EQUIPPING YOUNG PEOPLE FOR THE FUTURE WORKING WORLD





REACHOUT AUSTRALIA

ReachOut is Australia's leading online mental health organisation for young people, providing practical support to help them get through everything from everyday issues to tough times. Since 1998, ReachOut has worked alongside young people to deliver online tools and resources for depression, anxiety, exam stress, bullying and much more, and to support good mental health and reduce suicide. ReachOut Parents was launched in 2016 to help parents and carers improve the mental health and wellbeing of the young people within their family environment. Available anytime and pretty much anywhere, ReachOut.com is accessed by 200,000 Australians each month. That's more than 2.4 million people each year.

ΕY

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THE RELATIONSHIP BETWEEN REACHOUT AUSTRALIA AND EY

ReachOut Australia is EY Australia's first national strategic community relationship. Launched in 2012, the relationship aims to:

- contribute to the national dialogue around mental health through producing reports such as this and four previous reports: Counting the Cost, Crossroads, A Way Forward and One Click Away
- provide information and support for EY staff to enhance their own mental health and wellbeing, and in doing so confirm EY's commitment to addressing mental health issues in the workplace
- support the service that ReachOut.com provides directly to hundreds of thousands of young people each year by creating greater awareness of the importance of preventing the development and progression of mental illness, especially among young people.

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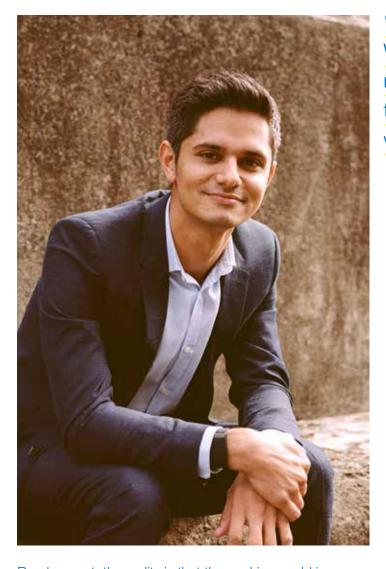
FOREWORD

The catalyst for this report on the need to prepare young people for a changing working world came from trends we saw in our research. Young people were telling us they were worried about the future. Would they do well enough in their exams to set them up for the career they wanted? Would they get a job? Would they ever be financially secure? With our research partner EY, we discovered a shared interest in prioritising areas for action that can make a difference.

There are a number of disruptive forces driving change in the working world, including automation (where machines are taking over more and more of the tasks that were once performed by people), advancing technology, and new digital platforms that connect work and workers. For young people, the working world will be very different from that of their parents.

The future of work is a hot topic. It has implications for how we conceptualise work, protect workers, skill and educate the workforce, provide safety nets for those who may be displaced, and reassure ourselves that the next generation will have the same economic opportunities that we had.

The future working world is both exciting and scary. It can be envisaged as a world where we achieve work/life balance, live in a city of our choice, are connected by our smartphone to jobs around the world, and are enabled to work from home or to travel to offices in other cities and internationally. It can also be envisaged as a world with greater job instability, where we work at a number of casual and part-time jobs to make ends meet, experience stress and anxiety as the result of a lack of financial security, and feel that having a family or owning a home is increasingly slipping out of reach.



'Right now, we have an opportunity.

Working with young Australians, we can make changes to equip them not just to survive, but to thrive, in the future working world.'

Ready or not, the reality is that the working world is changing and for the first time this report looks at how it will impact young people's mental health and wellbeing. Young people are at the centre of everything that we do; and in this report we have worked to ensure that their stories, thoughts and views are shared, and their priorities for action identified.

Right now, we have an opportunity. Working with young Australians, we can make changes to equip them not just to survive, but to thrive, in the future working world.

Ashley de Silva, CEO ReachOut Australia



A STORY
ABOUT
FINDING
WORK

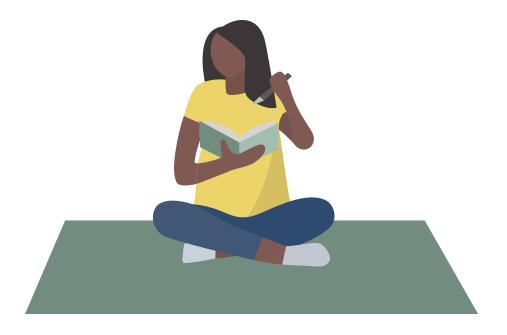
I graduated with a Bachelor of Social Research and Policy. I currently work in project management at a health research institute. Growing up, I was always interested in people and how society works, which is why I chose a degree in public policy. At university, I learnt how to critically analyse, conduct research and explore new ideas.

I also worked as a casual medical receptionist, and was involved in the Model United Nations.

Although I didn't have a clear idea of what I wanted to do after my studies, I began my job search during my final year after attending my university's careers fair. I was quite amazed by the professional development opportunities offered in graduate programs. So, I decided to apply for graduate roles. I went to multiple career seminars, where I learnt how to prepare and perfect my application. During this time, I felt quite confident about my university results and work experience. I applied for around 25 graduate roles in public and private organisations.

The application process often involved multiple rounds of testing including assessment centres, interviews and psychometric testing. For every graduate role I applied for, I was competing with thousands of graduates whose qualifications and experience were similar to mine.

The hardest part was waiting for weeks, or even months, to hear back about my applications. I was constantly receiving rejection emails with limited feedback. I remember how defeated I felt when I received a rejection despite having made it through to the final round! I was extremely disappointed in myself, and thought I had let down my family and friends. My self-esteem was at its lowest point. I was convinced that if I didn't find a full-time job in my field, I wasn't a success.



So, I decided to change my approach. I took an internship for five months to gain more work experience. As part of this, I conducted my own research project where I developed skills in data analysis and project management. The project built my self-confidence, as I was able to see my strengths and be proud of my work achievements. The internship gave me access to a network of people working in the non-profit sector. They advised me to apply broadly for positions, and to write my job applications with a focus on my strengths, interests and work achievements.

My work experience and the advice I received from networking enabled me to land my first full-time job in my chosen field. From when I'd first started applying for positions, finding this job took me a full year. My journey has influenced my understanding of

work and provided me with a very realistic expectation of the current job market as a young professional. Importantly, I learnt that resilience, self-confidence and self-care are important parts of searching for work and becoming a successful graduate.

Monica, age 26.

EXECUTIVESUMMARY

This report adds to a growing knowledge base about how and why the working world is changing, and for the first time looks at its impact on the mental health and wellbeing of young Australians.

The findings of this report have been informed by:

- Australian and international peer-reviewed research, plus government and policy reviews and reports
- online surveys and qualitative research conducted by ReachOut Australia with 14- to 25-year-olds and parents of teenagers, which sought their views about the future working world and what should be done to support young people entering the workforce
- interviews conducted by EY and ReachOut Australia with a range of key informants and future-thinkers, including employers, academics and educators (see Appendix 1 for a detailed interviewee list)
- interviews conducted by EY with young people studying, working or looking for work, to better understand how they feel about their future and the challenges they have encountered.

Across the globe, the working world is changing. Advancing and evolving technology is giving rise to the 'fourth industrial revolution' and exposing our future workers to an employment landscape more precarious, uncertain and unsupportive than ever before.

By listening to young people, this report has found that they are naturally excited and optimistic, but also scared about their personal futures. Young people are concerned about performing well in exams in the hope of finding stable employment and, perhaps one day, gaining financial security. As the impacts of the future working world are increasingly felt, we will likely see more young people affected by these concerns, which can put their mental health and wellbeing at risk.

As we look to the future, it is vital that we reconceive the way we think and plan for both work and life. We will need to equip young people with the skills, experience and resilience to face challenges and uncertainties not encountered by previous generations.

Currently, the structures in place to support young people are falling short. To adequately prepare them for this new working world, young people told us we need to:

- teach them new skills for new careers, equip them with real-world work experience, and provide career education that understands the future working world and prepares them for the transition from education to employment
- help them to build resilience and mental wellbeing, and provide mental health support to manage the stress and anxiety they will experience in the future working world
- empower those they turn to for help parents, carers, families and educators – to provide support.



'A school leaver today
will likely have 17
different employers and
5 separate careers in
their lifetime.'

THE MCCRINDLE BLOG¹





'WE STAND ON THE BRING REVOLUTION THAT WILL THE WAY WE LIVE, WOR ANOTHER. IN ITS SCALE, THE TRANSFORMATION WE HUMANKIND HAS EXTENDED.

KLAUS SCHWAB, FOUNDER WORLD ECON









ORKING WORLD

IK OF A TECHNOLOGICAL
FUNDAMENTALLY ALTER
RK AND RELATE TO ONE
SCOPE AND COMPLEXITY,
/ILL BE UNLIKE ANYTHING
PERIENCED BEFORE.'

AND EXECUTIVE CHAIRMAN, OMIC FORUM²







The working world is changing, caused by a tech revolution that is giving rise to the 'fourth industrial revolution'. It is predicted that nearly all occupations will be affected and that future workers will have to contend with more precarious and uncertain work. It will cause some jobs to become redundant, while complementing existing jobs and creating new ones. However, many of these new jobs will require a completely new set of skills.

The tech revolution

Automation

Automation and new technologies such as robotics and artificial intelligence (Al) are changing the nature of work, with effects to date seen strongly in the manufacturing and agricultural sectors.³ In Australia, some 40 per cent of current jobs across all industries are considered at high risk of automation over the next 10–15 years.⁴

In *The Future Workplace: How to Automate Intelligently*, EY mapped Frey and Osborne automation scores (a machine learning algorithm that estimates the probability of computerisation from 0 to 100) to nearly 2,000 occupations in four economies. The researchers found that the potential to automate tasks across business functions varied greatly, ranging from 80 per cent of tasks in finance, to only 12 per cent in learning and development. Across all sectors, it was found that approximately one-third of work has the potential to be automated.⁵



'Humans will always be required in the workforce and will adapt and move based on the skills and labour required.'

TIM FUNG, AIRTASKER

Automation will cause some jobs to become redundant, complement existing jobs and create new jobs. An EY report, *The Upside of Disruption: Megatrends Shaping 2016 and Beyond*, investigates the reinvention of work within this era of disruption. Al has already begun to disrupt jobs that were previously considered immune to technological displacement, such as white-collar work and creative endeavours. However, within this disruptive era of new technologies, there will also be surprises and the emergence of new sectors that we are unable to envision today.

'We are in the early stages of these shifts, and it's hard to know exactly how they will play out. On one hand, it has been predicted there will be massive net losses of jobs. Today, for instance, a worker displaced by globalization may freelance as an Uber driver. In the future, many more office workers will be displaced by AI – but they won't have the option of becoming freelance drivers if the ride-sharing platform of the future uses driverless cars.'

