacles to hiring young people are becoming more complex and difficult. If we are to improve the ability of young people moving into careers, we need scaleable options that may increase the willingness of employers to offer them

It is clear that the use of wage subsidies and support for training costs directed at employers have their place in solving the issue around creating employment opportunities for young people, especially amongst small and medium sized businesses. Subsidies are necessary, but they are not sufficient, and currently it appears on face value that they are not delivering intended outcomes.

There is a scaling problem, and more consideration needs to be given to 'what would employers need' other than money, to accelerate activity in a meaningful way. For example, stronger models helping young people move from secondary school into VET and then on to work are a critical part of the solution on the supply side; the Mitchell Institute reported collaborating with industry is vital to better prepare young people for future work and life, long before they leave school24, but there appears to be a lack of industry interest to do this at scale.

Our research has identified some early adopters who have a sense of responsibility for providing quality jobs to young people. However, the positive action of individual employers hasn't been able to reverse the overall decline in investment in training or declining career mobility for young people. We need a more coherent, 'whole of economy' approach, and against the current backdrop of COVID-19 recovery and a lack of migrant labour, now is a perfect opportunity for a governments and employers to consider more innovative and targeted options.

1 Financial levers

Longer-term considerations could be given to levers that target the employer such as rebates and training levies, given track records have been largely positive.

2 Establish support models for employers

There is a need for support structures for employers to help navigate the system which many feel are currently lacking. Employers spoke of a desire for brokers and/or intermediary support aimed at addressing employer issues.

3 Collaborative pre-employment (training) models

Options range from intense boot camps to academies supported by a consortium of employers in the same industry. The main thrust is that there is employer skin in the game from the start, investing in different forms of training.

4 Use of the work & learning combination to suit industry needs

Most industries can borrow a lot of ideas of what works from the traditional work-integrated learning approach. For example advanced apprenticeships/skill sets/microcredentials can introduce young people to a sector and start the beginning of a genuine career pathway at a lower cost.

5 Procurement & contracting

Where large government contracts are concerned, there is an opportunity to utilise the procurement process to stipulate that employers establish opportunities for young people as well as disadvantaged groups through their supply chain management and directly, especially in emerging markets such as energy and IT.

*The above options are in no particular priority order. They are informed by analysis of the literature review, survey and consultations, and draw from evidence of what has worked before / overseas to help rebuild career paths for young people. These options are not exhaustive, but have been highlighted in this report based on their possible impact on Australian employers, and the feedback provided by employers when tested at the roundtable.

Options and themes matrix

The matrix below provides a high level evaluation of the options proposed against the initial themes outlined in the report. The options were tested with employers at the roundtable, where it was indicated that financial incentives and collaborative pre-employment models appeared to be the preferred options for attendees.

	Theme	Financial levers	Establish support models	Collaborative pre-employment (training) models	Use of the work & learning combination to suit	Procurement & contracting
1	Over the last twenty years, there has been a reported reduction in the range and availability of full-time entry-level quality job opportunities (including employer efforts to nurture and train) and young people have been disproportionately impacted.	High	High	No direct correlation	High	High
2	While there are some differences between industries, employer spending on training and investment into workforce upskilling has been falling.	Very high	High	High	No direct correlation	High
3	The problem may be being partly compounded by employer attitudes, for example many have long-standing misconceptions about hiring young people in Australia.	Very high	High	High	High	No direct correlation
4	There is also the added impact of corporatisation, change in industry composition, increase in contracting out and weakened industrial relations.	No direct correlation	High	No direct correlation	High	High
5	Rapid technological innovation and workforce transformation have increased employers' expectations of prospective employees and increased competition for entry-level positions typically sought after by younger people.	No direct correlation	High	Very high	Very high	No direct correlation
6	There is goodwill amongst some employers and a desire to employ more young people, but limited capability, capacity and knowledge about how best to achieve this operationally, administratively and financially is leading to inaction.	Very high	Very high	High	High	Medium Low
7	Employer hiring and training processes can be improved to benefit employers and young people seeking employment.		Very high	High	High	No direct correlation
8	There appears to be barriers to employers engaging with reliable alternative training and employment models; not just at scale, but the ad hoc and stop-start nature of these initiatives which is limiting their take-up. Therefore, evidence of what works needs to be explored in greater depth to understand what is getting in the way of wider adoption of initiatives.	Medium Low	Very high	Very high	Very high	No direct correlation

Key – Level of correlation to addressing the themes: Very high | High | Medium Low | No direct correlation

Financial levers A: Incentives aimed at individual employers

Longer-term considerations could be given to financial levers, given track records have been largely positive. However what is currently available is too burdensome for some employers and therefore the need is for better designed levers.

Background

We heard from employers that money matters and cost matters. For small and medium sized businesses, the burden of funding an apprentice is enough to consider not even having an apprenticeship route. It is therefore vital that The Australian Government considers how best to directly incentivise employers, such as via wage subsidies. A recent example is the Boosting Apprenticeship Commencements scheme where employers of any size, location or industry are eligible for a Federal Government subsidy of 50% of the wages[27]. However, we were told by employers that it can often be confusing for them to navigate some schemes, as the laws surrounding apprentices and trainees are extensive and vary from state to state. Employers explained that as a result, they find it difficult to navigate the system and in fact they need more intermediary-style support to help ensure they are set up in the way that uses the subsidy correctly and provides the young person with access to appropriate tools, equipment and supervision.

However, although wage subsidies are useful support mechanisms for employers and can help "put a floor under declining apprentice numbers as the economy stabilises"[28], the reliance on such programs could be a concern, especially as the high cost is likely to be unsustainable for any government to continue over a prolonged period of time. The Productivity Commission also pointed out that incentive payments "offset only a small share of the total costs to employers" and unless it is targeted, can create upturn in areas deemed to be low priority. Incentive programs can also often result in a 'cliff edge' in commencement numbers if the economic context is still unstable when the subsidy is stopped. For example, the tightening of incentives criteria in 2012 saw a significant drop in non-trade commencements, highlighting some level of dependence on subsidies[29]. It suggests that rather than making a contribution to the cost, systems can become dependent almost entirely on the availability of government incentives. A further concern is that although wage subsidies may maintain some employment, it is most likely at the lower-scored end of the career ladder and often flow to shorter traineeships in sectors that do not guarantee longer-term job security. The Government therefore could consider designing financial levers that ensures the longevity and legacy of the overall goal to provide more quality, full-time job opportunities, even when the direct funding is no longer available.

Option to shift the dial

Financial levers can be effective when used in conjunction with other policy measures. However, what we hear from employers is that subsidies and financial incentives are often too burdensome administratively, and there is concern that subsidies are not targeted at the genuine problem areas (e.g. skills shortages), create over-reliance and are open to rorting. Evidence suggests that on face value, incentives are not delivering on the intended outcomes, which some employers suggest is due to the way they are designed. For future longer-term consideration (given the current economic shock from the pandemic may inhibit immediate financial action), governments should look at re-designing finance initiatives to increase impact with employers and introduce specific, targeted incentives for groups with less social capital, such as young people without degrees. The Government could use different means to help address economic and financial barriers affecting the involvement of businesses in training young people, including options such as grant schemes, loan schemes, social partnership training funds and legislative requirements to undertake a minimum level of expenditure on training young people. However, it is important that these schemes consider how to continue to support employers and encourage continuation of pathways for employing young people, especially when the subsidy ceases.

The need: Better designed incentives

- Employers we consulted with that have already embedded mature models to hire young people do not necessarily think wage subsidies are as important or act as the trigger to hire. But our survey results show they are quite important for small to medium sized businesses who perhaps have less experience and are less mature, or are starting the journey in creating meaningful pathways for young people.
- However, there was broad consensus that money matters and cost matters, and therefore incentives need to be better designed (including introducing ones that are different to wage subsidies) due to their administratively burdensome nature.

Roundtable views

Financial incentives are a great tool to help get a foot in the door with employers. However, they can often fracture relationships where participants are ineligible for subsidies or something happens where the employer is no longer entitled to a subsidy.

It should be more straightforward, streamlined and more accessible so that employers can understand the system.

Financial levers B: Collective employer contribution

The Government should consider providing additional support to employers directly, and employers also need to be encouraged to invest more to strengthen the bond with the young people they hire.

Background

There are examples, both domestically and internationally, of financial levers to increase employers' investment in quality job opportunities for young people. For example, the Training Guarantee Levy (TGL), introduced in Australia in 1990, required all employers above a set payroll threshold to spend a minimum percentage each financial year on eligible training[30]. The TGL provided a useful opportunity for businesses to focus attention on the quality and appropriateness of their training strategies and devise more cost-effective approaches. Analysis of the TGL by the NCVER shows that over half the eligible employers believed it had been instrumental in increasing their training expenditure, particularly medium-sized businesses where it contributed to a growth of 60% in average expenditure per employee. Although the TGL was introduced to reduce employer cost-cutting training spending as a result of the pressures induced by the recession, the fact that it appeared to have generated at least $20 of new industry investment in training for every Commonwealth dollar spent on it[31] suggests that there is still merit in considering a modernised version of this model in the future – especially in the current post-pandemic climate when employers may be looking at cutting training investment. For example, a training guarantee could be leveraged by the Government to address specific impediments, like skills shortages (much like the Construction Industry Training Fund levy in South Australia). Research suggests the TGL could be re-worked and re-introduced to provide a boost to businesses' organisational capacity to encourage higher skills at all levels of the workforce, with more attention paid to other forms of learning, as opposed to an exclusive focus on structured training[32]. Additionally, a TGL could be implemented in a single financial transaction. This would likely be attractive to employers as they would not be burdened with individual exchanges.

Another example is a tax initiative to encourage particular types of behaviour. Use of allowances, credits, reliefs or deferrals have proven valuable in parts of Europe[33]. Governments have introduced tax credits or rebates to encourage investment in lifelong learning and boost the availability of the financial means for such investment, as well as serving as a mechanism for sharing financial responsibilities among different actors. Currently in Australia, there are Payroll Tax Rebates for trainees and apprentices available in most states (for example, in Queensland, employers can claim a rebate on 50% of all wages paid to trainees and apprentices[34]).

Option to shift the dial

There is an opportunity in the longer-term, once Australia is well on its way to recovering from the pandemic, to consider options that increase the employer commitment to employees (e.g. the UK's Apprenticeship Levy has proven to have generated an impact on employer behaviour in relation to the type and level of apprentice they take on). Qualitative research of the TGL points out that a "critical factor determining whether a firm develops a training culture is not the amount of formal training it conducts, but its organisational capacity"[35]. The Government could consider a levy/rebate that targets a particular industry or specific issue (e.g. employing young people); focuses on changing the behaviour of an industry or region (e.g. energy); provides incentive to boost organisational capacity (e.g. funding intermediaries), and supports different forms of learning, such as microcredentials. Creation of a better designed employer-focused financial levers will also need to be less burdensome (e.g. collective larger financial hits) and take into account the predominance of small businesses in Australia.

Roundtable views
A majority of employers said financial incentives would make a difference to their industry, as financial incentives are a great tool to help get a foot in the door with employers.

"We don't take anyone on because of incentives...at times I wish they did not exist as the admin burden is significant"
(quote from roundtable)

Establish and strengthen support models for employers

Support structures for employers are needed to help navigate the system and ensure the young person and employer are both set up for success. Employers spoke of a desire for brokers and/or additional intermediary support.

The need: genuine support and a way to navigate the system

- Employers told us they want someone to be the 'glue' that coordinates all the parts of the system on their behalf so that it is less time consuming for the employer
- Employers stressed the need to have personalised support aimed at mentors and supervisors, but there is a gap in terms of training available for supervisors and capacity for staff to play these roles.

