

2025

UPGRADING THE SCHOOL TO WORK TRANSITION FOR SOCIAL AND ECONOMIC IMPACT



CO-AUTHORED BY HEDX

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Methodology

YOUTH SURVEY

One national survey of Australian youth conducted by Year13 in September & October 2023.

Total responses = 3030

This survey formed the basis of this research paper and was designed to gather comprehensive information about the job and university application processes of Australian youth aged 15 to 24. This survey was conducted online and respondents were sourced via social media. Youth quotes featured in this report were sourced from extended response questions included in the survey, some of which have been edited for clarity and brevity.

A total of 3030 survey responses provides a large enough sample size to draw valid conclusions that represent Australia's youth population. With a sample size of at least $n=3030$ we can be 95% confident that the metrics are within $\pm 2\%$ of the result had we surveyed all 3,200,000 Australian youth aged 15 to 24.

See next for combined demographics of these surveys.

STAKEHOLDER INTERVIEWS

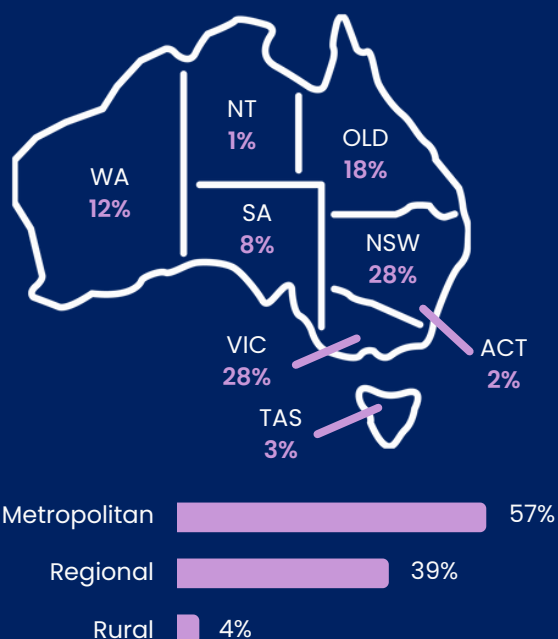
Ongoing interviews of stakeholders across the Australian school to work ecosystem from January 2024 to July 2024.

Total interviewees = 52

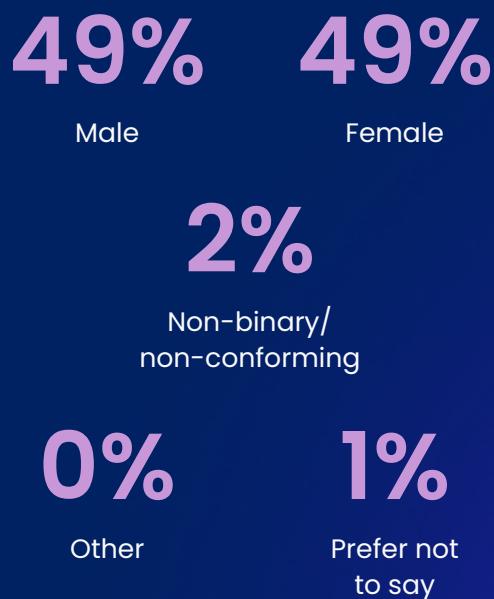
These interviews were designed to gain insights from various verticals across the school to work ecosystem, to ensure a broad range of perspectives and experiences. The interviews were conducted through a mix of online and in-person meetings, and all followed the same set of questions.

See page 11 for participants.