EY, THE UPSIDE OF DISRUPTION: MEGATRENDS SHAPING 2016 AND BEYOND 7



The Australian Government publication *Australian Jobs 2018* noted that technology and the automation of work has resulted in an increase in the share of people employed in non-routine jobs that are difficult to automate or which require a human presence, such as aged and disabled carers, teachers and plumbers.⁸ This finding is supported by the Reserve Bank of Australia's (RBA's) analysis of the growth in importance of non-routine jobs, and the need for skills that are not easily replicated by technology, such as social intelligence, creativity and problem solving.⁹ As Figure 1 shows, over the past 30 years there has been a rise in employment in non-routine jobs and a steady decline in routine manual occupations such as construction, agriculture, mining and manufacturing.

Employment by skill type*

Per cent of total

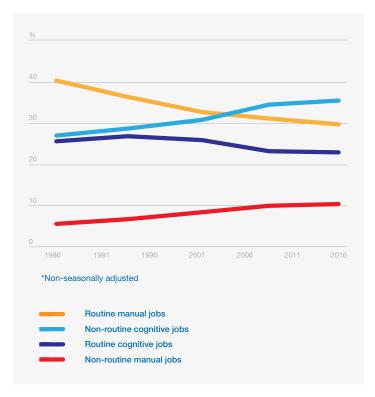


Figure 1: Changing nature of employment by skill type, 1986 to 2016. Source: Reproduced from Alexandra Heath, Head of Economic Analysis Department, Reserve Bank of Australia, *The Changing Nature of the Australian Workforce*. Speech presented to CEDA – Future Skills: The Education and Training Pipeline, Brisbane, 21 September 2016. Australian Bureau of Statistics data.

'It's not a question of "Will there be jobs?" It is whether there will be jobs that are recognisable.'

PROFESSOR LESLEY FARRELL, MELBOURNE GRADUATE SCHOOL OF EDUCATION

'Humans will move onto the next job. Automating a process frees people up so they can go and do another task or job.'

TIM FUNG, AIRTASKER

Turning the focus to Australia's young people, the Foundation for Young Australians (FYA) has noted that this cohort is likely to be disproportionately impacted by automation. This is because the entry-level jobs for around 70 per cent of 15- to 24-year-olds are in occupations forecast to be highly affected by automation, including retail, administration and labouring.¹⁰

Globalisation

Globalisation is not a new phenomenon and is continuing to impact the domestic labour market. The offshoring of tasks has given companies access to an expanded labour pool. For advanced economies with relatively high wages, globalisation has contributed to a shift of jobs to countries with lower labour costs, largely in manufacturing and some service sectors. Further, advances in technology mean we are now more connected than ever. This connectedness, combined with increased workforce mobility, has created a growing transnational workforce.

Figure 2 demonstrates the strong growth in labour services purchased from overseas, most notably in computer and IT services, in Australia over the past 15 years.

For young people, globalisation is both an opportunity and a threat, as technology connects them to work beyond our national borders, but also connects a growing and competitive transnational workforce to work opportunities in Australia.

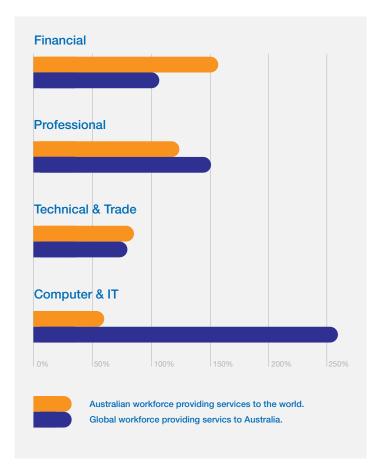


Figure 2: Percentage growth of trade in services, 1999 to 2014 Source: Foundation for Young Australians (FYA), *The new work order*. Melbourne: FYA, 2017.



Precarious employment

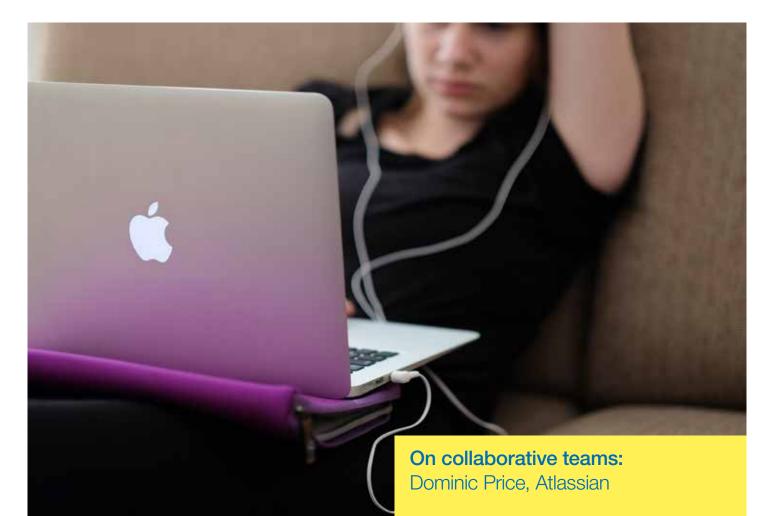
The gig economy

'Gig economy' refers to the free market system where organisations contract with independent workers for short-term contracts, or 'gigs'. Growth in the gig economy is facilitated by large and small organisations seeking an agile workforce that provides the right skills, at the right time, without the overheads. Digitally enabled marketplaces that pair roles or tasks with people seeking work have further enabled the gig economy. 11 As a result, companies such as Uber, Airtasker and Deliveroo are now familiar household names. However, it is not just these task-based companies that are driving the gig economy. Platforms such as Expert36012 offer freelance roles in the professional services industry, and the demand for these services is expanding.

The freelance workforce in Australia continues to grow. Australian Bureau of Statistics (ABS) figures for 2018 show that approximately 2.6 million Australians, or 25 per cent of workers, are employed on a casual basis, ¹³ up from 13 per cent in the 1980s. ¹⁴ Indeed, a recent report published by the Australia Institute revealed that less than half of all employed Australians are in permanent full-time jobs. ¹⁵ Further, in New South Wales, estimates have found that the gig economy contributed \$504 million to the State's economy annually in 2015, and provided 45,000 people with some form of work. ¹⁶

The benefits of gig work for individuals have been argued to include autonomy, flexibility and opportunities to earn a living in new ways. For employers, it allows the agile hiring of specialised individuals to meet short-term business needs, with reduced recruitment and workforce overheads. However, workers in the gig economy are not classed as employees, but rather as independent contractors. Under these arrangements, there is generally no requirement for minimum pay or employment safety nets. Young people, as new entrants to the workforce, are very likely to be employed in the gig economy in casual, temporary or part-time work, increasing the risk of underpayment and reducing their ability to access workplace protections, such as sick leave and superannuation.

So, what's next for the gig economy? High-performing collaborative teams, or 'gig teams', could form the future of this sector, particularly as the interconnectivity and mobility of workers increase through technology advances and globalisation. Bringing together people with different backgrounds, perspectives and information-processing styles can enhance innovation and problem solving, providing greater value than is possible with either individuals working alone or homogenous teams.



Job insecurity

The youth *unemployment* rate for 15- to 24-year-olds in Australia was 11.9 per cent in July 2019, a total of 265,400 young people. The youth *underemployment* rate for the same period was 18.2 per cent, an additional 405,600 young people. As such, over 600,000 young Australians were either unemployed or underemployed in July 2019.

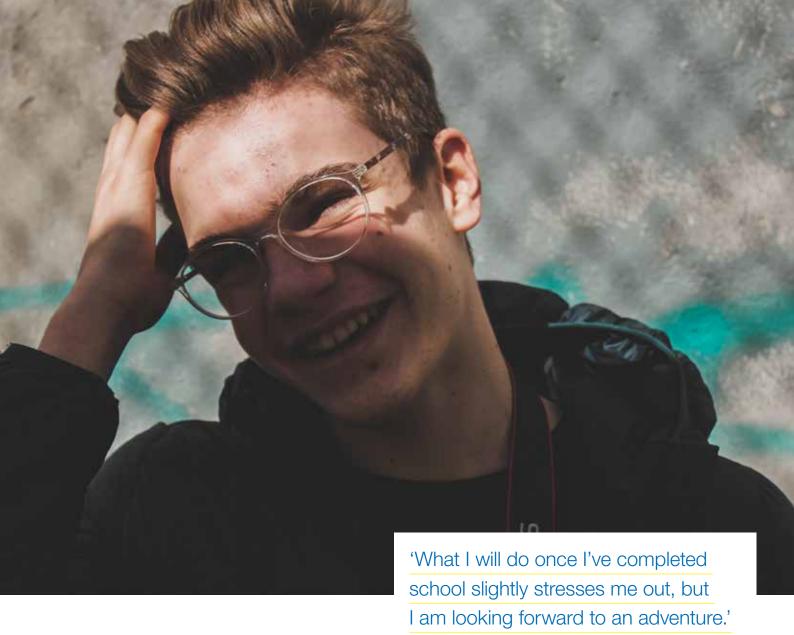
In developed countries such as Australia, young people tend to be the most impacted by economic downturns, resulting in greater job losses and higher unemployment rates than among the adult population. The reasons for this are that young people often have little or no labour market experience, and that businesses face higher costs of investment and lower costs of termination when employing young workers.¹⁸

With entry-level positions increasingly offered on a casual, temporary or part-time basis, and with sectors in which young people are overrepresented, such as the service economy, suffering from low wages, irregular work patterns and employment uncertainty, underemployment will remain an issue for many young Australians. ¹⁹ This inability to gain a foothold in the workforce can lead to a reliance on income support payments, poor general and mental health outcomes, and social isolation.

Atlassian, founded in 2002, is an enterprise software company that services over 125,000 customers. It is best known for its issue tracking application Jira, and its team collaboration product, Confluence.

Atlassian strongly believes that bringing people together from varied backgrounds, experience and viewpoints underpins innovation, and that intergenerational learning is key for all age groups to foster growth and development.

'The future is in bringing together the right skill sets from across the globe to maximise value in terms of teaming (flexible teams that come together to work on particular problems), intellect, innovation and efficiency.'



YOUNG
PEOPLE AND
THE FUTURE:
EXCITED,
BUT KINDA
SCARED

MALE, 18

How young people feel about the future is important to their personal wellbeing, as well as to society on a broader level. Positive perceptions of the future enable young people to work towards goals and pursue interests, building a sense of meaning and purpose in their lives.²⁰

Young people are naturally optimistic and excited about their personal futures; however, pressure to make the 'right' decision and to live up to their own and others' expectations can create a great deal of stress and anxiety. The changing working world is not a high-priority stressor for young people, who are currently more concerned about choosing the work or education pathway that will guarantee them fulfilment and success. However, as the impacts of the new working world are increasingly felt, this is likely to change.

For some young people, the future represents possibilities, freedom and independence. For others, it can be a source of worry, confusion and stress. For many, it's both. Young people are at a time in their development when they are trying to make sense of uncertainty and shape the narrative of their lives by asking questions like 'Who am I?' and 'What will I become?'