75%

of survey respondents said that the cost of support is a factor that may be limiting the career opportunities they provide young people

Roundtable views

There is often an issue about multi generational unemployment or barriers to employment. Employers, especially small employers, feel that they can't be expected to fix all of these issues, no matter how much money is given to them. From their perspective, things are more complicated than they used to be.

Government investing in intermediaries, that are skilled in the education system AND industry, are key to making connections for students and employees as neither industry nor schools are able (or willing) to do this work.

Background

Our research suggests employers need support and guidance when it comes to hiring a young person and setting them on a path of training and career development. Many people spoke enthusiastically about the role of Group Training (GTOs) in providing a simple, low-risk solution to hiring and managing apprentices and trainees, allowing the host employer to focus on the day-to-day work and on-the-job training. Others also highlighted the support provided by the Australian Apprenticeship Employment Network (AASNs) in navigating the contracting system and enabling employers to tap into national and local incentives and subsidies that the employer and employee could be eligible for. Some employers we spoke to welcomed the idea of a broker/intermediary who can act as a "go-between" with the employer and Registered Training Organisations (RTOs) – negotiating the best training solution for the employer's individual needs – and the supply side (e.g. recruiters, schools). Additional learning and development for their young employees, such as 'managing their finances' and 'drug and alcohol' would also be a welcome addition in conjunction with nationally recognised training.

Complementary to this, employers also seek support in scaling their institutional capacity when it comes to nurturing young employees. Many employers highlighted in the survey and consultations that the pressure to provide mentoring and supervisory responsibilities when hiring a young person is almost too burdensome, and can act as a barrier to hiring a young person over someone who would not require these additional support services.

Option to shift the dial

The Government could look to fund an intermediary/broker via a pilot to test an approach to helping businesses establish alternative pathways for young people into the workforce (e.g. higher apprenticeship routes). Funding could also be made available for a support and guidance body that employers could tap into to source mentors and supervisors specifically for increasing business capacity. Alternatively, or in addition, the support body could provide training for existing staff on how best to mentor and supervise a young person who joins through a work-learning programme. This could be executed using existing bodies:

1) GTOs – share the risk of employment, are able to aggregate demand across employers, provide flexibility For rotations to different employers, and offer mentoring (reducing the cost burden on the employer)

2) AASNs – administer the system responsible for the contract of training and can help navigate the system by advising on incentives and suitable training.

In addition, an intermediary (the 'glue') could be funded to directly support and work on behalf of the employer, tasked with negotiating the appropriate delivery of a pathways program for their organisation, including additional learning and development beyond the nationally recognised qualification. There is also an imminent opportunity for the Government to consider what role the new Industry Cluster bodies might play in providing a support model for employers.

Collaborative pre-employment (training) models

Possible options range from intense boot camps to academies that are set up by a consortium of employers in the same industry. The main thrust is that there is employer skin in the game from the start by investing in different forms of training.

Background

Some employers we spoke to shared their own experiences and initiatives that have worked in the context of their industry and organisation which establishes both pre-employment and ongoing training models to sustain career building aspirations beyond entry into the business. For example, BHP has established academies that provide an innovative approach to training that also ensures participants work on site from the earliest possible opportunity and have the guaranteed commitment from BHP as they are hired from day 1, before training is complete. This results in a mutual commitment and tightening of the employer-employee bond. Another employer spoke of the merits of intense boot camps as another route to unlock the value of the individual a lot earlier than the traditional 'train first, work when completed' model and/or a university degree. In both these examples, employers welcome the fact that they can assign participants to work after some (not all) training has been complete, and thus see a quicker return on investment. This addresses the employer attitude that the cost of equipping first year apprentices with the required skills and knowledge is "too expensive, relative to the work they produce"[36].

Option to shift the dial

It is indisputable that employees have more opportunities for employer-sponsored training when they are employed by large enterprises, and for many of the small-to-medium sized employers, there is the added concern that all the up front training doesn't stop the young person from leaving once completed. Further, government funding for pre-employment training appears inconsistent. To counter this risk, pre-employment models could be boosted, for example strengthening VET in schools to better act as a link between post-education and the labour market and bring consistency to school-based models (Germany's dual apprenticeship is fundamental in helping create synergy between vocational learning in schools and training occupations available to young people).

An employer-led pre-employment model could include smaller businesses coming together to pool resources into a shared boot camp or academy (on their own, a small business may struggle to set up a boot camp, but a consortium of SMEs could). This would raise quality across an industry (not just concentrate efforts in one business) and provide employers with a sense of shared responsibility, as well as influence, from the start. From the boot camp, the employers could draw on the staff they identify as having the specific skills they need at that time and employ them. Another layer is the role of a GTO who could be embedded in the boot camp and reduce the risk to the employer and young person by ensuring the young person's interests are protected, whilst helping strengthen ties to the business.

There is evidence of this model successfully creating pathways and career advancements for young people. For example, 42 Adelaide[37] is a 4-week intensive coding camp to upskill individuals without qualifications. The program is 100% free tuition and, so far, has created 140 jobs and further training pathways. It is funded by employers (such as Lockheed Martin, Fleet Technologies and LoftusIT) who are also hiring partners. Thus, there is an opportunity for those industries facing specific skills shortages to come together and collectively embed different training models to ensure there is a pool of skilled young people prepared to address future need.

The need: Innovative pre-employment training, mutual commitment with the young person, and a quicker return on investment

- Employers told us they want more input into and flexibility of pre-employment training in order to see an earlier return on investment.
- Employers spoke of the risk of losing young people after investing in training and many felt a mutual commitment needs to be established to help avoid this happening.

Roundtable views

'Bootcamps' and 'academies' would garner greater attraction, as long at there is long-term mobility for young people. There is also the option of SME networks in skills development that could assist with setting up skills eco-systems together (as they won't have capacity at an individual level to get scale they need for a bootcamp). There is also merit in embedding industry intermediaries that can help build capability and capacity on behalf of businesses to drive and coordinate this work in local employment ecosystems.

Use of the work and learning combination to suit industry needs

Industries could borrow ideas of what works from the traditional work-integrated learning apprenticeship model, and combine them with different approaches to training, such as stackable skill sets and micro credentials.

The need: Increase exposure early on and reduce the risks of losing investment

- Employers say they want young people to have earlier exposure to, and experience of the industry and job, before committing to a full training program so as to reduce the risk of the young person dropping out after investing in their training.
- Employers want more innovative, flexible models that combine work and learning to suit their workforce needs (e.g. fulfil critical entry-level roles in Aged Care). They want young people who are passionate about what they do, and therefore want a sound way to test this.

"We employ apprentices so we start people from scratch. (The) issue is finding people interested in certain careers. That is the challenge." (quote from a survey respondent)

Roundtable views

Alternative apprenticeship models and pathways into organisations are supported by both industry and young people. However the pathways need to be flexible enough to allow entry for a variety of young people. In addition, support is needed for employers to introduce the models into the workplace and relevant training needs to be available. For example, subsidies should be able to be applied to different pathways (e.g. for skill sets).

Background

There have been a number of examples of businesses that have adjusted the traditional apprenticeship model to suit industry needs, providing successful outcomes for both the learners and the employers. One example of using a work and learning combination and applying this approach to suit an industry need is the Human Skills Services Organisation partnership with the Brotherhood of St Laurence to launch a Skilled Pathway Pilot, which trialled a Skill Set as a pathway to entry-level jobs in aged and disability care sectors for young people[38]. The pilot engaged RTOs, transition-to-work organisations and employers, and it targeted young learners from disadvantaged backgrounds, who undertook an entry to care skill set. Findings from this pilot demonstrated that employers look more favorably upon young people who have demonstrated an initial commitment to an industry and appreciate the option for the young person to get a flavour for the work earlier on. Employers also highlighted that fact that the young person could apply their learning in a workplace to meaningfully contribute to the business as early as possible. The pilot demonstrated that early engagement of employers, learners and training organisations leads to better employment opportunities, as early connections between learners and employers are built and young people obtain full-time job offers off the back of completing short, sharp work-tailored skilling. There is the potential to scale up the pilot approach through increasing the involvement of employers and training providers, providing Government support, and by rolling out the skilled pathways approach in more locations around the country. Employers involved in the pilot said it would require an intermediary to coordinate all the stakeholders and help guide the process. Another example of adjusting the existing apprenticeship approach to industry needs is the PwC Higher Apprenticeship program. As outlined on page 15, this model allows individuals to enter job roles that have historically required a university degree as a minimum requirement. The current PwC Higher Apprenticeship program allows participants to first undertake a Certificate IV in Information Technology, which is then followed by a Diploma in Information Technology. This provides an opportunity for the participants to upskill in a staged process.

Finally, this model is proposed to be piloted in the Commonwealth Digital Skills Cadetship Trial[39]. The trial will be supported by industry to design and deliver tailored training according to employer requirements. The formal training may be a combination of units within an existing VET qualification that could later be used as credit towards a full VET qualification and higher education units packaged into micro-credentials and/or formal training augmented with other accredited training (e.g. training by global technology companies).

Option to shift the dial

Adjusting the apprenticeship model to suit a variety of industries and employment types could provide more options and pathways for both young people and employers, similar to international examples where apprenticeship style models have been applied to a wide range of occupations and sectors outside of traditional areas. Support for qualifications and short courses in industries that offer careers for young people would allow more provision of relevant training and support for learners to meet business needs.

Procurement and contracting

For large government contracts, there may be an opportunity to utilise the procurement process to stipulate that employers provide quality job opportunities for young people.

Background

There are many existing local examples of targets or requirements for the employment of certain underrepresented groups in large government procurement, particularly in the construction industry. These requirements may target a certain number of trainees or apprentices on a job, or they may target disadvantaged groups, including women in construction, people with a disability or Indigenous Australians.

Current examples in the Australian construction industry include:

- the Level Crossing Removal Project in Victoria where the Level Crossing Removal Authority has established a range of requirements, including a target that 3% of the total contract spend will go to social enterprises, Aboriginal businesses, and direct employment of disadvantaged job seekers in the supply chain[40]
- the Local Jobs First – Major Project Skills Guarantee (MPSG) in Victoria which requires all construction projects valued at or over $20 million to use Victorian apprentices, trainees or cadets for at least 10 percent of the total estimated labour hours[41]
- the Infrastructure Skills Legacy Program in NSW which has committed to minimum training and diversity targets for apprentices and trainees, women, Aboriginal and Torres Strait Islanders, young people and people from the local community[42]
- the Barangaroo Skills Exchange revolutionised how workers engage with training and how employers' workforce development needs are met. Lendlease teamed up with the NSW Government, subcontractors and construction workers to offer on-site skilling and training in the areas of: literacy and numeracy support; construction trades and skill sets; safety leadership; basic digital literacy; apprentice mentoring; skills assessment and gap training for mature aged workers[43].