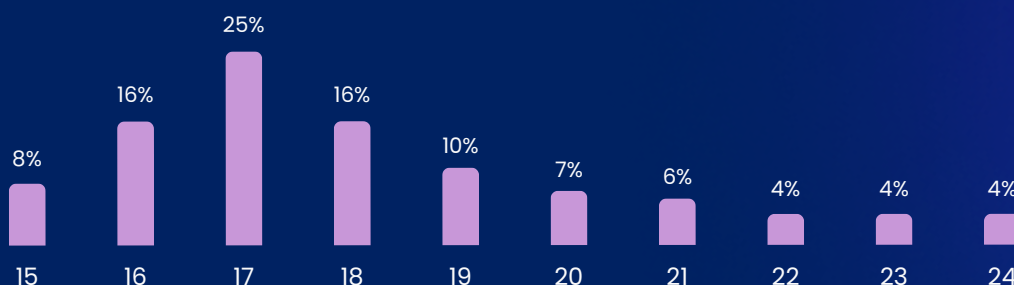
LOCATION BREAKDOWN



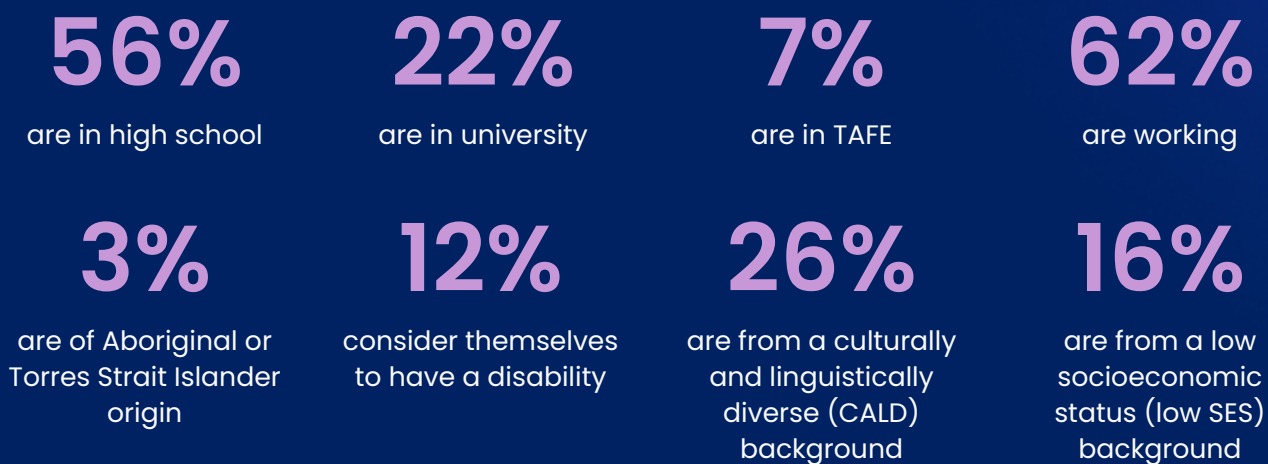
GENDER BREAKDOWN



AGE BREAKDOWN



OUR RESPONDENTS



Foreword

As we navigate the evolving landscape of education and employment, it is imperative that we address the critical transition from school to work. This white paper, co-authored by Year13 and HEDx, delves into the challenges and opportunities within this transition, highlighting the need for a more connected and supportive ecosystem. By leveraging data, technology, and strategic partnerships, we can create a seamless journey for young Australians, ensuring they are equipped with the skills and knowledge needed for meaningful work. Here at the FSO, our mission is to address the skills needs across Australia's finance, technology and business sectors by harnessing the full potential of the education and training system, leveraging its strengths to deliver impactful outcomes for learners. Our commitment to this mission is unwavering, and we believe that the insights and recommendations presented here will drive significant social and economic impact.



Patrick Kidd OBE OAM
Chief Executive Officer



Executive Summary

The school-to-work transition is one of the most pivotal phases in a young person's life, presenting both challenges and opportunities. At Year13, we believe that by strengthening student readiness—encompassing career preparation, essential skills, and social-emotional development—we can create a future where young people confidently navigate their pathways and thrive.

While the current system presents complexities—such as an overwhelming array of choices for students, increasing demands on career practitioners, and gaps between education and employment—these challenges also open doors for innovation and collaboration. The good news is that the key ingredients for success already exist. By aligning efforts across education, industry, and government, and leveraging technology, we have the opportunity to create a more seamless, connected, and effective transition system.

Creating a seamless, connected, and meaningful journey from education to employment cannot be solved by one organisation alone, and requires a collaborative effort. With our deep connection to young people and broad network of partners, Year13 is uniquely placed to help bring the ecosystem together. Our role has always been to give young people a voice. When paired with the perspectives of educators, industry, and policymakers, this creates a powerful foundation for identifying both the challenges and the solutions. By fostering stronger collaboration and aligning efforts across the system, we can ensure that every young person is supported in their transition from school to work—leading to better outcomes for students and the broader economy.



Will Stubley
Co-Founder & Co-CEO



Saxon Phipps
Co-Founder & Co-CEO



Glossary of Terms

Stakeholders The people, groups, organisations and institutions that are involved in the school to work transition in any way.

Ecosystem Defined as a complex network of interconnected entities that depend on and influence each other along the student's school to work journey.

Tertiary Education Post-secondary education, including universities, colleges, and vocational training (OECD, 2018).