'You don't know what the future holds. Am I doing the right degree? Will I get a job after I graduate? I'm not really sure what will happen next.'

MALE, 18

'I still don't know what I want to do. Honestly, I don't know. It still stresses me. I remember the day before we finished school, everyone was like, 'Oh my God, what are we gonna do?'

FEMALE, 18

For young people in transitional periods, such as when they finish high school or university, the pressure from parents and peers to achieve their future aspirations, or to have plans set in place to do so, can leave them feeling overwhelmed and stressed.

'That's when my dad started: "What are you doing? What are you gonna do?" And I said to him, "I don't know." And that's when you start to panic...'

MALE, 18

'The future [has been worrying me]. I'm in the middle of uni, but I have no idea what I'm doing and the family pressure is difficult.'

FEMALE, 25

Without a clear vision for the future, some young people can feel demotivated and lose their sense of worth.

'I felt overwhelmed and confused about the future and where I wanted my life to go. This included pressure to set clear goals such as going to uni or what career I might pursue. The stress from this resulted in a lot of demotivation and the urge to give up.'

FEMALE, 18

ReachOut's research with young people has confirmed that 'the future' is an issue that does cause worry. We heard that, among those living in rural areas, 'concerns about the future' is the third top issue on their mind.²¹ Many expressed this concern in terms of feeling worried or overwhelmed in relation to actualising their desired futures.

'Am I good enough? Where did I go wrong? Am I meant to amount to anything? Where's my future?'

MALE, 23

Further research by ReachOut identified that less than half of young people believe they are ready for the workforce after finishing their studies, with almost one in five saying they didn't feel confident that they would be able to find work.²² Mission Australia has identified that this lack of confidence is attributed to academic ability, financial difficulty and mental health challenges.²³ Additionally, other research has found that high school students don't feel well supported by their school, with most thinking their school cares more about ATAR results than about them as students.²⁴

'I feel like that's something schools don't do. They don't prepare you for the future enough.'

FEMALE, 18

Although young people are often worried about the uncertainty of their futures, the changing working world isn't a current concern. Interviews with high school students, university students and recent graduates revealed that young people are not particularly concerned about the impacts of the changing working world on their own career paths. Most interviewees felt that technological advancements would be an advantage to them, creating more jobs, not fewer jobs. Interviews with academics echoed these findings, explaining that these feelings are attributed to 'future discounting' – where present rewards are weighted higher than future rewards, a response more prevalent in young people.

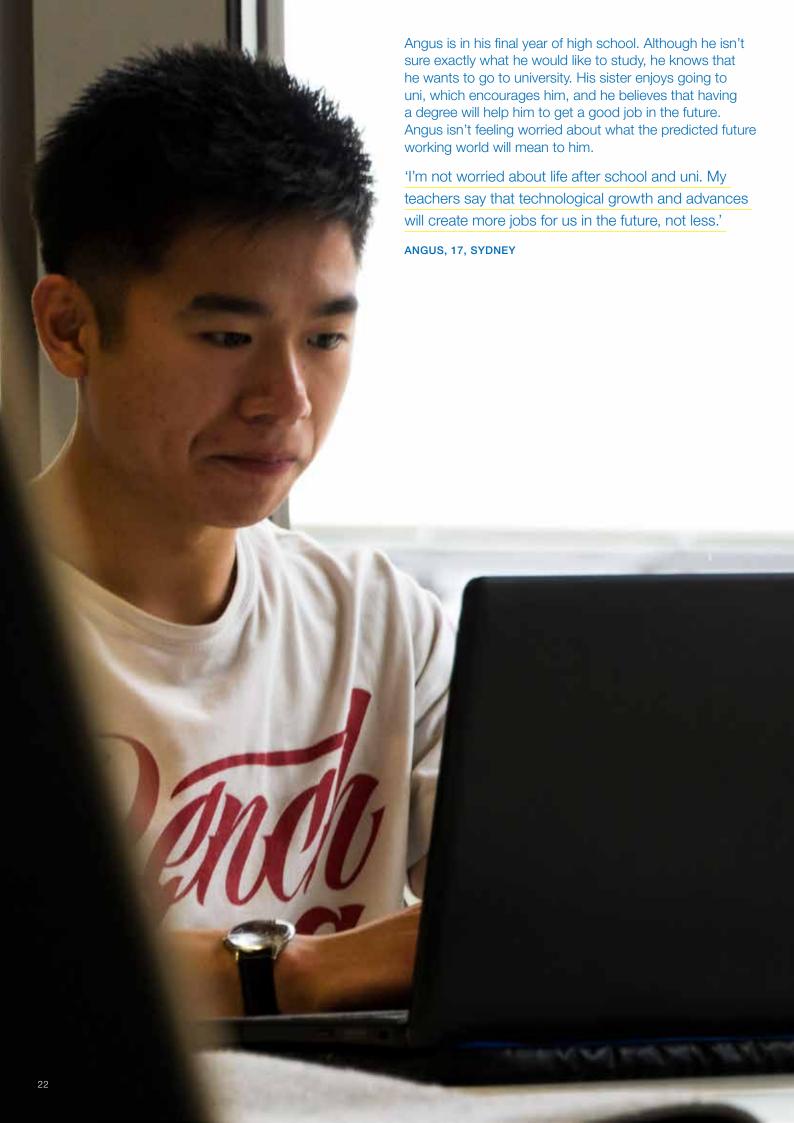
A ReachOut survey²⁵ found the key area of concern for those finishing university was the ability to find a job in their chosen field. For many respondents, this was already proving to be difficult. Young people also have mixed feelings about the future working world, highlighting the tension between a sense of excitement and apprehension about what is to come.

Although many said they were *scared*, *anxious*, *uncertain* and *worried*, they also described feeling *excited*, *confident* and *optimistic*. These words used by survey respondents emphasise hope, resilience and the growth mindset of young people, and how they envision this predicted future as one of exploration and possibilities, rather than despair.

Overall, these findings emphasise the optimism with which young people view the future and their employment possibilities, but may also indicate a current lack of awareness about how tech and globalisation will impact the labour market and work.

How young people feel about the working world

accepting (5), adaptable (6), advance (7), adventure (4), afraid (5), anxious (27), apprehensive (12), awesome (4), better (4), bleak (6), busy (6), challenging (34), changeable (4), changing (21), competitive (23), concerned (15), confident (21), confused (13), cool (10), curious (10), daunting (7), different (12), difficult (12), dynamic (8), easy (5), evolving (3), excited (87), expect (3), fast-paced (5), fast (11), feeling (3), flexible (28), forward (4), freelance (3), fun (14), future (9), futuristic (4), happy (17), hard (25), hectic (4), help (3), hopeful (18), innovative (11), insecure (11), interesting (22), intimidating (5), intrigued (6), jobs (6), keen (4), learning (3), modern (5), money (12), nervous (37), nice (5), not sure (7), ok (8), opportunities (7), optimistic (13), positive (3), progressive (11), ready (3), relaxed (5), robots (6), sad (4), **scared** (48), **scary** (41), secure (4), stressful (14), technology (12), tired (4), uncertain (41), uneasy (5), unknown (7), unprepared (8), unreliable (7), unstable (15), unsure (30), work (13), worried (44).



Parents and the future:

Expectations vs. reality

When it comes to young people making future career decisions, parents can add pressure to what, for many, can be a confusing and sensitive time.

ReachOut's research with parents found that they are worried about their child's long-term future early on in their schooling, at ages 12–13. Parents were particularly worried about their child's attitude to school, as well as about whether the quality of education and the skills they are receiving from school will affect their chances of being successful later in life. For these parents, a 'successful' future meant getting a 'good' job that allows their child to be financially secure and stable.

'I'll say [to my 13-year-old], "Look, if you don't study ... there will be consequences. No job, no house, no car, no going out, difficult life. It's expensive here in Sydney. Here's the real estate, have a look. Can you buy a place right now? No. You'll have a debt when you finish, if you go to uni. In order to survive here, to live here, you need to do this. That's life experience."

FATHER, NSW

The pressure put on young people to succeed academically can cause them considerable stress, which has the potential to contribute to negative mental health outcomes. ReachOut's research shows that 37 per cent of young people feel that their parents, carers and families are the main source of their exam stress. At the same time, parents are a crucial source of help and one of the first places young people go when they need help in dealing with an important issue.²⁶

ReachOut asked parents to describe what success at work looks like for their child or children in the future:

23% SAID

EMPLOYED IN WORK THAT MAKES THEM HAPPY AND FULFILLED

17% SAID

EMPLOYED IN WORK THAT ENABLES THEM TO BE FINANCIALLY SECURE AND INDEPENDENT

14% SAID

THEY WERE UNCERTAIN WHAT FUTURE SUCCESS AT WORK FOR THEIR CHILD MAY LOOK LIKE

8% SAID

THEIR CHILD'S WORKING FUTURE ALREADY LOOKS BRIGHT, HOPEFUL AND PROMISING

8% SAID

EMPLOYMENT IN A SPECIFIC PROFESSION OR FIELD – E.G. ARCHITECT, ENGINEER OR DOCTOR

7% SAID

THEIR CHILD'S WORKING FUTURE LOOKS BLEAK, CONCERNING AND WORRISOME

6% SAID

ACHIEVING ACADEMICALLY – E.G. FINISHING UNIVERSITY AND OBTAINING QUALIFICATIONS

5% SAID

EMPLOYMENT WHERE THERE ARE OPPORTUNITIES TO DEVELOP SKILLS AND TO PROGRESS IN THEIR CAREER

5% SAID

OBTAINING ANY JOB WOULD BE SUCCESSFUL FOR THEIR CHILD

5% SAID

EMPLOYMENT IN SECURE AND STABLE WORK

2% SAID

DID NOT RESPOND, OR PROVIDED A MISCELLANEOUS RESPONSE

Among those parents who were worried about their child's future, some identified specific concerns regarding the competitive labour market, a lack of job opportunities, or their teenager's lack of work experience.

'[Success in the future is] being happy in a career that they love and enjoy'

MOTHER, NSW

'[Success in the future is] being happy in their job and earning enough money to be independent'

MOTHER, VIC

'I am not sure, as the work environment is changing so quickly.'

FATHER, NSW



'In the future, there will be a greater need for workers to possess skills that machines do not have, specifically relating to non-routine work, relationshipmaking and problem-solving when machines fail.'

PROFESSOR LESLEY FARRELL, MELBOURNE GRADUATE SCHOOL OF EDUCATION

Future trends

The Foundation for Young Australians recently identified seven job clusters in Australia based on the analysis of 2.7 million job advertisements. Of these seven clusters, three have been recognised as offering greater long-term security based on their future growth prospects and resistance to automation.