Option to shift the dial

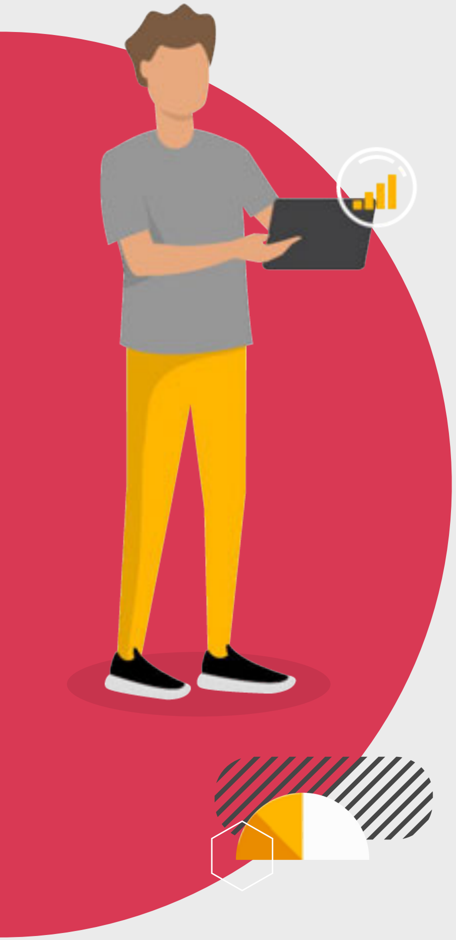
While procurement targets are already used extensively in government construction projects, there may be an opportunity to do more. There is a pathway for the Government to leverage its substantial purchasing power to increase opportunities for young people, including people from disadvantaged backgrounds, across a variety of industries. This would have a particular effect where the Government is undertaking projects in emerging industries, such as IT, as it would provide additional pathways for individuals to enter and contribute to these industries. It would also prove useful in sectors that reply on government funding, such as aged care.

The need: Mutual commitment with the young person

- Employers said they understand the need to establish a mutual commitment between themselves and the young person, but it does 'require enticement' in order to really shift the dial for that to happen at scale.

Roundtable views

This is really important to stimulate employers to establish opportunities for young people. But it is easier for large employers to fulfil this commitment so we need to look at how smaller enterprises, and social enterprises, can capitalise on these options. It's also important that this is combined with other options, for example, resources for middle managers in supervising and mentoring the young people engaged.



6 Next steps

Next steps

By way of next steps, a coordinated combination of the options raised in this report could help create a significant difference for employers.

Where to next?

The Commonwealth is currently leading a process to transform the skills system. This will only achieve its potential if employers also act to create more employment opportunities which allow young people to apply and grow their skills. We can't fix the skills problem if we don't address the lack of access to career pathways for Australian youth.

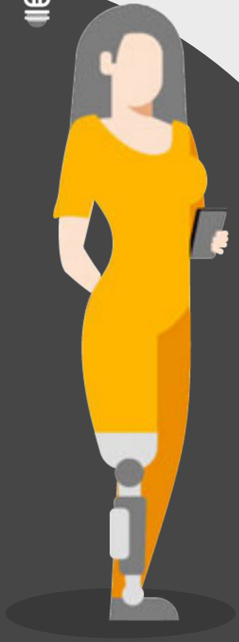
There is an opportunity, and a need, for joint action between governments, employers, educators and communities to rebuild career pathways for youth. Some individual employers are showing what can be done. But we need change at a systemic level if we are to build back careers for today's youth.

The success of the current Boosting Apprenticeships Commencement scheme demonstrates the importance of financial levers – particularly in sectors with well established VET pathways. But employers have told us that more significant change requires a combination of **financial levers; strengthening of support models for employers; collaborative pre-employment (training) models; use of work and learning combinations; and changes to government procurement.**

Many elements of a solution are there, but employers still find it hard to get the system to work. We need a concerted effort to address the gaps that employers have identified and to create additional momentum for change.

What we could do next:

- Using this paper as a starting point for co-design of a strategy to integrate current Skills Organisation pilots with support for employers who are willing to create additional entry points for young people, particularly those facing disadvantage.
- Trialling a combination of procurement targets in large IT contracts, new training/work integrated learning models and enhanced intermediary support to accelerate creation of job pathways into the IT sector.
- Piloting the use of an enhanced Group Training Model, with funds to deliver pre-employment and other support, to bring together employers and create better supported pathways for young people in SMEs.



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8 Appendices

Appendix A: One-on-one interview guiding questions

Topics of interest	Guiding questions
1	**Attitudes and experiences** • What are your views and experiences of hiring and training young workers? What have been the benefits / challenges? • What percentage of your total workforce are young people? Has the number of young people your organisation employs changed in the past 10 years? Why? • What do you think are going to be the two or three most important factors defining the way employers engage with and hire young people over the next few years?
2	**Employment, training and career progression** • How does your organisation handle employment of young people (e.g do you have apprenticeship/graduate positions in your organisation)? What are the sorts of jobs that you'd be bringing young people into your organisation for? • How do you make decisions about different forms of employment contracts (permanent / temporary / independent contractor)? How are (these) arrangements considered from a future workforce view and implications for young people's' opportunities? • Do you place value on different qualifications / different types of training (e.g. employability skills) or institutions (e.g. TAFE / School / University)? What is the relative weight of experience and education; and on-the-job training vs. off-the-job training? • Do you see a role / duty for your organisation to establish career pathways and quality jobs for young people in your industry more broadly and why / what drives that? • What is your view on the current career progression opportunities for young people at your organisation? In your industry/more broadly? • What factors affect your consideration of supporting career progression of existing workers?
3	**External influences** • How do external influences, particularly government policies, impact your hiring decisions and influencers (e.g. incentives and employment service providers)? • What would it take for you to consider creating more apprenticeships or traineeships or other entry points for young people into your organisation/? • If you had the chance to get one or two major policy changes through that would make it easier for employers to offer quality jobs to young people, what would they be?

Appendix A: One to one consults

Organisation/ individual
Lendlease Group
Beacon Foundation
Centacare Disability Support
BHP
Fairbrother PTY Ltd
Professor John Buchanan
Professor Jeff Borland
42 Adelaide
Learning Creates
Atlassian
John Holland Group
Department of Infrastructure, Transport, Regional Development and Communications

Appendix B: Survey questions (1 of 6)

1. Name:
Free text response

2. Contact Details (in case we need to follow up to clarify any information):
Free text response

3. Company/organisation:
Free text response

4. What industry sector is your organisation in? (select most appropriate)
- Health Care and Social Assistance
- Education and Training
- Construction
- Manufacturing
- Professional, Scientific and Technical Services
- Financial and Insurance Services
- Retail Trade
- Wholesale Trade
- Mining
- Agriculture, Forestry and Fishing
- Accommodation and Food Services
- Arts and Recreation Services
- Transport, Postal and Warehousing
- Electricity, Gas, Water and Waste Services
- Administrative and Support Services
- Public Administration and Safety
- Information Media and Telecommunications
- Rental, Hiring and Real Estate Services
- Other

5. Approximately how many people does your organisation employ?
- Less than 20 people
- Between 20 and 199 people
- 200 or more people

6. Leaving aside any immediate effects of COVID 19, over the last 15 years has the number of people employed by your organisation (if unsure, please estimate as best as possible)…
- Increased a lot
- Increased somewhat
- Stayed about the same
- Decreased somewhat
- Decreased a lot

7. Approximately what percentage of your total workforce are young people (aged 15 to 24)?
- Less than 5%
- 5-10%
- 10-25%
- 26-50%
- Over 50%
- Don't know

8. Approximately what percentage of your total workforce are over 50 years old?
- Less than 5%
- 5-10%
- 10-25%
- 26-50%
- Over 50%
- Don't know

Appendix B: Survey questions (2 of 6)

9. Over the last 15 years, the proportion of young people employed by your organisation has:

- Increased a lot
- Increased somewhat
- Stayed about the same
- Decreased somewhat
- Decreased a lot

10. What forms of employment is your organisation most likely to use to engage young people (select up to 3 of the following options)?

- Ongoing employment
- Apprenticeships and/or traineeships (direct employment)
- Apprenticeship and/or traineeship (Group training organisation)
- Graduate program
- Short term contract
- Casual
- Via subcontractors/labour hire
- Other (specify)

11. Over the last 15 years, have there been any changes in the way young people tend to be employed by your organisation? (E.g. reduced apprenticeship intake, increased use of labour hire)? Please explain, including any reasons.
Free text

11. Over the last 15 years, have there been any changes in the way young people tend to be employed by your organisation? (E.g. reduced apprenticeship intake, increased use of labour hire)? Please explain, including any reasons.
Free text

12A. Over the last 15 years, how much have the number of roles available to recent school leavers, or young people without post-school qualifications, increased/decreased in your organisation?

- Increased a lot
- Increased somewhat
- Stayed about the same
- Decreased somewhat
- Decreased a lot

12B. Please tell us a bit about why this has changed.
Free text

13. Which of the following benefits are provided to young people working for your organisation?

	Extent to which benefit is provided by your organisation			
Benefit	Always	Often	Rarely	Never
On-the-job training				
Ongoing skills development for careers in the organisation				
Access to external training				
Career progression/priority for internal promotions				
Mentoring				

Appendix B: Survey questions (3 of 6)

14A. Over the last 15 years, your organisation's spending on workforce training has:
Increased a lot
Increased somewhats
Stayed about the same
Decreased somewhat
Decreased a lot

14B. Please provide an explanation for this change in spending on training.

15A. Are there any positions that your organisation frequently has difficulty filling?
Yes, less than 25% of positions
25 to 50% of positions
50 to 75% of positions
Over 75% of positions

15B. What are these?
Free text

16A. When your organisation experiences difficulties in filling skilled or semi-skilled roles, how likely are you to do the following?

	How likely			
Approach	Very likely	Likely	Not likely	Never
Upskill or reskill existing staff				
Leave roles vacant until new staff with relevant experience/qualification can be found				
Hire new staff who have entry-level or no experience and train them up				
Look for international talent (i.e. skilled migration)				
Increase use of outsourcing/subcontracting				
Use labour hire				
Explore new sources of recruits (e.g. considering more disadvantaged job seekers)				
Seek to 'poach' trained workers already working in your sector				

Appendix B: Survey questions (4 of 6)

16B. Can you tell us a bit about what influences your approach?
Free text

17. How likely do you think it is that your organisation will face difficulties in meeting its skills needs in the next 5 to 10 years?

- Not at all likely
- Unlikely
- Likely
- Very likely

18. If any, please tell us what strategies you have in place to address your future skills needs in the next 5 to 10 years:
Free text

19A. How important have the following factors been in limiting your organisation's career opportunities for young people entering the labour market (with a focus on those without degrees)?

	Importance			
Factors	Very Important	Fairly important	Slightly important	Not at all important
Lack of availability of skilled supervisors				
Cost of wages				
Cost of training				
Safety concerns				
Competitive pressure				
Lack of candidates with required level of English language skills				
Lack of candidates with required level of literacy/numeracy				
Lack of reliability of young workers (e.g. punctuality)				
Risk of young person leaving				
Lack of roles for people without experience				
Lack of availability of training that would meet our needs				
Cost of support (where using intermediary like GTO or mentoring service)				
Other (specify)				

Appendix B: Survey questions (5 of 6)

19B. Is there anything else that prevents your organisation from creating more opportunities for young people?
Free text

20A. How important have the following factors been in encouraging your organisation to create career opportunities for young people entering the labour market (with a focus on those without degrees)?

	Importance			
Factors	Very Important	Fairly important	Slightly important	Not at all important
Wage subsidies				
Apprenticeship/traineeship incentives				
Obligations under government contracts (eg social procurement targets)				
Availability of pre-employment programs				
Availability of specialist organisations to assist in supporting young people in employment (eg Group Training Organisations, Job providers)				
Availability of training that meets the needs of our workers				
Leadership/board commitment to increase youth employment				
Other (specify)				

20B. Are there any other initiatives or factors that have increased the number of career opportunities your organisation has created for young people?
Free text

21. Rank the top 3 most effective initiatives that are likely to create a positive change in the number of career opportunities in your sector for young people (with a focus on those without university degrees) [1 being the most effective].