Career Practitioners Professionals who assist students in navigating career options and educational pathways.

Pathways Structured routes for achieving education and career goals, including traditional and alternative options.

Meaningful Work Employment that contributes to personal and professional fulfilment.

Micro credentials A digitally-recognised certification that verifies a specific skill, competency, or area of knowledge.

Lifelong Learning Continuous pursuit of education and skills throughout one's life and career.

Acknowledgement

At the outset, we acknowledge everyone who contributed their time and insights to this project and who helped shape what we believe will be the catalyst for significant and much needed changes within the education and employment landscape, both within Australia and internationally. To enable open dialogue and maintain trust, we've de-identified direct quotes throughout the report.



Introduction

Since the early days of Year13, our core mission has always been to 'upgrade the school to work transition' because we believe that every young person deserves a happy, healthy and more fulfilled life.

And since the inception of the work of one of our partners in this report HEDx's mission has been to change higher education for good. It adopts and lives by this purpose to ensure that transformational opportunities for lifelong learning are available to all and best serve the needs of learners and a future society and economy.

Young People Are Struggling

70%

Of young people experience high levels of anxiety, depression, stress, frustration, and fear in Year 12.

Economic Development is Suffering

\$11.5T

The global skills gap is projected to cost \$11.5T in potential GDP by 2028 if it is not addressed.
(World Economic Forum, 2020)

Background

For the past 13 years, we've focused our time and energy on helping students build a plan for after school, providing peer-to-peer style content and e-learning resources co-designed by industry, to increase awareness and consideration of pathways, careers and skills. Having now garnered an audience of more than 2 million students on our platform, the natural next step in this journey is helping these students transition into the next phase, which for 89% of young people is further education and training (Year13, 2023). We know there are long standing systems and processes in place, that have been around for many years and which do facilitate post-school transitions. However, we also know, from direct feedback from our audience, that these systems don't work as well for everyone

and a lot of students are falling through the gaps.

Therefore, the question that prompted us to focus our efforts in this next phase was, 'how can we best act as a safety net under the current systems to help support all students into further education, training and/or employment at the right stage?'

In parallel with this, during the past 4 years at HEDx, interviews, written opinions and events with global higher education and corporate leaders have all pointed to the need for higher education to be agile to changing landscapes of learners needs, work skills required. Higher education providers need to improve how they evolve in their offerings to better match the changing times.

Why a white paper?

Year13 is well-known for giving young people a voice, but as we have grown, we are now actively working with each of the major stakeholders in the school to work journey. Therefore, one key advantage we have in identifying and understanding the core challenges of the entire ecosystem is our direct engagement and scale of access to learning providers, companies and people.

Therefore, over the last nine months, we've interviewed close to 50 stakeholders across the school to work ecosystem to understand what the gaps and barriers are in the current transition system, what the opportunities for improvement are, the roles and responsibilities of each stakeholder, and how we can better prepare students for life after school. In doing so, we have been able to gain insights and perspectives from across the whole ecosystem from those who are most impacted and/or who play a role in the school to work transition.

These participants include:

- High School Principals and Career Practitioners (from both private and public, as well as metro, rural and remote areas)
- Higher Education Future Student Teams and Leaders
- CEOs and Senior Leaders from Industry Peak Bodies and Organisations
- Employer Workforce Development Managers
- Government Policy Leaders

Additionally, we also conducted a comprehensive literature review to identify existing research and data to help shape the framework for not just this paper, but for what we have great confidence in as being the future solution helping students be prepared for life after school.

We have also taken the opportunity in this report to correlate the findings from this research process with the almost 40 years of global higher education experience and the 4 years of 150 podcast interviews with global leaders, that HEDx has completed. This allows us to ensure our research is backed up by broader evidence and experiences.

The core observations from the interviews, further supported by the literature, and findings from HEDx show the current situation is such that:

1

Students are not at the centre of the system

2

Career practitioners have an impossible job, at scale

3

Students are making uninformed decisions which is impacting tertiary education outcomes and attainment

4

Industry skill shortages are impacting economic productivity and competitiveness

Social and economic lens

Research demonstrates that the two major components of positive post-school pathways are social and economic issues (Billett, Thomas, Sim, Johnson, Hay, & Ryan, 2010). However, this is not a new concept or innovative idea, but rather one that has not been given the necessary focus, value or resourcing. The 2020 Shergold Review highlighted that ‘education is key to offering economic opportunity and social mobility to all young Australians’. An upgrade to the current school to work transition process is imperative to enabling a happier, healthier and more fulfilled population that exists within a thriving, productive and competitive economy. To break it down, it’s evident that what starts off as a small problem of a young person finishing school, being unsure what is best for them, becomes a much bigger problem the further down the value chain you go. In understanding this and applying this same social and economic lens, it’s obvious that if students are not leaving school happy and healthy, then every other incumbent stakeholder is negatively impacted until it reaches a population-wide systemic issue. We argue that it has.