Careers of the future	Jobs of the future
TECHNOLOGISTS	
Skilled understanding and manipulation of digital technology	Programmers, software engineers, database administrators, web designers, ICT [information and communications technology] business analysts
INFORMERS	
Professionals providing information, education or business services	Teachers, economists, accountants, policy analysts, organisational psychologists, solicitors, human resource advisers
CARERS	
Jobs supporting mental or physical health or wellbeing	GPs, social workers, allied health practitioners, child- care workers, fitness instructors, counsellors, beauty therapists

Source: Adapted from 'The new work mindset: 7 new job clusters to help young people navigate the new work order'.

Melbourne: FYA, 2017.

Currently, young Australians are optimistic about the future and their employment possibilities. However, it is now more important than ever that we equip young Australians with the right skills and training to navigate a changing working world.

Twenty-first century skills

Twenty-first century skills, also referred to as soft, non-cognitive, enterprise or employability skills, are highly valuable to employers, (see Figure 4). With new technologies set to reshape our economy and society, these skills have an enhanced focus and will give workers an edge over machines and robots.

Research by David J. Deming, a professor at the Harvard Kennedy School and Harvard Graduate School of Education in the United States, found that employers are increasingly valuing 21st century skills over traditional academic performance. He argues that this trend is driven by technological change, and by the importance of skills and tasks that machines cannot perform.²⁷ This finding is supported by the JobGetter and EY report *Soft Skills in Demand*,²⁸ which found that 21st century skills are a growing requirement for new university graduates.

Teamwork, and the ability to work effectively with others, is also growing in importance. Professor Lesley Farrell from the Melbourne Graduate School of Education has stated that, in the future, employers will be looking for employees who can identify a problem, articulate it, invite people to collaborate to solve it and implement the solution. The ability to work with people in a globally distributed and interdisciplinary way will be critical.

On skills

employers want: Tim Fung, Airtasker

Airtasker is an Australian

'people ready to work, with

It is are an example of a tech

company with a recruitment

process that differs from the

traditional approach. Airtasker

employs people based on their problem-solving skills - their ability to 'figure stuff out'. It's found that its most successful employees are the ones who can grow and develop independently of direction; employees who understand the skills they need, and how to go about developing them. Airtasker's recruitment

process tests for 21st century

skills, maximising its ability

to employ high-performing

individuals.

community platform connecting

people who need work done'.29

What are the 21st century skills?



Critical thinking

- Analytical thinking
- problem solving
- decision-making
- reasoning
- reflecting and evaluating
- intellectual flexibility



Communication

- effective oral and written communication
- using language, symbols and texts
- communicating ideas effectively with diverse audiences



Creative thinking

- innovation
- initiative and enterprise
- curiosity and imagination
- creativity
- generating and applying new ideas
- identifying alternatives
- seeing or making new links



Collaboration and teamwork

- relating to others (interacting) with others)
- · recognising and using diverse perspectives
- participating and contributing
- community connections



Personal and social skills

- adaptability/flexibility
- management (self, career, time, planning and organising)
- character (resilience, mindfulness, open and fairmindedness, self-awareness)
- leadership and citizenship
- cultural awareness



ICT skills

- operations and concepts
- · accessing and analysing information
- · being productive users of technology
- digital citizenship (being safe, positive and responsible online)

- ethical (and moral) understanding

Figure 4: What are the 21st century skills? Source: Queensland Curriculum and Assessment Authority, 21st century skills. Brisbane: Queensland Government.



Digital literacy

Digital literacy is the ability of individuals to use information and communications technology (ICT) appropriately to access, manage, integrate and evaluate information, develop new understandings, and communicate with others in order to participate effectively in society. It is fast becoming a foundation skill for all jobs. The Department of Jobs and Small Business report *Australian Jobs 2018* recognises digital literacy as a key requirement for workers of the future and a key skill for non-routine jobs.

The Foundation for Young Australians analysed 4.2 million job postings from 2012 to 2015 and found that the demand for digital literacy in early career roles relevant to young people had increased by 212 per cent.³² FYA also found that 90 per cent of the workforce will require at least basic computer skills, such as using email or company software, and over 50 per cent will need to be able to use, configure and build digital systems in the next two to three years.³³

'This doesn't mean we need to teach everyone to hack code. But we do want people to understand the building blocks of computation, to appreciate what can – and can't – be done.'

MARK SCOTT, SECRETARY, NSW DEPARTMENT OF EDUCATION³⁴

Research is showing that basic digital literacy will become a universal requirement for future employment. Young people who don't develop or maintain these skills will find it increasingly difficult to obtain work.

Don't forget the basics

With the increasing focus on 21st century skills, it is important not to forget the basics, literacy and numeracy. Numerous interviews conducted for this report revealed a common theme: that young people, now and in the future, will need to leave the education system with foundational literacy and numeracy skills that are essential for further learning.

'That is not to say there is not a role for developing skills like problem solving, critical thinking, creativity and teamwork, but those skills cannot be applied if someone doesn't have the basic skills of literacy and numeracy.'

HON, DAN TEHAN MP, MINISTER FOR EDUCATION³⁵

According to Professor Lesley Farrell, for young people to have a successful career, maths matters. She cited the work of Dr David Deming, who found that employment and wage growth was strongest for those jobs requiring high levels of both maths and social skills.³⁶ This is because jobs requiring lower levels of numeracy and literacy are more likely to be automated, and available jobs will require more sophisticated levels of numeracy and literacy. This is a view supported by Dr Alan Finkel, Australia's Chief Scientist, who strongly believes in the importance of maths for future success.³⁷

As a result, to facilitate future workforce success, educators must not only explain to students the need for these basic skills, but also explore how to teach the required levels of numeracy and literacy to those without a natural aptitude for them. Professor Farrell explained that the education system and employers will need to find ways to re-engage and train people who find reading, writing and maths challenging.

'What is needed is an education system that combines the teaching of traditional English and maths skills, as well as the teaching of soft skills.'

PROFESSOR LESLEY FARRELL, MELBOURNE GRADUATE SCHOOL OF EDUCATION

Career management and life skills

'Schools should focus on also teaching students important life skills like budgeting, taxes, how to create a resume, work etiquette – so they are more prepared for the REAL world and have the skills to have a job and manage it.'

FEMALE, 16

Young people have always required skills to plan their career and gain employment, as well as to navigate life, including budget management and preparing a tax return. These skills will gain importance as the working world changes, bringing with it new technology-enabled employment models and multiple career pathways. FYA has advocated that to prepare young people for the future of work, we need to shift away from the mindset of a single career pathway and support young people to develop a portfolio of skills, knowledge and attitudes that are portable across many jobs and sectors.³⁸

A recent ReachOut survey of Australian students found they believed that learning practical, relevant life skills would better prepare them for finding work in the future.³⁹

'[We need] more life skills courses at school.'

MALE, 17

'Learning how to adult at school [will help me prepare].'

FEMALE, 16

Further, as employment becomes more precarious, skills needed to navigate employment conditions will be critical. Employees will need to be able to negotiate the terms of their contract, including initiating the conversation and advocating for their own needs.

Career management and life skills education programs offered in schools will need to adapt to prepare students for this new working world.

YOUNG, STRESSED AND ANXIOUS

'The uncertainty that surrounds the transition from study to work means that it is a priority to look at how we can best support the mental health and wellbeing needs of young people right now.'

ASHLEY DE SILVA, CHIEF EXECUTIVE OFFICER, REACHOUT AUSTRALIA



The mental health and wellbeing of young Australians

The future of Australia is dependent upon young people being happy, well, and ready to meet the challenges of work and life. However, youth mental health and wellbeing is an area of ever-increasing concern. Currently, one in four adolescents live with a probable serious mental illness, and this rate is rising.⁴⁰

Mental health disorders such as depression and anxiety negatively affect young people's wellbeing, functioning and development, both in the short and long term. 41,42 These disorders also put young people at greater risk of suicide. Tragically, the number of deaths by suicide of young Australians is the highest it has been in ten years. 43 In 2017, suicide accounted for over one-third of deaths among 15- to 24-year-olds. 44

The social and economic impacts of mental health disorders are far-reaching, affecting both the individual and wider society. Without appropriate support, mental health problems often increase in severity and can lead to social withdrawal, the breakdown of relationships, and poor education and employment outcomes. 45,46 In addition to these significant personal costs, mental illness in young adults costs Australia \$6.29 billion per year in lost productivity. 47

The high prevalence of mental health issues is acknowledged as an area of major concern by young Australians themselves. Forty-three per cent of young people identify mental health as an important issue facing Australia today.⁴⁸

For young people with a probable serious mental illness, the top three issues of concern were coping with stress, school and study problems, and depression. ⁴⁹ ReachOut has identified that the main sources of stress for young people surround work, money and study. ⁵⁰ For students experiencing exam stress, the most cited source of this stress was from worrying about the future or concern about getting a job. Twenty five per cent of young people surveyed by ReachOut were so stressed by exams they sought help from a counsellor, GP or mental health professional.

'During the HSC, I used to tell everyone that I didn't stress. I came to school and I was so carefree, but I'd go home and cry because I'd be so stressed.'

FEMALE, 18

'It's quite literally hell because of the stress and assignments and assessments and the prelim course exams and then on top of all that we are again constantly having our responsibilities as young people drilled into us ... We are restless and are – to be quite honest – crumbling under the social pressure, as well as the pressure put on us by the board of studies, teachers and the principal.'

FEMALE, 17

Wellbeing and resilience

'Wellbeing' refers to a person's sense of happiness and satisfaction with life, built from a combination of physical, mental, social and emotional health factors. ⁵¹ For young people, being successful and 'well' means balancing responsibility for their future and life, while making time for fun, and being social and present in the 'here and now', without worrying too much about the burden of the future. ⁵²

A key set of social and emotional skills is necessary to ensure positive, stable wellbeing. This includes resilience, which is the ability to bounce back from challenges, change or adversity.⁵³ The environmental factors and personality traits that either intensify or help an individual respond to adversity shape the resilience process.⁵⁴ Figure 5 outlines the protective factors that build a young person's capacity for change as they transition through to the independence of adulthood and experience changes and challenges.⁵⁵ In particular, psychological resources, such as a sense of hope and of personal control, self-efficacy and selfesteem, are important buffers against negative mental health and help to build the protective factors needed in order to cope. 56,57



Figure 5: A model of building resilience for young adults. Source: A. Masten et al., Resilience in emerging adulthood: Developmental perspectives on continuity and transformation. In J. J. Arnett & J. L. Tanner (Eds.), *Emerging adults in America: Coming of age in the 21st century* (pp. 173–90). Washington, D.C.: American Psychological Association Press, 2006.

Feeling down and out: Unemployed and underemployed

The link between unemployment, underemployment and negative mental health implications is well established⁵⁸ and has been found to contribute to:

- anxiety⁵⁹
- depression⁶⁰
- increased suicidal behaviours⁶¹
- alienation⁶²
- anti-social behaviour^{63,64}
- low self-esteem⁶⁵
- feelings of hopelessness⁶⁶
- feelings of a loss of control over life.⁶⁷

As such, periods of unemployment, underemployment and job insecurity may put the mental health and wellbeing of young people at risk.