- Wage subsidies (50% or greater of wage cost)
- Wage subsidies (under 50% wage cost)
- Training or apprenticeship levy (requires employer investment in training and/or apprentices)
- Pre-employment programs to equip people for the sector
- Access to assistance from intermediaries to recruit and support young workers (e.g. GTOs, mentoring programs)
- Obligations to hire and train young workers under government contracts
- Access to expert advice on how to develop better pathways for youth
- Other

Appendix B: Survey questions (6 of 6)

22. How much you agree or disagree with the following statements:

	Scale					
Statement	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Don't know
My organisation sees it as being in its own interest to invest in developing young workers						
My organisation sees itself as having a social responsibility to develop the skills of young workers for the sector						
Turnover amongst our younger employees makes it hard to justify investing in their skills						
Employers in our sector are investing enough in young people to meet future skills needs						
My organisation would invest more in training young people if others in our sector were doing the same thing						
My organisation is well equipped to support young people who are starting out in their careers						
Our staff don't have time to supervise and train young people						
Team leaders and supervisors need more skills to manage and support young people						
My organisation would be willing to employ more young people if government incentives were increased						
My organisation finds it difficult to attract young people to available jobs						
I know what works, where to look and where to get support when considering hiring a young person						

Appendix C: Literature review

Pages 47 - 75

Many young people cannot secure jobs that enable them to develop skills that are in demand now or expected to be in demand in the future…

As at April 2021, the employment ratio of young people was 61% (and 69% participation rate)

However, only 17% of young people make up the overall full-time workforce, whereas 46% make up all short-term casual employees (2019)	There is also a 50% reduction in the number of entry-level jobs since 2006, leading to 10.2% youth underemployment (June 2021)

Key figures:

1. On average, young people's' real incomes from 2008 to 2018 have declined by

-1.6%

2. The average length it is taking a young person to move into full-time work is

4.7 years

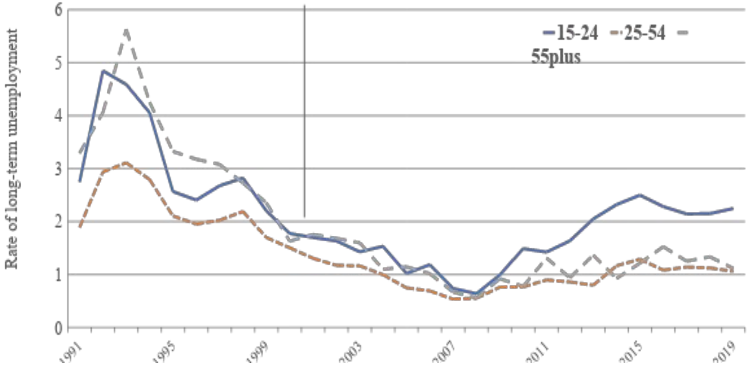
3. Young people are more likely than that of the adult labour force to be unemployed by

2.5 x

4. Number of young people in employment in 2020 with a VET qualification dropped by

17.5%

More likely to be long-term unemployed: Rates of long-term unemployment, by age, persons, 1991 to 2019 (August)



Key Facts and Figures about young people (15-24 years):

- Incomes have continued to decline;
- Those without degrees tend to be hardest hit compared to previous generation;
- Are ascending career ladders more slowly than the broader population and are therefore taking more time to secure full time employment - resulting in societal and economical impacts (scarring;
- Weaker labour market (middle-skill jobs that once provided a stepping stone to career progression have disappeared), meaning young workers are obtaining jobs that were further down the jobs ladder and moving up more slowly;
- Young people who enter weaker labour markets often experience long-term ‘scarring’ effects;
- Employers are reducing investment into training, which impacts young people’s ability to compete in the market;
- Holding a job that does not fully use a young person’s skills can raise the probability of unemployment and reduce future wage rate growth.

Theme 1: *Over the last twenty years, there has been a reported reduction in the range and availability of full-time entry-level quality job opportunities (including employer efforts to nurture and train) and young people have been disproportionately impacted*

Traditional labour market entry points into quality jobs for young people have been in decline (e.g. demonstrated by the decline in apprenticeship numbers). Declining investment in training, and reduced employer commitment to maintaining their workforces over time signals a loosening of the bonds between employers and workers.

Key Findings

- Young people today are more educated than those in previous generations. However, entry-level job opportunities that offer career progression have declined;
- OECD found that, despite uninterrupted economic growth in Australia during the global financial crisis, labour market outcomes for young Australians had not improved since then (OECD 2016);
- Poor labour market outcomes for young people have manifested as slow wage rate growth rather than as an increase in unemployment. This wages stagnation has meant financial rewards have become less certain for individuals who have time spent acquiring skills on or off the job;
- Many young people end up in work that doesn't make use of their skills. At the same time there are skills shortages in many parts of Australia, many employers argue that young people seeking employment are not adequately prepared for 'the world of work';
- Entry points offering stewardship and training for young people directly from school into full time employment (e.g. apprenticeships) and from higher education (e.g. graduate recruitment) have declined. The loss of mentorship and pastoral care that these schemes may have provided has particularly weakened the ability of employers and young employees to develop long standing relationships;
- Training a person on the job in any sort of a formal or structured way is seen as expensive for employers. "... you're unlikely to want to make that expense unless you expect the person to stay with you for quite a while so that you get the benefit of their training. Employers seem to want to be able to hire and fire and to not make implicit or explicit commitments to keep on their staff for a long time" (Sue R).
- "Over the last twenty years there has been a reduction in the range and availability of full-time entry-level job opportunities and young people have been disproportionately impacted by this".
- There is a suggested 'left behind' thesis which suggests the changing trends related to the nature of work, the economy, the nature of capitalism and role of government policy might be driving some employees to feel "diminished and distant", weakening collective bonds and changing the relationship between the employee and employer (and therefore the role and duty of the latter).

Relevant Literature*

- Smith Family: Young people's successful transition to work: What are the pre-conditions?
- Sue Richardson - Transcript of conversation from ABC News
- SVA: Fair Future report
- Productivity Commission reports: Climbing the jobs ladder slower: Young people in a weak labour market; Upskilling and retraining, and Why did young people's incomes decline?
- OECD: Give Youth a Chance
- Disrupted: Where to from Here?

*This is not exhaustive

Relevance to report: Employers historically played a strong role in developing novice workers into longer term employees through opportunities such as the apprenticeship model; however in the last two decades this has changed. The report will seek answers to 'why' from employers.

Theme 2: *While there are some differences between industries, employer contribution to training and education funding has been falling.*

Training staff and career pathway creation appears to not be top of mind for some employers; in some cases there is often only interest when a training guarantee/cash incentive is available. However, past initiatives have not left a long-lasting legacy, due to lack of 'stickability' amongst employers.

Key Findings

- Employers have "gotten lazy." When faced with what they see as a skill shortage, what they could do (and what they once did), was to take that person on and train them, or change the nature of the job so that it fits that person. Nowadays they've got used to not needing to do that;
- While employers demand higher skill levels and experience from prospective employees, many appear to be doing less of the 'heavy lifting' regarding skills development themselves;
- Employers value what they pay for; where employers invest heavily in the skills of their workers, they have strong incentives to ensure the productive deployment of those skilled employees and have a greater chance of retaining them in their organisation;
- The experience of the Training Guarantee revealed that it did succeed in stimulating employer expenditure, it did result in more genuine training and it did encourage managers to take training and skills development more seriously. But the Levy was not as effective as hoped due to a "fixation with the supply-side issues"; a preoccupation with training inputs; and an enterprise orientation;
- Restoring some balance will require the major participants — employers, educators, workforce intermediaries, and policymakers — to address four major inefficiencies in the current system. These are:
  - Fragmented coordination and communication;
  - Lack of a common language and transparency: this is a classic supply-and-demand mismatch. Employers who demand skills and educators and workforce intermediaries who supply skills seldom share a common language or work in collaboration looking at one set of data;
  - Unclear, unstructured career paths: aspiring workers are not fully aware of the implications of the choices they make when they invest time and money in seeking education beyond Grade 12 or pursuing a certification in a discipline;
  - Misaligned incentives: individual actors in the system are encouraged to optimize their own performance without sufficient reference to the impact on the broader system;
- Employers are finding it "harder to find time and resources to take a long-term, integrated and strategic approach to improving employment transitions for young people." There is a trade off between doing the right thing vs challenging market conditions that hold employers hostage, meaning what is possible, what is necessary and what is realistic can be very different things.

Relevant Literature

- You Value What you Pay For
- Bridge the gap: Rebuilding America's Middle Skills
- Shifting the Dial: 5 year productivity review
- Disrupted: Where to from Here?

Relevance to report: Report will look at evidence of decrease in employer contribution to training over the years and identify where the uptick has been a result of a policy and why it didn't 'stick.'

Theme 3: *The problem may be being partly compounded by employer attitudes, for example many have long-standing misconceptions about hiring young people in Australia.*

Attitudes towards hiring young people vary between different industries, demographics and individuals' previous experiences. Some industries are well-known for having a business culture that is highly favourable towards providing young people with meaningful career pathways. However, being employed in a quality job with a decent wage and commitment from the employer has proved to be more difficult for young people, particularly without university degrees (compared to previous generations). Some driving attitudes may mean employers see young people as expendable.

Key Findings

- Employers that have had negative experiences in the past have reservations around the business etiquette, reliability and commitment of young people;
- There is a perception that the cost of equipping first year apprentices with the required skills and knowledge is too expensive, relative to the work they produce. Many employers believe that they are unlikely to be profitable by hiring apprentices;
- Employers require environments that have adequate supervision and support for young employees, which may not be available within their resource constraints or at all (e.g. businesses need funding to train mentors/coaches);
- Some employers have been drawn towards more casual and/or short-term employment models (e.g. casuals, gig, labour hire and overseas skilled migration) over employing young people (however, it is noted that this is not to be generalised across all industries, particularly those that are built on an apprenticeship model such as construction). This may provide an explanation to the lack of employer willingness to invest in training;
- Intergenerational workplace interactions can be challenging if employers and employees do not understand solid techniques for interacting or the benefits of positive interactions. Depending on the organisation, the possibility of intergenerational cultural differences may dis-incentivise employers from hiring young people;
- Employers are concerned that many young Australians are failing to pick up proficiencies and dispositions required in the workplace, including reliability, a positive attitude, willingness to try and readiness to learn.

Relevant Literature

- Australian Bureau of Statistics, 2016 Census of Population and Housing based on place of work
- The attitude gap challenge: A South Auckland Employment and Skills Challenge, 2012
- The Parliament of the Commonwealth of Australia - Youth employment: a working solution
- Disrupted: Where to from Here?

Relevance to report: Report will examine the experiences and attitudes of employers (e.g. through one-to-one interviews) that influence hiring behaviours towards and career creation for young people.

Theme 4: *There is also the added impact of corporatisation, change in industry composition, increase in contracting out and weakened industrial relations*

Fragmented supply chains, use of more insecure forms of employment, and reduced investment in training have all made it much more difficult for young people to secure a foothold in the labour market and to develop skills in the workplace.

Key Findings

- The shift away from the traditional primary industry and manufacturing sectors towards the service sector and new industries has “precipitated a collapse in the labour market of full time jobs for young people”;
- Employment growth has occurred in sectors of the economy which commentators argue do not have well-developed career structures spanning entry level through to higher level roles. New jobs in sectors (e.g. business) usually require higher skill levels, attract higher wages and require greater levels of professional and managerial experience as a prerequisite for entry (getting ‘pushed off the ladder’);
- Employment growth has occurred in sectors characterised by insecure forms of employment (retail, hospitality, personal services and cleaning). Employment is often casual, short term, irregular (e.g seasonal) and the work itself is not generally connected to more permanent or longer term career paths - which offers limited opportunities for further formal and transferable skill development; truncated options for career development through promotion; and little assurance of ongoing employment when consumer demand declines;
- The consequences of restructuring large workplaces and of increasingly precarious employment can be seen in declining skills investment and chronic shortages in key occupations. It is reported that too many employers expect other employers or educators to provide young people with technical and employability skills, or rely on availability of skilled labour from other countries;
- Employers have a choice to either lean in or back away as a result if the shifting expectations and assumptions regarding their role (partly triggered by macro trends). There is a different weighting at play between wider economic and social obligations vs actual role for employers;
- The availability of an apprenticeship model is not the only reason for continuing commitment to creating skilled pathways for youth in this sector. Procurement and unionisation have also been powerful drivers. However, contracting chains do seem to push responsibility down the line.