Time spent in unemployment can also affect young people's prospects of securing employment in the future.⁶⁸



Blake,* 19, regional Queensland

Blake has been looking for work for a while now. Although he felt he did well at school and received a certificate in computer programming, he hasn't been able to find a job relating to his qualifications. He loves living out of home and values his independence, but being unemployed means that he is constantly worried about having enough money to pay his rent and bills. Looking for work is making him feel angry and stressed, and is starting to impact on his sense of self-worth.

'I'm pretty much always stressed about whether or not I'll have enough for bills and whether I'll get a job sometime soon, but I'm also pretty angry that no one will give me a try. What I want most in my future is family, a steady enough income to provide for my family, and that's about it.'

Grace,* 23, Sydney

Grace undertook a five-year Law and Arts degree, following her mother's advice that she would have a wide range of jobs to choose from after graduating. Last year, she moved to Sydney to pursue a job in her chosen field; however, things haven't gone according to plan.

Grace has met with ten or more lawyers to discuss jobs and employment in the legal field. She has also arranged over 20 meetings with other lawyers to find out more about what they do and to discover any opportunities.

She is currently working in a different field than law and feels that the longer she isn't working in the legal profession, the harder it will be to make the transition.

Grace feels that she has followed the advice given to her constantly while growing up: she performed well in high school, got into a good university, studied hard and excelled at her studies. She feels let down by the education system and wonders if it was all worth it. Grace says that she has always struggled with her mental health, having suffered from anxiety at high school. After finding herself in this uncertain situation with work, she says that her anxiety has increased and she experiences semi-regular panic attacks.

'I studied law but I probably won't ever work as a lawyer.

Sometimes I wonder if it was a waste of time. Everyone told me to be a lawyer but I often wonder if I should have done something different.'



^{*}Names used are not actual names of interviewees.

The mental health and wellbeing impacts of precarious employment for young workers

Research from the UK has found that the effects of an increasingly flexible labour market, resulting in young people working in temporary or part-time roles, is associated with a number of indicators relating to negative mental health and wellbeing. ⁶⁹ Similar evidence exists in Australia. ⁷⁰

Despite the employment benefits of the gig economy, conversations are turning to the drawbacks for gig workers. First, a shift to 'algorithmic management', whereby communication with management is mediated through digital platforms, has changed the flow of information between employer and employee. This change means that employees are less able to ask management for help, advice or feedback, which for young people at the beginning of their career is an important part of mentoring and skill development.

Second, research has shown that those working in precarious employment, who may be uncertain about regular pay cheques and under intense pressure to meet multiple deadlines, have high self-reported mental health symptoms, including low self-esteem, anxiety and depression.⁷¹

'What might be thought of as liberation, is experienced as detachment; flexibility as fragility; geographical mobility as placelessness or rootlessness; and the freedom of freelancing as anxiety.'72

Third, behind the flexibility and autonomy of gig work is the reality that workers often have little choice but to work from home, which can result in a lack of social contact and feelings of loneliness and isolation.⁷³ The social interactions provided in traditional workplaces have long been acknowledged as beneficial for mental health.^{74,75}

'There is potential for the gig economy to miss valuable learning opportunities due to an absence of traditional workplace structures.'

DOMINIC PRICE, ATLASSIAN

Lastly, Professor Helen Cahill, of the Melbourne Graduate School of Education, argues that an increase in casual work makes it harder for young people to find the time to get together and socialise. Indeed, balancing multiple, short-term contract jobs with social commitments can cause a great deal of stress for young people. Less time spent with family and friends, which are important protective factors for mental wellbeing, may contribute to feelings of disconnection and isolation.

'Precarity and underemployment is the new normal for young people. Struggling to maintain a balance between work and life can cause a great deal of stress for [them]... It's now not just a problem for the "busy boss".'

PROFESSOR HELEN CAHILL, MELBOURNE GRADUATE SCHOOL OF EDUCATION



Zoe,* 24, Sydney

Zoe considers herself a gig-economy worker. After studying fashion at the University of Technology Sydney and working full-time for two years, she is now starting her own fashion brand. In this start-up phase, with limited cash flow, Zoe is driving part-time for Uber to help cover her rent.

Zoe doesn't mind working temporarily for Uber, although she admits she misses the daily companionship she found with her former work colleagues. She recently experienced a minor car accident, which left her without a car for the week it was at the panel beater's and thus without the Uber income. She struggled to cover her rent and ended up asking her parents for financial help.

Zoe's story highlights both the autonomy and flexibility of gig work, and the vulnerabilities when something goes wrong.

Stuck in transition

While young Australians are now more likely to have a qualification, around half of 25-year-olds are not yet working full-time hours. Employment outcomes for graduates have weakened in recent years; in 2016 the full-time employment rate for bachelor graduates was 71 per cent, compared to 85 per cent in 2007. Breaking into the labour market is becoming harder for young people, in part due to automation and globalisation.

Spending more time 'stuck' in transition to employment has a profound impact on young people. They are exposed to the adverse mental health effects of unemployment, with their ability to become financially independent delayed. This means that many young adults are relying on their parents for financial support well into their twenties⁷⁹ and remaining in their parents' home or returning to live at home out of necessity.⁸⁰

Young adults are also delaying other 'traditional' markers of adulthood, such as marriage, forming relationships and parenthood. Many emerging adults in their midtwenties now experience a 'quarter life crisis', as they are viewed as having failed to reach independence and what is expected of them as an 'adult', while struggling with career and financial insecurity and doubt. Many control of the struggling with career and financial insecurity and doubt. Many control of the struggling with career and financial insecurity and doubt. Many control of the struggling with career and financial insecurity and doubt.

^{*}Names used are not actual names of interviewees.

EDUCATION IS FALLING SHORT

'Schools need to change to prepare students for jobs.'

FEMALE, 19

With over 3.8 million students enrolled in Australian schools,84 our education system plays a pivotal role in preparing our young people for the successful transition into adulthood and employment. The changing and uncertain working world has led to the need for new skills, a shift in the way we think and plan for work and life, and the enhanced need for resilience. The traditional model of education is falling short and must be reconsidered. We must explore how the education system can better support young Australians to transition into the working world in the shadow of the fourth industrial revolution.

The Australian education system is broadly segmented into four sub-sectors:⁸⁵

- Primary school: reception (or foundation) to year 6 or 7 (state dependent), with the focus on developing essential literacy, numeracy and social skills, and providing foundational knowledge to children about the world around them.
- 2. **Secondary school:** years 6 or 7 to year 10, with subject matter becoming more specialised within learning areas.
- 3. **Senior secondary school:** years 11 and 12, with progressive specialisation and a focus on the requirements for achieving the Senior Secondary Certificate of Education.
- 4. **Tertiary education,** which includes higher education and vocational, education and training.

Primary to senior secondary school

The Australian Curriculum, Assessment and Reporting Authority (ACARA) describes the Australian Curriculum from Foundation to Year 10 as three-dimensional (see Figure 6). The curriculum recognises the central importance of:

- key learning areas
- general capabilities
- cross-curriculum priorities.

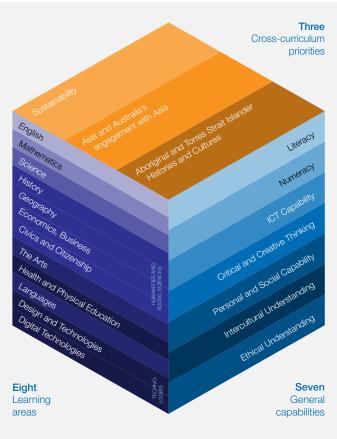


Figure 6: The three dimensions of the Australian Curriculum Source: Australian Curriculum, *Structure*. Available at: https://www.australiancurriculum.edu.au/f-10-curriculum/structure/

The current education system places a strong emphasis on numerically ranked academic measures and testing, including the National Assessment Program – Literacy and Numeracy (NAPLAN) and, in senior secondary school, the Australian Tertiary Admission Ranks (ATAR).

- NAPLAN is an annual assessment for schoolchildren of varying ages that tests reading, writing, language conventions (spelling, grammar and punctuation) and numeracy.
- ATAR is a ranking given to Australian students that is necessary to gain entrance into university.

These assessment schemes are based on principles of reliability, rather than the necessary validity to ensure graduates are future fit. According to Professor Martin Westwell, Chief Executive of the South Australian Certificate of Education (SACE) Board, 'reliable' assessments don't necessarily teach the transferable 21st century skills required for the future, as the ability to succeed under these testing schemes with rote learning is high. As such, students may be missing out on the skills they require to be successful in the ever-changing working world.

Testing

Australian students are tested and numerically ranked against academic measures through the National Assessment Program – Literacy and Numeracy (NAPLAN) and the Australian Tertiary Admission Rank (ATAR).

NAPLAN is an annual assessment for all students in years 3, 5, 7 and 9. It tests reading, writing, language conventions (spelling, grammar and punctuation) and numeracy. ATAR is a rank/score, usually for final-year students, that ranks a student against other students across Australia. A recent report by The Mitchell Institute commented that the ATAR and NAPLAN may be giving disproportionate emphasis to academic activity, and that this could drive misdirected priorities for teachers, school leaders and education departments.⁸⁶

An Australian Government report reviewing Australian schools stated that the ATAR is an assessment for university entrance and, for this reason, is of limited use to students who don't study after year 12. It is also not very useful to employers in assessing job applicants, as it doesn't include information about specific skills, potential or learning growth.⁸⁷ The ATAR's weakness is now being recognised, with universities in Australia using non-academic tests or interviews to assess resilience, judgement and empathy in addition to the ATAR for entry into teaching degrees.⁸⁸

Is this an opportunity to review whether current school testing is fit for purpose, and to prioritise the development of skills that will ensure young people are best prepared for the changing working world?

'[There needs to be] less importance placed on the HSC and ATAR.'

FEMALE, 18

'The ATAR is a ranking that primarily measures work ethic, based on standardised testing, not a score which reveals the true performance of the student.'

VIRGINIA GRANTHAM, NAZARETH COLLEGE, ADELAIDE



Media and Law Student, Macquarie University, Sydney

A third-year Media and Law student at Macquarie University in Sydney shared that, while at school, particularly towards the end of high school, she felt pressured to choose subjects that were more theoretical in nature with the aim of gaining a higher ATAR. This meant she passed on her preferred subjects, which were arts-based and encouraged creativity and the learning of soft skills.

Some academics and educational institutions have recognised the limitations of the current reliability testing framework and are taking active steps to focus on assessments of validity to foster the development and teaching of 21st century skills.

Young people want to feel more prepared

Young people want to feel more prepared to find secure work. A recent ReachOut survey⁸⁹ asked young people who felt inadequately prepared for the workforce what could be done to help them. Most commonly, they advocated for more opportunities to develop their experience of the working world – through placements, internships, apprenticeships and volunteering.

'We need better support networks, job opportunities through university and real experience.'