Relevant Literature

- Smith Family: Young people’s successful transition to work: What are the pre-conditions?
- Sue Richardson - Transcript of conversation from ABC News
- SVA: Fair Future report
- Productivity Commission reports. Climbing the jobs ladder slower: Young people in a weak labour market; Upskilling and retraining, and Why did young people's incomes decline?

Relevance to report: Report will provide brief commentary on macro level observations relating to this theme and implications to solutions (e.g nature of capitalism, loss of large public sector players). Consider if macro trends is resulting in no one taking responsibility.

Theme 5: *Rapid technological innovation and workforce transformation have increased employers' expectations of prospective employees and increased competition for entry-level positions typically sought after by younger people.*

The adoption of increasingly agile and remote ways of working, and increasing rules and regulations across industries that employ young people, has resulted in employers demanding greater experience and qualifications for people entering the workforce. They are also making choices about how they structure the jobs, and therefore how they select. In May, 2019, only 10 percent of job vacancies were suitable for applicants with no qualifications or work experience, which young people (particularly from low socioeconomic status backgrounds) have struggled to deal with.

Key Findings

- According to the Vacancy Report Headline Figures for June 2021, employers are actively seeking individuals with bachelor-level degrees or higher, more than any other level of qualification. This was supported by the dominance of job advertisements for highly skilled jobs, including managers (increase of 105.4% job advertisements over past year) and professionals (increase of 89.7% job advertisements over past year). As employers' actively seek higher level qualifications, younger people without university degrees are likely to face greater barriers to enter the workforce in a full-time quality job;
- Entry-level administrative jobs, such as bank workers, filing and registration clerks, and data entry operators are declining as businesses increasingly incorporate automated workflow technologies. This means that businesses are increasingly unable to offer young people work in areas where they may have done so in the past;
- An increasing rise in remote ways of working may mean that employers are less willing to hire inexperienced young people, who they believe cannot be remotely trained and/or face risk of underperforming;
- A report by Anglicare showed that, as at May 2019, only ten percent of all available jobs were best suited to people looking for entry-level work, which are typically young people;
- Young people are being subject to "upcredentialing," where employers' inflate the credentials required for advertised jobs. Many employers now claim that they require bachelor's degrees for jobs that have historically been dominated by employees without university qualifications. According to a report by Burning Glass Technologies (2021), 65 percent of postings for Executive Secretaries and/or Executive Assistants advertised that they require bachelor's degrees, despite work experience being of greater value in these occupations;
- Technology reduces the need for workers to complete routine, manual tasks, which means that workers are needing to spend more time focusing on people, solving more strategic problems and thinking creatively. By 2030, today's young people will need to work with a more entrepreneurial and independent mindset, which will is likely to increase competition for entry-level positions and increase the need for "high-level skills" among young people.

Relevant Literature

- What do recruiters think about today's young people?
- Vacancy Report Headline Figures, June 2021
- Jobs Availability Snapshot, 2019 - Anglicare Australia
- Moving the Goalposts: How Demand for a Bachelor's Degree Is Reshaping the Workforce, 2021
- Disrupted: Where to from Here?

Relevance to report: Report will explore impact of technology and workforce transformation on employers behaviours to providing young people access to quality entry-level jobs.

Theme 6: *There is goodwill amongst some employers and a desire to employ more young people, but limited capability, capacity and knowledge about how best to achieve this operationally, administratively and financially is leading to inaction. There is also an aspiration vs pragmatism contest for employers.*

Employers need to take action, but there is a a level of support needed to ensure they can execute their 'duty' (if they see one) to nurture young people. They need to decide what kind of 'voice' and position they want, as so far the employer role and contribution to discussion regarding young people in the labour market has been inconsistent. They can 'resist and defend' or 'engage and invest'.

Key Findings

- Many commentators argue that employers should be re-evaluating the role that importing skills has in our economy and in our society (especially now with the lack of migrant skilled labour) and think how to cultivate skills amongst our own population. Employers need to be able to recognise the benefits and opportunities associated with developing a long term employment relationship with young and entry level employees. Employing and committing to the skill development of young people is "an essential precondition for young people's positive transitions to work";
- However, some employers may find their ability to nurture the development of young workers has been diminished by a lack of supervisors with the skills and experience to provide training and support;
- Therefore, employers need support or a 'go to' person when things don't go as planned. They need knowledge and resources in navigating the challenges of employment of a young person;
- Some initiatives have worked, but there are others that do not support employers to guarantee the quality of their offer. For example, assistance through jobactive is focused on moving people into work, regardless of the quality of the work or whether it allows for the development or use of skills. This can be unhelpful to the young person as the assumption that poor quality jobs (e.g. jobs with poor pay, underemployment and limited access to skills-based progression) will be a stepping stone to better work is not well supported by available evidence. It is also not necessarily helpful to the employer as evidenced by the lack of engagement by employers in jobactive. In 2007 18% of employers were using the system - in 2018 it was 4%;
- According to a survey by Stewart-Weeks, M., the cost of developing skills in young people can be burdensome for employers. Further, resourcing required for work placements is often high and does not always make sense to invest in. Many survey respondents emphasised a significant administrative burden and lack of a coordinated approach to work placements across sectors and within their own organisations;
- "A CEO of a national employment services organisation highlights that there is immense goodwill amongst employers and a desire to employ more young people, but limited knowledge about how best to achieve this operationally, administratively and in human resource terms";
- The benefits of helping young people progress in quality jobs are well known; however despite knowing the puzzle pieces, they come together in a "fragmented and disconnected way" (e.g. too reliant on schools/university to do the piecing together for the labour market);

Relevant Literature

- Smith Family: Young people's successful transition to work: What are the pre-conditions?
- Sue Richardson - Transcript of conversation from ABC News
- SVA: Future Fair report
- OECD Give Youth a Chance
- Productivity Commission reports
- I want to work
- Disrupted: Where to from Here?

Relevance to report: While government action is critical, it is employers who must decide how they structure employment opportunities, how they reward those who bring their skills to the workplace, and how much they invest in the future skills of their employees. The report will seek to gather views on 'how' employers perceive this duty when it comes to young people and what kind of support is needed.

Theme 7: *Employer hiring and training processes can be improved to benefit employers and young people seeking employment.*

Recruitment processes could benefit from career pathway mapping and better use of employment data, including stronger engagement with employers. It is suggested that there is misalignment between the way jobactive works and the goal of increasing the number of young people moving into quality careers.

Key Findings

- Creating connections between employers and young people positively affects employer hiring practices (e.g. through school engagement programs, work experience);
- The employment of young people can be improved if data is used by policymakers to identify skills gaps and employment pathways, and allocate training resources strategically based on long term outcomes. This will ensure that employers have sufficient access to talent to fill competitive and important jobs when considering recruitment of new employees;
- Some argue that the effectiveness of current active labour market programmes (ALMPs) on disadvantaged groups is marginal, particularly as it aims to place people in work regardless of fit to existing skills and lacks measurement of income effects. However, it is suggested by some that ALMPs could be improved if they were expanded to consider employer engagement and career development; latest evidence suggests that stronger outcomes are achieved by programs that are focused on work as well as human capital accumulation;
- Unclear and unstructured career paths results in aspiring workers not being fully aware of the implications of the choices that they make when they invest time and money in seeking education;
- Resources should be directed to those areas that make the market for middle-skills talent more efficient, such as:
  - creating better real-time data;
  - encouraging cooperation among employers;
  - focusing on small and medium enterprises;
  - supporting and replicating successful not-for-profit models;
  - removing barriers to employers and educational institutions adopting innovative initiatives; and
  - integrating performance metrics around the theme of jobs;
- The sources of effectiveness of sectoral employment programs include upfront screening of applicants on basic skills and motivation, training in occupational skills and career readiness, wraparound support services, and strong connections to employers. Examples of successful sector-focused training programs include Year Up, Per Scholas, WRTP and Project Quest;
- There is a need to make employee-employer relationships more purposeful, including during recruitment, training, support, mentoring and giving young worker stretch opportunities to add value and contribute.

Relevant Literature

- The Demand Side of Hiring: Employers in the Labor Market
- More than a match? Assessing the HRM challenge of engaging employers to support retention and progression
- Promoting Equity and Inclusion and Connection to Good Fit Jobs for Young Adults
- Bridge the gap: Rebuilding America's Middle Skills
- When is a job just a job - and when can it launch a career?
- Why do sectoral employment programs work? Lessons from Workadvance, 2020
- What Works? A Meta Analysis of Recent Active Labour Market Program Evaluations

Relevance to report: Report will evaluate different methods for improving recruitment processes/Report will examine the use of career employment data for improving outcomes and directing programs and policy.

Theme 8: *There appears to be barriers to employers engaging with reliable alternative training and employment models; not just at scale, but the ad hoc and stop-start nature of these initiatives which is limiting their take-up. Therefore, evidence of what works needs to be explored in greater depth to understand what is getting in the way of wider adoption of initiatives.*

While employers benefit from a number of alternative training and employment pathways, including non-trade apprenticeships, there are some reported difficulties that may lead to employers shunning these opportunities; their response does not correspond with the longevity of the problem.

Key Findings

- While wage subsidies help employers retain employees during economic shock, they can also slow much-needed adjustments of the shock results in lasting structural change that required significant labour force reallocation. In this way, their design is critical;
- Employers report better results where they are able to be involved in steering the design and delivery of training;
- Employers who participated in a pilot program in Australia agreed that the Higher Apprenticeship model addresses a gap in the training landscape; however, other research indicates that higher apprenticeships can be complex and difficult to operate across some industries;
- Multidisciplinary pathways and flexible training arrangements are more successful in the employment landscape;
- There needs to be a major reset of the relationship between employers and young people, and for solutions to be implemented in a predictable and systematic way;
- Employers should take a long-term look at strategic workforce plans and invest earlier in building a future workforce ('shape the production line' if what is coming out of education isn't fit for purpose). There is a consequence to the employer choice regarding level of involvement;
- Governments can use their purchasing power to increase availability of training pathways (Sydney Metro);
- Employers could establish both direct engagement and pathways throughout their supplier and other networks (e.g. Microsoft Traineeship Program);
- Models like Talent Rewire's Rewire Lab may be useful in bringing employers together to develop initiatives in their organisations;
- Alternative training and employment pathways, such as using 'stackable' skill sets that build towards attaining full qualifications and securing entry-level jobs, are being increasingly sought after by employers (e.g. in the aged and disability care industry).

Relevant Literature

- OECD Engaging Employers and Developing Skills at the Local Level in Australia
- Infrastructure Skills Legacy Pilot Program
- Final report and evaluation: Alternative delivery pilots: higher apprenticeships and traineeships
- SVA: Future Fair report
- Using wage subsidies to support growth, 2020
- Beyond mentoring: social support structures for young Australian carpentry apprentices, 2016
- Disrupted: Where to from Here?

Relevance to report: Report will examine alternative delivery pathways and policy support in relation to young Australians. This may include case studies.

Local efforts to build non-university career pathways for young people

The following policies, initiatives and programs have been implemented and proposed in Australia to help creating better, more sustainable jobs for young people. The following table is intended to summarise some example initiatives and programs, and will be supplemented with additional examples, following consultation with key stakeholders.

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Government	Australian Apprenticeship Incentives Program (AAIP)	The AAIP supports the development of a skilled and relevant workforce that supports economic sustainability and competitiveness. This is achieved by encouraging opportunities for skills-based training and development of employees and people to enter skills-based training through apprenticeships. Examples of incentives relevant for employers of young people include the Australian School-based Apprenticeship Commencement Incentive and the Australian School-based Apprenticeship Retention Incentive. From 1 July 2020, the AAIP was scheduled to be replaced with a new, simplified and streamlined incentives program for employers of apprentices and trainees, the Incentives for Australian Apprenticeships (IAA). However, this has been delayed due to the ongoing impact of the COVID-19 pandemic on employers. The IAA will now commence from 1 October 2021.	• Reduces the financial burden of hiring young people who require additional training needs; • Employers have the ability to employ an Australian apprentice on a part-time or full-time basis, or while they are enrolled at school; • Employers can apply for different incentives to fit their business needs, such as: ○ Boosting Apprenticeship Commencements wage subsidy (which has been successfully extended 12 months from its date of commencement from 1 October 21 to 31 March 2022); ○ Australian Apprentice Wage Subsidy. • Offers young people the opportunity to study and earn an income while undertaking a qualification; • Young people can use their qualification to work anywhere in Australia and around the world.	• The AAIP is intended to transition to the IAA by 1 October 2021; however, this may be further delayed by the COVID-19 pandemic; • Employer incentives are subject to eligibility criteria, waiting periods and time limits; • Employers may utilise the Australian Apprenticeship Support Network to get advice and assistance with recruiting, training and retaining Australian apprentices; • Employers must consider whether their business can offer the full range of skills that an apprentice needs to work in a given industry, or the amount of work they are required to complete during training. If they cannot meet these requirements, they may consider using a GTO.
	Training (e.g. NSW JobTrainer)	Through JobTrainer, the Government is offering training to people people who are out of work or aged 16 to 24, and providing support for businesses to retain their apprentices and trainees.	• Young people are offered fee-free and low-fee training options to boost skills with full and part qualification course options, as well as personalised support to assist with navigating skills and training opportunities; • Addresses skills gaps of young people who are at risk of unemployment and/or may require training to secure ongoing employment.	• Example of a lack of an integrated approach to addressing training and employment resulting in a risk that the JobTrainer investment in training is entirely wasted; • Eligible learners must be living in a specific state (e.g. NSW, for this example), be an Australian or New Zealand citizen, permanent resident or humanitarian visa-holder.

Local efforts to build non-university career pathways for young people (con't)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Government	Wage Subsidy (e.g. JobMaker Hiring Credit scheme)	This is an incentive for businesses to employ additional job seekers aged 16 to 35 years. Eligible employers can access the incentive for each eligible additional employee they hire between 7 October 2020 and 6 October 2021, provided that hiring the employee increases the business' headcount and payroll. Employers can make claims every three months for up to twelve months from the date that a new eligible employee starts work.	• Employers who hire young people receive financial incentives; • Young people are increasingly hired by employers.	• Eligible employers cannot claim JobKeeper and the JobMaker Hiring Credit payment at the same time; • Employees under this incentive must meet criteria as outlined, here (e.g. needing to be aged between 16 and 35 years when starting employment); • Claiming the JobMaker Hiring Credit payment can affect an employer's eligibility for other government support payments; • Despite the financial benefits of wage subsidies, the take-up by employers remains low.
	Industry-led employment pathways (e.g. Youth PaTH Industry Pilots)	The PaTH Industry Pilots are industry-led employment pathways to help young people into work using elements of Youth Jobs PaTH, employment services and other support. The Pilots respond to calls from industry for greater input in selecting, training, matching and supporting young job seekers into work. Nine organisations, including employers, GTOs, industry peak bodies and other employer representatives will deliver the Pilots in regional and metropolitan areas around Australia, including in: • Aged,disability and community care; accommodation; • Food services and tourism; • Business; • Engineering and electrotechnology; • Retail; • Transport and logistics; • ICT; and • Agribusiness.	• Tests if and how industry-led approaches can increase employer take-up and more effective uses of employment services; • Aligns pre-employment pathways with the needs of employers with significant workforce demand, and in growing industries; • Informs the development of future employment services, including the design of future pre-employment and work experience programs.	• Young job seekers from jobactive, Transition to Work, New Employment Services Trial (NEST) regions and Disability Employment Services are eligible to participate in the Industry Pilots; • It is too early to tell what differences industry-led employment pathways are making, including the the types of jobs being created and whether they are sustainable.

Local efforts to build non-university career pathways for young people (con't)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Government	Training Guarantee Levy	The Training Guarantee (introduced in 1990) required all employers above the payroll threshold to spend a minimum percentage of payroll in each financial year on eligible training. The minimum expenditure was set at 1%, rising to 1.5% from 1992-93 onwards.The payroll threshold was set initially at $200,000, indexed to annual movements of average weekly earnings This was equivalent to roughly 8-10 employees. The definition of eligible expenditure was broad and included not only staff training but customer training, development of training strategies, acquisition or construction of training facilities, and donations to educational establishments. The cost of wages paid to attendees was also included. To be eligible, training had to be employment-related, "structured" (i.e. have defined aims and outcomes) and approved or developed by a person with specified minimum qualifications.	• Provided a useful opportunity for businesses to focus attention on the quality and appropriateness of their training strategies and devise more cost-effective approaches; • Over half the eligible employers believed it had been instrumental in increasing their training expenditure. It was particularly influential with medium-sized businesses among whom it contributed to a growth of 60% in average expenditure per employee; • It protected the existing training activities of businesses at the time from cost-cutting pressures induced by the recession. This meant training activity actually continued to grow right through the 1990-93 recession; • From the Commonwealth's point of view it was a highly cost-effective program; it appeared to have generated somewhere between $20 and $100 of new industry investment in training for every Commonwealth dollar spent on it.	• The Training Guarantee had been expected to show most benefit in problem areas such as those where there was no tradition of training (e.g. retail). In practice, it proved least effective in such cases; • Small businesses struggled, especially those that were too small to be covered by the Training Guarantee, so training activity fell over the three years from 1990 for this group; • The Training Guarantee was also ineffective (at least in the aggregate) in improving access to training for disadvantaged groups in the workforce; • Some argue it was too generic in nature and needed to focus on target areas/industries; • It was also too focused on changing behaviour of individual firms - it needed to focus on incentivising at an industry or regional level rather than intervening directly in an attempt to change the behaviour of individual firms in isolation from their context; • Commentators suggest there needed to be a greater emphasis on recurrent training of the currently employed workforce; a focus on the industry or region rather than the individual employer; further government action to overcome the information problems faced by employers (especially small businesses) who are new to training; giving primacy to changes in organisational culture; creating market-driven incentives for enterprises to develop their skills base; and strategies to encourage lifelong learning.

Local efforts to build non-university career pathways for young people (con't)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Employers	Higher Apprenticeship Program *(PwC Australia)*	This program gives young people the opportunity to complete a fully-funded qualification in technology (e.g. *Diploma of Information Technology*) while working in professional services. Higher apprentices complete varied, challenging client work and/or internal projects, are coached by experts in their field, and are paid a competitive starting salary.	● Paid employment at a reputable professional services firm, often with the opportunity for further employment as a graduate; ● Attain a professional qualification in information technology (IT) without any student debt; ● Ability to take paid study leave to meet training requirements; ● Work experience across diverse industries; ● Employer gets direct access to a group of skilled candidates; ● Program is exclusively available to learners who are not completing/have not completed a university degree, removing competition from university graduates.	● Program relies on successful marketing campaigns (e.g. school careers counsellors circulating guidance to students); ● Applicants must have obtained a high school certificate (e.g. HSC, VCE, VCAL or equivalent) by the time the program commences; ● Applicants must be Australian or New Zealand citizens, or Australian permanent residents.
	Microsoft Traineeship Program *(Microsoft Australia)*	The program combines education and on-the-job experience to build towards an IT career. Upon successful completion of the program, trainees will receive a *Certificate IV in Information Technology* and some of the latest cloud computing Microsoft certifications, delivered by Prodigy Learning. Trainees are employed by leading group training provider, MEGT, who recruit, screen, employ and support trainees.	● Opportunities for host partners to grow a diverse, talented team from the ground up, aligned with business needs; ● Support from MEGT, a non-profit organisation that specialises in supporting traineeships; ● Paid, on-the-job experience for participants; ● Attain nationally accredited IT qualifications, globally-recognised Microsoft certifications and training support; ● Employers get direct access to a group of skilled candidates.	In addition to the above: ● Individuals with a prior Certificate IV or above qualification, including Diplomas and University studies from Australia or overseas, are ineligible to undertake this traineeship; ● Job placements are subject to the needs of the business.

Local efforts to build non-university career pathways for young people (con’t)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Government social procurement	Level Crossing Removal Project *(State Government of Victoria)*	This project has been undertaking social procurement through each of its project packages. The Authority has established a range of requirements, including a target that 3% of the total contract spend will go to social enterprises, Aboriginal businesses, and direct employment of disadvantaged job seekers in the supply chain.	• Major new expenditure, creating growth and driving opportunities for social enterprises and Aboriginal businesses throughout the project supply chains; • Organisations such as Social Traders and Social Ventures Australia are working with buyers and social enterprises (particularly those providing employment for people with disability or from disadvantaged backgrounds) to build capacity to respond to the new opportunities; • New employment outcomes for disadvantaged communities working directly for private sector providers across the supply chain.	• Local governments must have budget and demand to fund large infrastructure projects; • Local employers must be willing to hire young people for local projects; • A sufficient supply of young people must exist to meet employer demands; • Workers must be able to work in light of local rules and regulations (e.g. COVID-19 lockdown rules).
Government Major Projects Skills Guarantee	Local Jobs First *(State Government of Victoria)*	The *Local Jobs First* - Major Project Skills Guarantee (MPSG) policy helped create opportunities for Victorian apprentices, trainees and cadets to work on some of Victoria's largest building and infrastructure projects.	• Fosters growth of skills among young people and helps build in-demand infrastructure in Victoria; • Stakeholders are encouraged to employ local apprentices, trainees and/or cadets from groups that are underrepresented and/or face barriers to vocational training or the workforce, including women, indigenous apprentices, trainees,cadets and/or people with disabilities.	• As above.
Government youth employment programs	Youth Employment Scheme (YES) *(State Government of Victoria)*	The YES provides young people, aged 15 to 24, with an opportunity to work in the Victorian Public Service for 12 months while completing accredited training. The program boosts the participation of young people in the workforce, while assisting communities to meet future skills and employment needs.	• Offers 12-month entry-level traineeship provisions in the Victorian Public Service; • Provides accredited training to young people, thereby increasing employability, skills and knowledge; • Assists young people in securing paid work experience, qualifications and training that lead to sustainable employment.	• Eligibility for the program is limited to applicants who are aged 15 to 24 at the commencement of their traineeship; • Applicants must be unemployed or not working for more than 15 hours per week; • Applicants must not be currently undertaking tertiary education; • Applicants must be without a post-school qualification, excluding Certificate I-IV courses).