MALE, 23, QLD

Real-world work experience at high school

One school consulted during the writing of this report revealed that it is no longer able to provide work experience opportunities to its high school students due to budgetary constraints. A Working With Children Check (WWCC) is required for personnel at each work experience location, and the associated volume of administration was too great. As a result, the school took the decision to remove the program. This is concerning and unlikely to be an isolated case. Given these challenges, it is important to consider how we can continue to provide these rich learning experiences.



Tertiary education

The Australian tertiary education sector is segmented into vocational, education and training (VET) and higher education. The VET sector, which includes Technical and Further Education (TAFE) institutions and other registered training organisations, provides students with access to a range of practical and skill-based courses. Higher education providers, which include a range of research and teaching universities, offer both practical and theory-based courses, with many degrees a blend of the two.

Despite close to one million new jobs predicted to be created by 2022 and approximately 90 per cent of these jobs requiring a post-school qualification, 90 youth unemployment rates continue to rise and young people are worried about their job prospects after school and university.

ReachOut surveyed students across Australia and found that many don't believe their education is equipping them for the workforce, with 20 per cent indicating that they don't feel confident that they will be able to find work after completing their studies.⁹¹ Those who don't feel confident are calling for courses that incorporate a work experience component: 28.4 per cent indicated that opportunities such as work experience, internships, apprenticeships, placements and volunteering would help young people find work.⁹²

The higher education sector is developing new educational models with a stronger anchor in industry that incorporate real working-world experiences.⁹³ The University of Technology Sydney, for example, prioritises supporting students with a workplace-like experience during their degree, with 85 per cent of recent undergraduates undertaking an internship or internship-like experience prior to graduation.⁹⁴

Submissions to the Senate Select Committee on the Future of Work and Workers referenced a number of ways the higher education sector needed to change, and is changing, to meet future work requirements. Specifically:

- Close partnerships between the tertiary sector and industry would better identify future workforce needs and ensure that new and emerging skills are embedded in teaching programs and that real-world work experience is incorporated into courses and degrees.
- Greater linkages between the VET and higher education sectors would allow students to move flexibly between institutions and qualifications so that entry into education and training is easier, and prior qualifications are recognised.⁹⁵

These recommendations were echoed by the academics and employers interviewed for this report, with many raising the idea of developing an 'education ecosystem', a shared model of education involving governments, employers, educators and parents to support young people.

The education ecosystem



- **Government:** Create policies and frameworks for education; provide funding.
- Educators: Traditional and emerging educators work closely with students/workers, government and employers/industry to ensure that educational needs are being met in this fast-moving working world.
- **Employers:** Provide training opportunities for employees, with ongoing professional education and upskilling a greater requirement as the working world continues to change. Employers should also explore providing employees with the *time* to upskill.
- Parents/carers: Provide guidance and support to young people.
- Young people: Own their educational needs based on individual motivations, recognising that the model of education is evolving and that they are responsible for obtaining the right skills to maximise their career success, whatever it may look like.

Kiara, entering thirdyear of university and working part-time, Sydney

Kiara has just finished her second year of university, studying a Bachelor of Business Management at a private higher education institution in Sydney. Having grown up in the country, she chose her university degree after attending an information day at her high school.

Kiara's university has ties to industry, and internships are a core component of degrees. She now has a part-time job at the same company she has interned for as part of her degree.

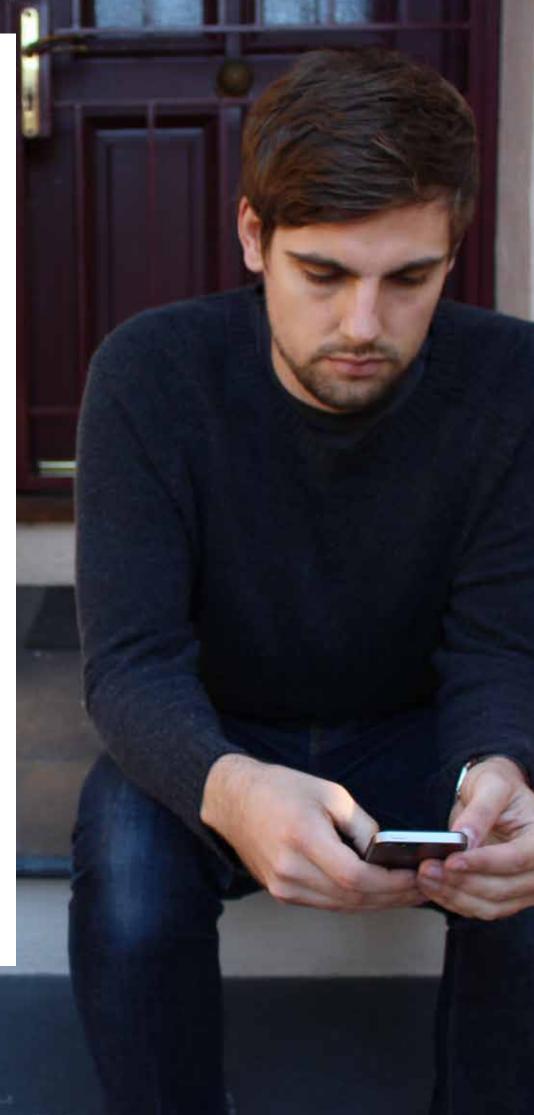
Kiara feels that it is very hard for young people to get experience, as many companies want employees to have experience before they will hire them. She feels that it could be the role of educational institutions to help bridge this gap between education and industry, including for high school students who want to enter the workforce via entry-level roles.

Education for life

As the world of work changes, and changes at a rapid pace, smaller, faster and smarter approaches to learning are required.96 The 'shelf life' for skills will be shorter, with some estimates putting it at an average of six years.97 It will be impractical for young people, and adults, to go back to university or TAFE each time they change jobs or careers. Hence, 'micro-credentials', or short-burst qualifications, are becoming an essential component of any career.

Universities are responding to this demand to both upskill and learn new skills by providing new and flexible qualifications. Pro Vice-Chancellor of Education at the University of Technology Sydney, Peter Scott, shared that one of the key focus areas of the university is postgraduate qualifications, and how the university can support the requirements of the workforce.

Employers are also responding to this need by providing opportunities for their employees to upskill. For example, EY employees have access to the 'EY badges' program, which 'enables its people to invest in their own careers by earning digital credentials in skills that differentiate them in the market, such as data visualization, Al, data transformation and information strategy'.98 Badges are earned based on global standards and are recognised at all EY offices around the world. EY also offers its employees access to Udemy, an online learning and teaching marketplace whose training courses are globally recognised.



MAKING IT HAPPEN

'These changes in the way we work will affect our relationships, our intellectual life, our ideas of work-life balance, and how we engage in the public sphere as citizens separate from our work. So, in a sense people will need to learn how to be a whole person in a world where work is changing and will continue to change throughout their lives.'

PROFESSOR LESLEY FARRELL, MELBOURNE GRADUATE SCHOOL OF EDUCATION

The impacts of a changing working world will intersect with many aspects of a young person's life, from their financial security to their social relationships, which will greatly influence their wellbeing. For this reason, the systems and networks around young people, including educators, governments, employers, and parents and families, need to work together to help them respond to future challenges.

It is also essential that young people are recognised as the most important participants in their future. Involving young people in the development of solutions is crucial to overcoming barriers to engagement, encouraging uptake of interventions and enhancing young people's sense of agency. As powerful voices and influencers in the decisions of their futures, what needs to be done must be developed in conjunction *with* young people, not *for* them.

If we take this approach, we can reduce the negative impacts of mental health challenges on young people and communities, and ensure that the environments where young people live, learn and work will enable them to thrive.

Case study: Giving young people a voice

VicHealth Youth Deliberative Forum

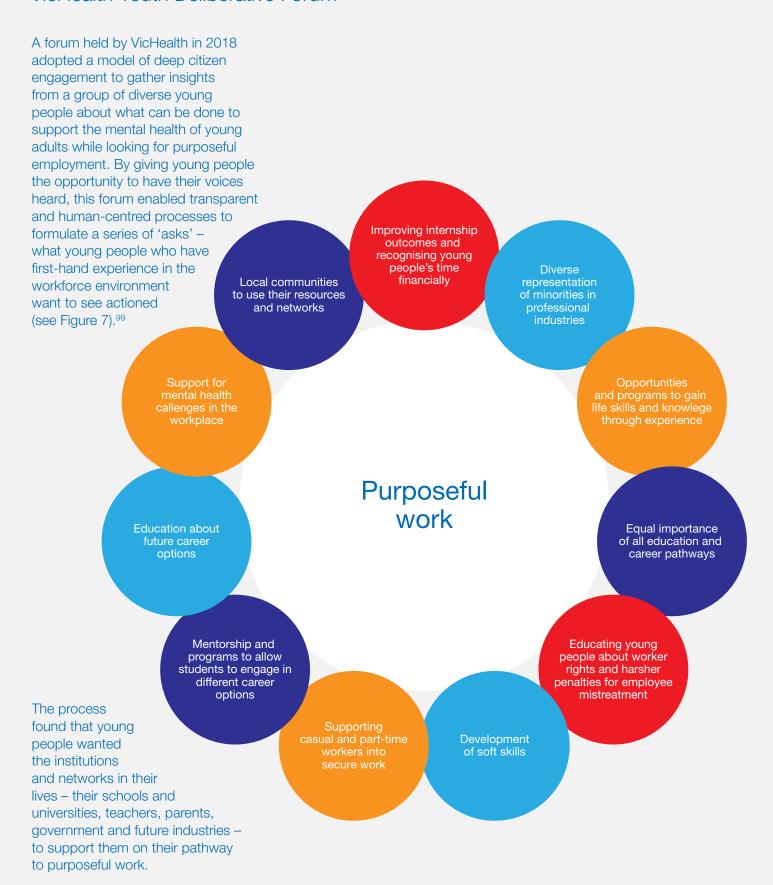


Figure 7: How policy makers can support young people on their journey to purposeful work. Source: Extracted from VicHealth, *Staying on track*, 2018.

Teach new skills for new careers: Equipping students for the 21st century

The Review to Achieve Educational Excellence in Australian Schools, chaired by David Gonski AC, was supported by an independent panel of experts drawn from different states, school systems and sectors. The Review committee was asked to recommend ways that Australia could ensure that school systems and schools truly prepare Australia's young people for an everchanging world.

Recommendations from this work were underpinned by the goal that every student needs to be equipped with the skills and knowledge to navigate a rapidly changing world, including the basic building blocks of learning, specifically literacy and numeracy, as well as skills that provided 'job resilience', to be able to adapt and respond to fast-shifting education and workforce needs.¹⁰⁰

The skills considered critical to prepare students for future work were those included in the General Capabilities set out in the Australian Curriculum, specifically literacy, numeracy, information and communications technology capability, critical and creative thinking, personal and social capability, ethical understanding and intercultural understanding.