Local efforts to build non-university career pathways for young people (con't)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Group Training Options (GTO) model	GTO Recruitment Program and Apprenticeship Completion Incentive Program *(Training Services NSW)*	A GTO is an organisation that employs apprentices and trainees, and then places them with a host employer who they work for whilst receiving on-the-job training for their apprenticeship or traineeship. This example initiative provides funding to GTOs to recruit, screen, induct and refer individuals to Partner Providers to undertake pre-apprenticeship training. The overall aim is for participants to enter into a Training Contract on completion of the pre-apprenticeship training.	GTOs provide: • Employment opportunities for apprenticeships and traineeships that otherwise might not have existed; • Stable employment opportunities for young people; • Opportunities for employers who cannot support an apprentice or trainee for the full term of an apprenticeship or traineeship, or think it is too administratively cumbersome, to still take on an apprentice or trainee.	• GTOs are legal employers of apprentices and/or trainees and therefore, are responsible for meeting all obligations as an employer under required legislation, rules and regulations, recruiting apprentices / trainees and ensuring they are suitable for placement with host employers, and paying apprentices/trainees; • Participants are often required to be below a specific age and have left school; • Participants must meet specific criteria (e.g. in this example initiative, participants must meet the Smart and Skilled student eligibility criteria to participate in the training); • GTO programs are dependent on host employers' willingness to participate in the program.
Training levies	Building and Construction Industry Training Fund *(Government of Western Australia)*	State based Industry Training Levies replaced the Training Guarantee Levy (1990) and now exist in Western Australia, South Australia, Tasmania and the ACT. An example: The Construction Industry Training Fund (CITF) levy is collected on building and construction activity in South Australia. CITB collects a levy of 0.25% on the value of building and construction projects valued over $40,000. The CITF levy is distributed across the housing, commercial and civil sectors of the construction industry.	Training levies: • Support training for young people working in a given industry; • Contribute to the improved productivity and stability of a specific industry (e.g. construction); • Improve the diversity and quality of individuals' skills; • Provide employers with greater flexibility to counteract cyclical shortages; • Provide funding for in-demand, industry-specific training.	• The primary argument by industry against any type of levy is that levies are essentially another form of taxation; • Some opposers feel that the governance of training levies does not ensure that industries making contributions have a direct voice and role in the provision of strategic training advice and policy development.

Local efforts to build non-university career pathways for young people (con't)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Not-for-profit	National skills trial pilot *(Brotherhood of St Laurence)*	The National Youth Employment Body and the Transition to Work National Community of Practice are supporting communities to design and implement a skills pathway for young people to enter the aged care and disability workforce, using the *Entry into Care Roles Skill Set*, developed by the Human Services Skills Organisation. The Skill Set is currently being evaluated by PwC Australia, within the context of the Pilot. The trial is being implemented in the following regions: ● Adelaide North, SA ● Darwin, NT ● Gold Coast, QLD ● Logan-Beaudesert, QLD ● Penrith, NSW ● Shoalhaven, NSW ● South East Tasmania, TAS.	● National skills trial pilots offer a range of stakeholders to invest in upskilling young people to attain employment across in-demand sectors (e.g. in aged and disability care); ● Completion of the Skill Set gives young people greater confidence to complete in-demand qualifications (e.g. *Certificate III in Individual Support*, which is an expected qualification for many aged care employers in Australia); ● National skills trial pilots offer government organisations (e.g. the Human Services Skills Organisation) to evaluate the the effectiveness of trialled training products and assess them for further investment opportunities. ● Seeks to address the issues within the industry regarding ageing workforce and providing a clear career pathway to young people who are considering a care-related role.	● Stakeholders involved in national skills trial pilots (e.g. transition-to-work providers), may have separately aligned objectives that are focused on placing participants into jobs that are not necessarily linked to the Skill Set, and as such, may encourage participants to accept employment, irrespective of its relevance to training; ● Pilot programs require strong support measures to be implemented by all key stakeholders, including transition-to-work providers, employers, registered training organisations and learning counsellors, especially for disadvantaged young people; ● Pilot programs have operational risk without strong governance and accountability.

Local efforts to build non-university career pathways for young people (con't)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Not-for-profit	Higher Apprenticeships Pilot Project *(Workforce Innovation & Development Institute (WDI))*	The Higher Apprenticeships program will provide an on-the-job up-skilling and credentialing pathway for team leaders and supervisors to become managers. The pilot is targeted at individuals working in the social service sector, and will use the nationally accredited RMIT Advanced Diploma in Community Sector Management as the base qualification to support this up-skilling pathway.	• The Pilot is fully funded by the Victorian Government, meaning participants do not pay course fees; • Equips individuals with skills and knowledge in Victoria's largest and fastest growing industry (i.e. the social services sector); • Supports the development of innovative qualifications in the social assistance sector, new learning pathways and career opportunities for a rapidly growing industry sector.	• Limited online information is available on this program.
Government	Digital Skills Cadetship Trial *(Department of Education, Skills and Employment (DESE))*	The Digital Skills Cadetship Trial aims to support innovative approaches to create cadetships for digital career paths. The Trial will be driven by employer demand for skills in digital fields such as cybersecurity, advanced manufacturing, data analytics, game design and animation. Each cadetship is expected to take between 4 to 6 months and comprise formal training, on-the-job learning through an employer-sponsored work placement and mentoring arrangements. The formal training may be a combination of units within an existing VET qualification that could later be used as credit towards a full qualification, VET and higher education units packaged into new forms of micro-credentials, and/or formal training augmented with industry accredited training (e.g. training offered by global technology companies).	• The Trial will help develop in-demand and emerging digital skills needs; • Employers will be increasingly involved in engaging with digital training (e.g. for young people); • The Trial is likely to generate valuable insights into approaches to strengthen connections between employers, the educational system and training providers.	• The Government is still finalising the Trial's delivery approach and plans to secure industry involvement during 2021, and cadetships to commence during 2022 (this is subject to change); • Detailed eligibility criteria for the Trial has not yet been been articulated; therefore, it is unclear whether the Trial will be targeted to young people and/or another age group.

Local efforts to build non-university career pathways for young people (con't)

Stakeholder type	Example initiatives	Details	Benefits	Considerations
Not-for-profit	New Youth Employment Consortium (NYEC) *(Jobfind)*	Jobfind has created a consortium of employers, educators and not-for-profit organisations that are committed to get 5,000 unemployed young people into jobs. The Consortium will deliver training, support, apprenticeships, and real job opportunities to young, unemployed Australians. Current partners of the Consortium, include: Australian Retailers Association, Angus Knight Institute, Future Minds Network, Ladder, MAS National, MEGT, Mission Engage, Programmed, Real Futures, Squad, TAFE Directors Australia, WPC Group, Youth Development Foundation and Youth Junction Inc.	● Reduces youth unemployment (ideally by 5,000 young people) through a diverse consortium; ● Young people have the opportunity to engage with a diverse range of stakeholders (see list on left).	● The program is still in the process of gathering employers, job seekers and organising events; ● Jobfind's initiatives extend beyond the NYEC, including offering a range of services to job seekers, parents of young people and employers.

International efforts to build non-university career pathways for young people

The following policies, initiatives and programs have been internationally implemented to help creating better, more sustainable jobs for young people. The following table summarises some example initiatives and programs, and may be supplemented with additional examples, following consultation with key stakeholders.

Country	Example initiatives	Details	Benefits	Considerations
Switzerland	Apprenticeship model	Apprenticeships are well integrated in the Swiss economy, where nearly 2/3 of Swiss youth aged 16 to 18 combine school and work through vocational and education training, learning on the job with employers, contributing to production, and learning in the classroom from a curriculum aligned with employers' needs. Employers heavily invest in apprentices' training to ensure classroom instruction matches workplace needs. The Swiss model has often been labelled the "golden standard" for the world, given Switzerland's low youth unemployment and return on investing in apprentices.	• The system is strongly driven by employers industry stakeholders; • School and work-based learning are well integrated and transferable across different companies; • Switzerland's apprenticeship-based VET programmes pay for themselves, whereby the benefits to most employers reportedly outweigh the costs; • Participants are offered career counselling to help guide key learning outcomes.	• Funding of national apprenticeship programs can be materially affected by global recessions; • Participants face competition from university-educated graduates; • The program relies on employers participating in the program.
United States of America (USA)	National Youth Employment Coalition (NYEC)	The NYEC connects young people to employment opportunities, and builds career pathways and talent pipelines that prepare and connect young people to employers with high-demand jobs.	The NYEC have written recommendations for the US Congress, which advocate for young people, aged 16 to 24, who are unemployed and/or not in school. These recommendations aim to: • Promote race and gender equality; • Expand opportunities for unemployed young people; • Invest in capacity-building and local decision-making; • Co-design solutions with young people; • Prepare the next generation of skilled leaders.	• Projects (e.g. "Young Adults in Economic Recovery Legislation" and the "Learn and Earn to Achieve Potential (LEAP) Fellowship Program") require investment from larger government, which can sometimes be limited.

International efforts to build non-university career pathways for young people (cont)

Country	Example initiatives	Details	Benefits	Considerations
Europe	Tax initiatives	Tax credits or rebates are used to reduce company taxes for businesses that contribute funding to their employees' education and training. Examples of such arrangements: In the Czech Republic, social partners and public authorities have discussed a system for financing continuing education, splitting the financial burden between the employer, employee and State; In Estonia, there are plans to increase tax allowances for enterprises, so they may also deduct the costs of formal VET for their employees: currently, only costs for short job-oriented training courses can be deducted. In Greece, the Hellenic Federation of Enterprises issued a proposal to the government in 2006 on tax incentives for enterprises and individuals to encourage investment in training and competence development activities; In Ireland, the Irish Business and Employers Confederation, called on the government to introduce an employer's tax credit on the costs incurred through education and training. Source: *European Centre for the Development of Vocational Training, 2009*	• Improves employers' financial incentives to invest in their employees' skills needs; • Employers' are more likely to hire young people, given that they usually require and/or seek additional training initiatives; • Low administrative costs for the government and employers.	• Tax incentives may not persuade large employers to invest in additional training, given that they can carry out training without tax incentives; • Tax incentives are usually not targeted at specific groups in the workforce and therefore, may end up further training already highly-qualified employees; • Research suggests that there is minimal evidence of the effectiveness of tax incentives on education and training; • Tax incentives on their own are insufficient, and require employers to carry out successful education and training initiatives to utilise the financial benefit.

International efforts to build non-university career pathways for young people (cont)

Country	Example initiatives	Details	Benefits	Considerations
United Kingdom	Apprenticeship levy	Apprenticeship Levy (2017) is an amount paid at a rate of 0.5% of an employer's annual pay bill. As an employer, you have to pay Apprenticeship Levy each month if you have an annual pay bill of more than £3 million.The government also tops up the employer contribution to be used for accredited training by 10%. Employers can only use the funding in their account (2 years expiry) to pay for training offered by one of the apprenticeship training providers certified by the government. It can be used towards training any eligible learner, whether a school leaver or an existing employee.	● The levy funds apprenticeship training for all employers; ● Any unspent levy funds are used to support existing apprentices to complete their training and to pay for apprenticeship training for smaller employers; ● The 'redistributive tax' model means small businesses can pay 5% of the cost of the apprenticeship to access 95% of the remaining cost'; ● Government has recently announced changes to the way in which apprenticeships are managed and funded so that apprentices can work with multiple employers and in sectors with more flexible working patterns (flexi-job apprentices).	● Levy funds can only be used for approved training which can create some issues for businesses, including that it does not cover the ancillary costs associated with apprenticeships and the fact that at least 20% of an apprentice's time must be spent out of the business on training; ● It has been reported that UK employers have lost £2bn over the past two years in apprenticeship levy funds that they have been unable to spend; ● The number of people starting apprenticeships has dropped; the proportion of apprenticeships going to young people has fallen sharply; and employers' overall investment in training has also declined. While many employers simply wrote off their levy funds as a tax, others found ways to spend the money on training that did not match the policy's original intention.
Germany	Dual pathway	In Germany, more than half of each age-group graduate from dual training programs in which they simultaneously earn academic credentials along with gaining work experience, rather than attending classes alone like in many other countries. Approximately 68 percent enter the workforce in the company where they were trained immediately after training.	● This style of training brings future job applicants in closer contact with the job market and generates more reliability when it comes to qualification standards; ● It also offers a long period in which employers can get to know young employees, offering managers a relatively reliable insight into trainees' skills and potential for development. This limits employers' risks when taking on young workers; ● The system offers qualifications in a broad spectrum of professions and flexibly adapts to the changing needs of the labour market.	● This model of success would likely be difficult to export. Since training programs are expensive for companies, those headquartered in countries with weak job market regulation will have little reason to introduce such programs on a large scale. However, in countries that have tight labor laws, the initial costs of setting up such a system act as a major obstacle to creating a country-wide network of training options. ● Some students leave compulsory school with weak core academic skills. Their VET system is not currently organised to ascertain whether this is in fact a problem or, if so, to address it.