The Review committee also noted that it was vital that university entrance did not overshadow a focus on vocationally based education in senior secondary education. Currently, senior secondary education models follow a curriculum that is separate from Foundation to Year 10 and is oriented towards academic disciplines for university entrance. ¹⁰¹ However, only 62.5 per cent of students finishing year 12 transition to university or other training. ¹⁰² For those not following this path, school-based VET programs that are of a high quality and involve a combination of work and training are essential to prepare students for the transition from education to employment.

An additional recent Senate Select Committee report also identified skills required for the future that distinguished humans from machines, including critical thinking, creativity, adaptability and emotional intelligence. In a range of submissions, the committee heard that our educational institutions need to produce workers who are creative and flexible, have good interpersonal skills, are able to interpret information, and can understand and solve complex problems, among other skills.¹⁰³

Other submissions to the committee introduced the concept of teaching employability. This was described as universities and other tertiary education providers, including TAFE institutions, working together with businesses to ensure that students were resilient and adaptable lifelong learners and developed 'boundary crossing' skills and capabilities that combined specialist knowledge and soft skills.¹⁰⁴

There is a common theme: to prepare young people for the future working world, we need our educational institutions to focus not just on qualifications for specific jobs, but on developing transferable knowledge and capabilities, with a focus on 21st century skills, which will allow them to adapt and respond to changing employer demands.

RECOMMENDATION: Prioritise teaching 21st century skills across the education system, from primary to tertiary education.

RECOMMENDATION: Ensure that 21st century skills are recognised and appropriately assessed across all education settings.

Learning 21st century skills:

The Research Project, South Australian Certificate of Education (SACE)

The Research Project is a compulsory subject for students completing the SACE. Students study an area of interest in depth, enabling them to develop their planning, research, synthesis, evaluation and project management skills, all of which are essential for learning and living in a changing world.

The benefits of the Research Project have been recognised by Flinders University, which has altered admission criteria for some degrees. Applicants with strong results in the subject can be considered for admission based on an adjusted selection rank, with 60 per cent weighting towards the ATAR score and 40 per cent weighted on Research Project performance. 105

Professor Martin Westwell shared that 21st century learning is a priority for South Australia. Building on the Research Project, the SACE is moving towards a curriculum assessment approach that will involve less emphasis on standardised testing and more on the application of knowledge, with the aim of better understanding a student's specific skills, including critical thinking and problem solving.

'With the research project, we are asking students to research information, to question, to apply their knowledge and make a judgement, and to do that in an area they feel passionate about.'

PROFESSOR MARTIN WESTWELL, SACE BOARD



Developing creative and critical thinking: Rooty Hill High School

Rooty Hill High School is a co-educational public school in Sydney's west. The school has invested in the development of a learning model, the Creative Inquiry Cycle, which focuses on a capability driven curriculum, personalised learning and leadership for innovation. The model is being used to support teachers to design programs that allow students to develop their creative and critical thinking. The model's lesson plans focus specifically on the creative dispositions of imagination, inquisitiveness, persistence, collaboration and discipline. Student input is also an important aspect of the Creative Inquiry Cycle, where students are asked to articulate and evaluate their own capabilities. The use of the Creative Inquiry Cycle framework is still in its infancy. However, the school is reporting positive results and improved learning, with students being more collaborative. imaginative and curious, and showing greater engagement in the classroom.

'It was hard, at first, to wrap
my head around the idea that
there is no right or wrong
answer; but then that could
also be interesting as well,
because you can look at two
different perspectives.'

ZANE, YEAR 9 STUDENT, ROOTY HILL HIGH SCHOOL

A focus on enterprise skills:

\$20 Boss, Foundation for Young Australians

Developed by the Foundation for Young Australians and National Australia Bank, \$20 Boss is a nationwide in-school program run by primary and high school teachers. The goal of the program is to provide young people with an opportunity to build on their enterprise skills, including creativity, team building and project management. As part of the program, students are provided with \$20 of start-up capital to create, launch and operate a business venture over the course of a school term. At the end of the

program, students are encouraged to pay back the start-up money, after building their financial literacy and project management skills along the way. With enterprise skills becoming increasingly expected by employers, a growing number of schools are participating in the program, recognising that it is important to equip young people with these skills to enable them to participate successfully in the changing workforce. In the past four years, over 30,000 students from over 500 schools across Australia have participated in the program, making \$20 Boss the largest entrepreneurship program in Australia.



Career education for a future working world

Career management is the ability to plan and set realistic career goals, and to develop the knowledge and adaptability to navigate available opportunities. These skills are developed through understanding the labour market and how it works, and through being aware of employment options. ¹⁰⁶ Career education must prepare students for the transition from education to employment, reflecting the need for a broader approach as the working world is changing and there is no longer a linear pathway to a single career or profession. ¹⁰⁷

Just as education providers need access to labour market analysis and job growth projections, and need to understand skill requirements and gaps, this information is also required for career education programs, so that young people know what the skills of the future are, and where they should direct their career planning. Career education should also teach students about employment conditions, their rights at work and employer responsibilities.¹⁰⁸ The ability to understand and negotiate work contracts will also be an increasing requirement.

The Australian Government Department of Education and Training has developed a new National Career Education Strategy¹⁰⁹ to increase awareness and improve national consistency of career education, with a focus on skills and capabilities for the future, collaboration between schools, employers and local communities, and career management and navigation skills. Ensuring schools are fully equipped to implement this strategy through career education programs is a priority.

RECOMMENDATION: Ensure that career education in secondary schools and beyond includes an understanding of how the working world is changing, with a focus on 21st century skills, career pathways and practical life skills.

RECOMMENDATION: Make labour market analysis, job growth projections and skill requirements information readily accessible to young people, parents and educators, including an understanding of different employment arrangements, employer responsibilities and employee rights.

RECOMMENDATION: Explore the development of a gig work hub that provides information and advice on contractual arrangements, and employment rights and conditions for gig workers.

What young people expect from career education programs

Many young people felt that changes to the current education system, including improving the quality of teaching, provision of courses and changes to academic testing, could better prepare them for securing future employment. Young people advocated for the need to learn practical, relevant life skills such as budgeting, taxes and job application skills throughout their academic careers, so that they can feel better prepared for 'real life'.

They also want to be provided with career counselling, mentoring and advice, so that they know what skills employers are looking for, the job opportunities that are available to them, and how best to apply.

'There needs to be less importance placed on the HSC and ATAR. We need to educate school children about alternative routes into the workforce, rather than completing school and the HSC.'

FEMALE, 18, NSW

'Subjects should be based around future changes. [We need to] change the way things are taught.'

MALE, 18, WA

Invest in social and emotional learning to build student resilience and mental wellbeing

'Having the resilience to deal with employment precarity is significant. It's about encouraging everyday coping strategies so that young people can deal with anxiety and manage the stress of life.'

PROFESSOR HELEN CAHILL, MELBOURNE GRADUATE SCHOOL OF EDUCATION

For young people to be able to cope with the stressors that they may face in the future working world, it is also critical that they are equipped with the skills and behaviours to be able to bounce back from adversity, an ability that is referred to as social and emotional learning (SEL). Building these skills early allows young people to better respond to rapidly changing and new environments, to reduce or avoid the negative impacts of stress and, ultimately, to prevent the onset of mental health issues.

SEL develops young people's emotional literacy, stress management and emotional regulation skills, as well as positive coping strategies, and encourages help-seeking and peer support, while also building decision-making and problem-solving skills.¹¹⁰ These skills all help to provide resilience to stressors and prevent emotional and behavioural issues from developing.¹¹¹

Despite mounting international evidence supporting the benefits of SEL, it is not holistically provided in Australian schools or universities. There has, however, been increasing uptake in recent years as more programs and initiatives are made available. A recent example launched in 2018 is the Be You initiative led by Beyond Blue. Be You is a national mental health education initiative for educators across early learning, primary and secondary schools to promote positive mental health in children and young people. Educators registered with the program receive online, evidence-based resources. Learning resilience skills is a key component of the education modules, and educators are provided with an understanding of how to teach SEL skills and foster resilience in everyday learning contexts.

It is important that SEL programs are built into higher education. Research has found that a strengths-focused resilience-building seminar within the university curriculum was useful for students and translated into behaviour change. 112 Embedding resilience units into first-year degrees for all students could help to develop the necessary skills and behaviours for responding to a new environment and life stage. 113,114

Additionally, digital solutions can be incorporated into schools to support SEL. A report by the World Economic Forum¹¹⁵ stated that the number of SEL products in the education technology market is insufficient. The report identified several opportunity areas, such as digital role-play and strategy games, and leading-edge technologies such as wearable devices, apps and virtual reality, as platforms for further developing social and emotional skills for young people.

RECOMMENDATION: Increase

investment in and uptake of social and emotional learning (SEL) programs, supported by digital solutions, across all education settings.

Digital solutions that teach social and emotional learning: ReachOut Orb

ReachOut Orb is an innovative and engaging 'serious' game designed for use in year 9 and 10 classrooms, mapped to the Australian Health and Physical Education and NSW Personal Development, Health and Physical Education Curriculums and General Capabilities. The game seeks to improve students' understanding of key factors and skills that contribute to improved mental fitness and wellbeing.

Students enter a virtual world where a negative force known as The Glitch has drained colour from the world, causing people and machines to behave oddly. Students interact with a range of characters in an attempt to return colour and positivity to the world. ReachOut Orb uses positive psychology principles to increase students' knowledge and understanding of the evidencebased actions they can take to enhance their mental fitness and provide a buffer against mental illness.

The game helps students to:

- improve their mental fitness and wellbeing
- understand a positivity mindset
- identify and use their strengths
- develop and sustain positive relationships
- build resilience.

ReachOut Orb is supported by a comprehensive teacher resource, to help teachers plan lessons to reinforce the wellbeing messages.

Real-world work experience

A consistent barrier to full-time employment mentioned by young people in research by ReachOut and more broadly was the need for relevant vocational and practical work experience. Over 40 per cent (43.3 per cent) of young people surveyed as part of ReachOut's *Brand Survey 2018* felt that the training and support they received wasn't adequate to find work, and that opportunities such as work experience, internships, apprenticeships, placements and volunteering would help.

It is essential that secondary schools and higher education providers work with their local communities and industry to ensure that young people develop valuable work-based skills as part of their learning and courses, to support the transition from education to work and improve their employment outcomes. Furthermore, schools should be equipped with the measures they need to overcome the financial and logistical barriers they may face when providing work experience opportunities for their students.

RECOMMENDATION: Equip students with real-world work experience through industry-linked work experience, internships and apprenticeships.

Internships that provide real-world work experience:

CareerTrackers

CareerTrackers is a national not-for-profit organisation that supports young Indigenous Australians in their career development. CareerTrackers links Indigenous students with employers for paid, multiyear internships. Each student completes internships during their university or high school breaks with partner organisations matched to their career aspirations. As well as getting relevant industry exposure, young people in the program have the opportunity to develop relevant workplace skills and to have workplace mentors before they graduate. Through the CareerTrackers program, students receive training to prepare them for leadership in the workplace and the community. The program also provides a range of supports for Indigenous students to boost their progress at university, in their internship and within the Indigenous community. CareerTrackers students complete university at higher rates than their non-Indigenous peers, and 95 per cent of alumni are in full-time employment in their field within three months of graduation. The program has grown considerably over the past ten years, and its success has been recognised by employers, governments and Indigenous communities throughout Australia.

'Seeing people who are absolutely striving in any field really pushes me on and makes me feel like I can achieve something.'

CLARK DONOVAN, CAREERTRACKERS 2018 INTERN OF THE YEAR

Higher-level apprenticeships: Swinburne University of Technology

Swinburne University of Technology, a dual-sector university delivering both higher education and vocational education and training, is working with Siemens Ltd on a new Higher Level Apprenticeship pilot project.

The curriculum consists of 22 weeks of study at Swinburne and 26 weeks of hands-on training at Siemens. Students rotate between the two locations, based on the content, skills and knowledge they are learning. This method aims to provide a diverse learning experience, while also incorporating skills for the new millennium in business and design.

The pilot project seeks to improve science, technology, engineering and maths (STEM) skills and culminates in a new Diploma and Associate Degree in Applied Technologies. The course includes a range of topics, including Industry 4.0 and the Internet of Things (IoT), disruptive technologies and engineering. 116

Are unpaid internships fair?

Internships are a popular way for young people to gain experience and contacts, despite many of them being unpaid positions. The growth of internships has also been driven by universities, which are under increasing pressure to produce work-ready graduates. The majority of research shows that internship participants consider it a positive experience that improves their employability skills and helps them to gain employment. A number of studies talk about the risks of unpaid internships, including:

- inequality of access to learning opportunities
- the variable quality of experiences in terms of development of skills and capacities
- · the cost of undertaking the internship
- the displacement of regular employees by these arrangements¹¹⁷

There is limited national data on the number of paid or unpaid internships in Australia. However, a 2016 study into unpaid work experience found that 58 per cent of respondents aged 18 to 29 had participated in at least one episode of unpaid work experience in the last five years. Over a quarter of respondents reported that they had cut back their hours of paid work in order to participate, and around the same number indicated they had received financial assistance from family or friends to cover living expenses.¹¹⁸

If internships are to become an essential component of the pathway to full-time employment, it will be important to ensure they are fair and available to all, and not just for those with the external supports to afford it.

Empower educators and support staff to enhance the positive wellbeing of students

Schools, TAFEs and universities are central in young people's lives. As such, they present opportunities to deliver a range of mental health promotion and intervention initiatives. Evidence suggests that successful approaches to teaching wellbeing are achieved when schools adopt a holistic approach, coordinating strategies across the whole school community including parents, students, staff and the wider community.

School staff are often the first to identify the symptoms of mental health difficulties in students. 119 Yet, many teachers feel they don't have the time or the confidence to give students the mental health care they need. 120 It is important to equip school staff with the skills and training required to confidently and effectively identify the early symptoms of mental health issues and to intervene successfully.

It is also important to continue this support into higher education settings. Similar to teachers, university staff can feel unsupported in helping students who are experiencing mental health issues. ¹²¹ In 2016, the Enhancing Student Wellbeing project (http://unistudentwellbeing.edu.au/) was developed to provide online resources and training for support staff at universities to enable them to better support students, including providing guidelines on how to manage difficult conversations.

RECOMMENDATION: Invest in training educators and staff across schools,

TAFEs and universities to better identify mental health issues and risk, and connect young people to the right support.

Empower parents, carers and families to support young people

'We must educate parents and carers about the future working world, what this means for their children and how best to support them.'

VIRGINIA GRANTHAM, NAZARETH COLLEGE, ADELAIDE

Parents and families play a central role in forming young people's future decisions. Parental expectations and ideas of what future success looks like can contribute to feelings of stress and anxiety as young people feel pressured to meet these goals. It is vital that parents and carers are educated about what future opportunities the new working world presents, and that they understand that future 'success' can take many different forms. Several interviewees identified that parents' outdated understanding of the workplace is sometimes negatively impacting young people's decisions about their future. Parents and carers will need to be equipped with the knowledge and skills to support young people's mental health and wellbeing as they make decisions about the future and when they are at their most vulnerable, including in the transition from education to work.

RECOMMENDATION: Extend career education to parents and carers so that they are informed about the impacts of the changing working world and are confident to support their child in their education and career choices.

RECOMMENDATION: Equip parents and carers to identify the early signs of stress or mental health issues in their child, including study burn-out, and to effectively provide support.

Helping parents and carers to support teenagers:

ReachOut Parents

ReachOut Parents is an online service for parents and caregivers of adolescents aged 12-18 that helps them to support their teenagers with issues that affect their mental health and wellbeing. Free and accessible 24/7, ReachOut Parents comprises a self-help website containing multimedia information and support, an online peer support community forum and a 1:1 teleweb coaching service (delivered in partnership with The Benevolent Society). Parents can choose which services they engage with, based on their support needs and preferences. The service is designed to increase parents' mental health literacy and their confidence in dealing with emerging mental health issues, and to support them in strengthening their relationship with their teenager so they can better support them through everyday stresses and tough times.

Mental health support for a future working world

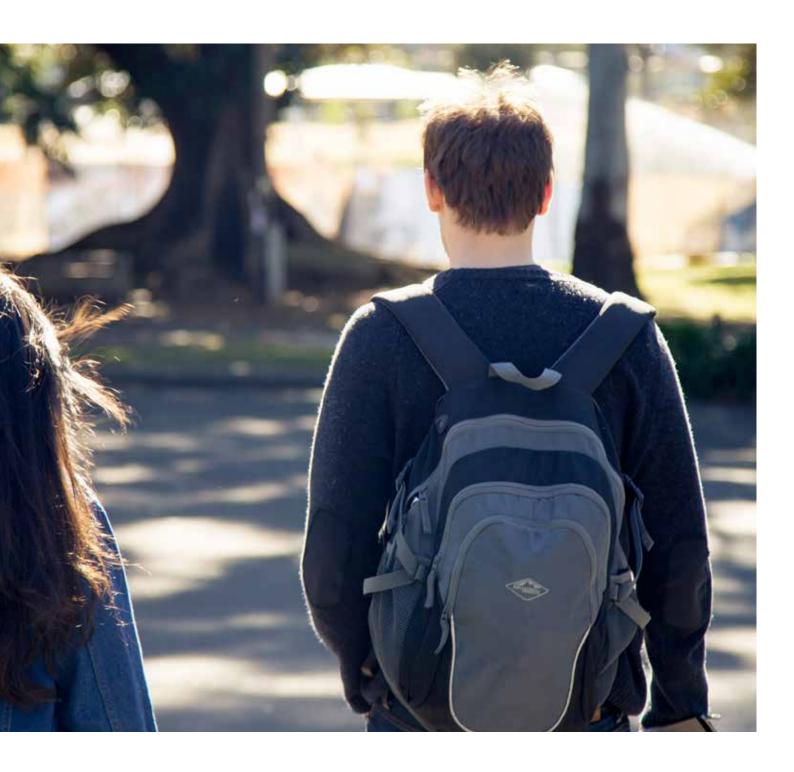
In order to prevent or mitigate the stress and anxiety that young people may experience in the future working world, it will be important for employers to invest in mental health and wellbeing programs. These programs focus on prevention, such as increasing young people's ability to handle stressful situations through promoting healthy eating, physical activity and resilience training. Many of the programs are delivered through online learning modules.

In Australia, one example of such a program is KFC Australia's Wellness Program. KFC employs 35,000 people Australia-wide, 90 per cent of whom are under 25 years of age. Launched in 2012, the program helps KFC employees learn more about healthy living through a series of online training models that cover how to improve work/life balance, wellness assessments, and tips on healthy eating and mental wellness.

Further, work in the gig economy has the potential to contribute to significant mental health impacts associated with financial and job insecurity, reduced social contact, and limited interaction with and direction from management, among other factors. Mental health and wellbeing programs for these workers will be particularly important, and there is a real opportunity to use online technologies that are scalable and cost-effective to deliver this support.

RECOMMENDATION: Support young workers to learn about mental wellness, enabled by online technologies, to help manage stress and anxiety, including due to unemployment, underemployment and new 'gig' arrangements.





Appendix A: Interviewee list

Educators, academics and employers

Name	Organisation	Title
Juliet Andrews	EY	Partner, People Advisory Services
Fiona Brooks	University of Technology Sydney	Assistant Deputy Vice-Chancellor (Research): Development, Deputy Vice-Chancellor (Research)
Helen Cahill	University of Melbourne, Melbourne Graduate School of Education	Academic
Alison Cairns	EY	Partner, Technology Advisory
Sandra Casinader	Westpac	Head of HR Strategy, Inclusion and Diversity
Nathan Chadwick	Airtasker	Chief Financial Officer
Lesley Farrell	Melbourne Graduate School of Education	Associate Dean Research
Tim Fung	Airtasker	Founder and CEO
Virginia Grantham	Nazareth Catholic School, Adelaide	South Australian Certificate of Education (SACE) Coordinator
Linda Greenleaf	TAFE	Head of Commercial Capability
Peter Hutton	Future Schools Alliance	Co - Founder and Director
Dominic Price	Atlassian	Head of Research and Development, and Work Futurist
Peter Scott	University of Technology Sydney	Pro Vice Chancellor (Education)
Keren Shlezinger	University of Melbourne	Research Fellow, Youth Research Centre
Alex Snow	Foundation for Young Australians	Head of Research
Martin Westwell	SACE board	Chief Executive, SACE

Young people

Young person	Gender/location	Situation
Young person 1	Female, 18, ACT	End of first year university, working casually
Young person 2	Male, 16, NSW	Year 12
Young person 3	Female, 20, NSW	University/working
Young person 4	Female, 21, NSW	Third year university/working
Young person 5	Female, 24, NSW	Gig economy worker
Young person 6	Female, 24, NSW	Finished university, struggling to find work in their studied field

Appendix B: Release

Ernst & Young Australia ('Consultant') was engaged on the instructions of ReachOut ('Client') to co-author a report on insights into mental health and digital self-care by young Australians ('Project'), in accordance with the engagement agreement dated 26 September 2018, including the General Terms and Conditions ('the Engagement Agreement').

You should read the Report in its entirety including any disclaimers and attachments. A reference to the Report includes any part of the Report. No further work has been undertaken by the Consultant since the date of the Report to update it.

Unless otherwise agreed in writing with the Consultant, access to the Report is made only on the following basis and in either accessing the Report or obtaining a copy of the Report the recipient agrees to the following terms.

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- 9. In the event that a recipient wishes to rely upon the Report that party must inform the Consultant and, if the Consultant so agrees, sign and return to the Consultant a standard form of the Consultant's reliance letter. A copy of the reliance letter can be obtained from the Consultant. The recipient's reliance upon the Report will be governed by the terms of that reliance letter.

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