International efforts to build non-university career pathways for young people (cont)

Country	Example initiatives	Details	Benefits	Considerations
USA	The Hire Opportunity Coalition (HOC)	The HOC is a national movement of employers, foundations, and community organisations that are committed to hiring and training young people. The HOC's mission is to "To build the capacity of American companies to hire, retain, and upskill Opportunity Youth." The HOC's vision is that "Every employer in America will demonstrate a meaningful commitment to hire and develop youth who face the greatest systemic barriers to employment." To achieve this, the HOC builds coalitions of aligned corporate members who commit to hiring, supporting, retaining and upskilling opportunity youth to advance equity in the workforce, utilise diverse talent, and connect future leaders with key stakeholders.	• HOC assist "opportunity youth" (i.e. young people who are predominantly people of color and/or from low-income communities with intergenerational poverty and disconnection from the mainstream economy); • HOC connect key stakeholders, including charter members (e.g. Hyatt, Starbucks and Verizon), legacy members (e.g. Sweetgreen and Tableau) and supporting organisations (e.g. Hilton) to encourage youth employment; • Stakeholders can access the Opportunity Navigator, which helps member companies create customised road maps for achieving business and social impact through their employment of opportunity youth; • The HOC has key research tools, reports and research into youth unemployment, which is publicly available on their website.	• The HOC relies on employers, transition-to-work providers and other key stakeholders' willingness to participant in their programs to help empower young people; • The HOC's agenda is targeted at opportunity youth and may not be appropriate for more advantaged young people; • The HOC's main communities are in Dallas, Atlanta, Los Angeles, Chicago and Phoenix in the USA; • The HOC's goal is for one million opportunity youth to be hired by 2025.

Possible hypotheses concluded from the literature review

There are a number of emerging hypotheses regarding what may be driving the attitudes and behaviours of employers when it comes to considering establishing career pathways for young people

Draft hypothesis	Evidence of hypothesis
Statement 1 Employers are not offering enough quality jobs to young people compared to previous years, despite reporting skills shortages.	**Evidence** NSC Skills Priority List - still critical skilled worker shortages (a lot can be satisfied by vocational pathways) but over 10% underemployment amongst young people. Underemployment rose with the rise of part-time work, suggesting that many workers wanted more (possibly full-time) work. Some young workers were pushed out of employment completely; long-term unemployed as a share of all under 25s more than doubled by 2018.
Statement 2 Employers historically played a strong role in developing young people into longer term employees. However, in the last two decades, employers have come to see employees as commodities of fixed value not worth investing in which harms career opportunities for young people.	**Evidence** Creation of new apprenticeship and traineeship opportunities has fallen behind overall employment growth. Productivity Commission reports that after 2008, young people obtained work in lower-scored occupations than did comparably-skilled young people before 2008; worse off by 2018 than in 2001
Statement 3 Employers face a trade off between what is possible, what is necessary and what is realistic when it comes to providing quality jobs for young people. This influences the decisions they make and can deter from 'shaping the production line'.	**Evidence** Businesses complain that unfriendly business ecosystems of regulation and taxation stifle their ability to invest in younger employees.
Statement 4 The reported skills and labour shortages suggest that there are structural problems and attitudes in the labour market which are having an affect on youth employment. However, supply-side (govt) measures may have little impact on young people's ability to secure good quality work if employers do not create opportunities.	**Evidence** OECD reports those who do manage to find work after being unemployed will earn around 8% less and suffer weaker career progression across their whole working lives than peers who enter the workforce directly

Questions to be considered...

1. **Test theory that employers expect other employers or educators to provide young people with technical and employability skills, or rely on availability of skilled labour from other countries**
2. **Test whether an issue is that there is no real sense of what works ('pieces of the puzzle have come together in a fragmented and disconnected way' - Martin) and therefore no shared evidence base from which to draw from**

Reports included in Literature Review (1 of 5)

#	Report	Organisation/ Author	Year of release
1	A hands-on approach to youth unemployment	McKinsey & Company	2016
2	AFL Sports Ready - Traineeships guide	AFL SportsReady	2021
3	AI Group - Research into employer hiring behaviours	N/A	2021
4	An introduction to employer engagement in the field of HRM. Blending social policy and HRM research in promoting vulnerable groups' labour market participation.	van Berkel, R., Ingold, J., McGurk, P., Boselie, P., and Bredgaard, T.	2017
5	Artsready education and employment	AFL SportsReady	2021
6	Attitudes and behaviour of employers to recruiting persons with disabilities	Burke, J., Bezyak, J., Fraser, R., Pete, J., Ditchman, N. and Chan, F.	2013
7	Australian Bureau of Statistics, 2011 Census of Population and Housing based on place of work	Australian Bureau of Statistics	2011
8	Australian employers offer advice to young job seekers	Australian Government	2021
9	Australian jobs 2019	Australian Government, Department of Jobs and Small Business	2019
10	Barriers to youth work opportunities	University of Birmingham	2016
11	Beyond the fragments	Australian Centre for Industrial Relations, Research and Training	1999
12	Bridge the gap: Rebuilding America's Middle Skills	Accenture, Burning Glass Technologies and Harvard Business School	2014
13	Coming of age in a crisis: young workers, COVID-19, and the youth guarantee	Per Capita	2020
14	Creating markets or decent jobs? Group training and the future of work	Buchanan, J. & Evesson, J.	2004

Reports included in Literature Review (2 of 5)

#	Report	Organisation/Author	Year of release
15	Denmark: More focus on job rotation	Preisler, M.	2013
16	Employer engagement in active labour market policies in the UK and Denmark: a survey of employers	Centre for Employment Relations, Innovation and Change, Leeds University Business School	2015
17	Enabling renewal: further education and building better citizenship, occupations and business communities in wales	Buchanan, J., Froud, J., Lang, M., Lloyd, C., Smith, B., & Williams, K.	2020
18	Engaging Employers and Developing Skills at the Local Level in Australia	Organisation for Economic Co-operation and Development	2019
19	Factors affecting apprenticeships and traineeships	Fair Work Commission	2017
20	Final report and evaluation: Alternative delivery pilots: higher apprenticeships and traineeships	PwC Australia	2019
21	Fundamental principles of youth employment	Social Ventures Australia	2016
22	Improving the employment prospects of young Australians	Australian Government, Department of Employment	2013/14
23	Infrastructure Skills Legacy Pilot Program	Sydney Metro	2020
24	Jobs Availability Snapshot 2019	Anglicare Australia	2019
25	KPMG Microsoft traineeship program survey - Summary evaluation report	KPMG	2020
26	Labour market policy after COVID-19 - The scramble for jobs: who will be employed when the music stops?	Committee for Economic Development of Australia	2020
27	Library Fellowship Paper	N/A	2020
28	Mechanisms for increasing employer contributions to training: An international comparison	National Centre for Vocational Education Research	2004

Reports included in Literature Review (3 of 5)

#	Report	Organisation/ Author	Year of release
29	More than a match? Assessing the HRM challenge of engaging employers to support retention and progression	Sissons, P. and Green, A.	2017
30	Engaging Employers and Developing Skills at the Local Level in Australia	Organisation for Economic Co-operation and Development	2019
31	Give Youth a Chance	Organisation for Economic Co-operation and Development	2013
32	Preparing tomorrow's workforce for the Fourth Industrial Revolution For business: A framework for action	Deloitte	2018
33	Interim Report – National Agreement on Skills and Workforce Development Review	Productivity Commission	2020
34	Climbing the jobs ladder slower: Young people in a weak labour market	Productivity Commission	2020
35	Why Did Young People's Incomes Decline?	Productivity Commission	2020
36	Promoting Equity and Inclusion and Connection to Good Fit Jobs for Young Adults	Ranita Jain and Amy Blair	2021
37	RBA: Using wage subsidies to support growth	Reserve Bank of Australia	2020
38	Recruitment Insights report June 2021	National Skills Commission	2021
39	Responsible business: attitudes soften to hiring young workers	Financial Times, UK	2014
40	Revitalising Tasmanian workforce development	Tasmanian Workforce Development Think Tank	2014
41	Smith Family: Young people's successful transition to work: What are the pre-conditions?	The Smith Family	2014
42	Sue Richardson - Transcript of conversation from ABC News	N/A	2020

Reports included in Literature Review (4 of 5)

#	Report	Organisation/Author	Year of release
43	Survey of employers recruitment	N/A	2021
44	Survey of Employers’ Recruitment Experiences	N/A	2018
45	SVA: Future Fair Report	Social Ventures Australia	2019
46	The attitude gap challenge: A South Auckland Employment and Skills Challenge	Auckland Co-design Lab & Auckland Council	2012
47	The Demand Side of Hiring: Employers in the Labor Market	DB Bills	2017
48	The futures of work: what education can and can’t do	Buchanan, J., Allais, S., Anderson, M., Calvo, R. A., Peter, S. & Pietsch, T.	2020
49	The labour market outlook for the young in Australia – and how policy can help	Borland, J.	2021
50	The Parliament of the Commonwealth of Australia - Youth employment: a working solution	House of Representatives	1997
51	What do recruiters think about today’s young people?	Education & Employers Organisation	2015
52	When is a job just a job - and when can it launch a career?	Lamback, S., Gerwin, C., & Restuccia, D.	2018
53	Why businesses should recruit young people	Hasluck Employment Research	2012
54	Why Do Sectoral Employment Programs Work?	Harvard University, National Bureau of Economic Research, Microsoft & MDRC	2020
55	Women’s work The impact of the COVID crisis on Australian women	Grattan Institute	2021
56	Working Paper Series Is it ‘dog days’ for the young in the Australian labour market?	Jeff Borland & Michael Coelli	2021

Reports included in Literature Review (5 of 5)

#	Report	Organisation/Author	Year of release
57	You value what you pay for – Enhancing employers' contribution to skill formation and use	Hall, R., Buchanan, J. & Considine, G.	2002
58	Young people are not after an easy ride, just job security	Woodman, D., The Conversation	2016
59	Youth Employment Index 2018	PwC UK	2019
60	I Want To Work	Employment Services	2020
61	Moving the Goalposts: How Demand for a Bachelor's Degree Is Reshaping the Workforce	Burning Glass Technologies	2021
62	Labour Market Outcomes for Younger People	Reserve Bank of Australia	2018
63	Shifting the Dial: 5 year productivity review	Australian Government Productivity Commission	2017
64	Beyond mentoring: social support structures for young Australian carpentry apprentices	Buchanan, J., Raffaele, C., Glozier, N., & Kanagaratnam, A.	2016
65	Completion rates for group training organisations and direct employers: how do they compare?	O'Dwyer, L. & Korbel, P.	2019
66	What Works? A Meta Analysis of Recent Active Labour Market Program Evaluations	Curd, D., Kluve, J., & Weber A.	2018
67	Disrupted: Where to from here?	Stewart-Weeks, M.	2021
68	Higher apprenticeships in Australia: what are we talking about?	National Centre for Vocational Education Research	2019
69	Boosting Apprenticeship Commencements	Department of Education, Skills and Employment	2021

Thank you