This is exacerbated if the experience that they and all others gain at higher education places of learning is not keeping pace with the experiences and expectations of learners. These expectations have developed from their exposure to customer experience and technology enabled personalisation in their consumption of other services such as entertainment, mobility, media and financial and other health services. The parallels between customer experiences in other sectors and the opportunity to improve learner experiences has been a focus in the book *The New Learning Economy* (Betts and Rosemann, 2023) and the work of Year13 is a clear way that innovation of new services can serve the needs of this emerging economy.

Meaningful Work

Ultimately, if we want to help young people and in doing so, help the ecosystem, then the primary goal of the school to work transition needs to be on student readiness and supporting more young people into meaningful work, and pathways that last a lifetime. Simply put, meaningful lifelong work is the intersection of value creation where each stakeholder benefits. If we are optimising for meaningful work it means that

- students are happy, healthy and fulfilled,
- schools shift their focus to skills over scores,
- tertiary providers achieve higher retention and improved graduate outcomes,
- industry and employers have higher quality workers and increased output,
- learners are set up for success for life, and
- the government benefits from economic productivity and competitiveness.

Whilst it’s evident that a system geared towards meaningful work can benefit the whole ecosystem, the purpose comes back to the student, with author Johann Hari noting that a lack of meaningful work is attributed as one of the top causes of depression in today’s society (2018), with 32% of young Australians saying they struggle with depression as a result of trying to work out their career, of which this number jumps to 49% for those from low-SES backgrounds (Year13, 2023).

Well-Informed Decision Making

In order to support more young people into meaningful work and subsequently improved outcomes for high schools, higher education, training providers, industry, employers and government, it's imperative that every stakeholder in this journey has access to the necessary data, tools and resources.

It's become clear that even if we miraculously fix the four observations highlighted on the previous page, the school-to-work transition would still not be fit for purpose or effective.

Without the underlying data and the connected thread throughout a student's journey from school into work, the system remains disjointed, fragmented and based on many false assumptions.

Before we move onto the findings from our stakeholder interviews, it's important to set the scene by articulating what the system looks like in its current state, so that we can compare this in the 'Opportunities' section, with what it could (and should) look like.

The Current System

If we examine the current student journey from school to work, it typically begins in the senior years of high school.

A student might use a career exploration tool or platform to learn about various jobs and career paths, and might meet with a career practitioner once or twice a year, if available. After high school, while a small percentage may go directly into employment, the majority immediately apply to university, often because "that's what everyone else is doing," based on their academic transcripts and ATAR results.

Some pursue TAFE or Vocational Education and Training. Even if they complete their

higher education or training, they often finish unsure of their career path, how to align their skills with their interests, and unable to effectively leverage their 13 years of education and achievements in the job market.

This fragmented and disjointed journey highlights the lack of a cohesive system that seamlessly connects students' educational experiences with meaningful career opportunities. It relies heavily on individual initiative and sporadic guidance, leaving many students without a clear direction or the necessary tools to transition smoothly into the workforce.

Moreover, this disconnect disproportionately disadvantages other stakeholders such as employers, educators, industry, and government. Without valuable data and insights, they struggle to inform policy and program development, improve their offerings and support, and enhance productivity and workforce planning. This not only impacts students but also hinders the effectiveness and efficiency of the social and economic ecosystem.

In Summary

There are myriad solutions, programs, platforms and initiatives in place that seek to address at least one of the above four observations such as job fairs, career websites, alternative admissions pathways, industry-education partnerships and more. However, the true key to unlocking the collective power of all stakeholders is in connecting each of these elements together in a single, simplified tech-enabled and data-led solution powered by the wider and whole ecosystem, with the emphasis being on holistic student readiness.

Observation 1

Students aren't at the centre of the system

Throughout history and to this day, governments, organisations, industry peak bodies, employers, education groups, schools and many others, have tried and continue to make efforts towards improving the education and employment landscape. However, these efforts have often been focused from the single perspective of a single one of these stakeholders. The bottom line is, the system that results is complex, disjointed and is not fit for purpose.

This is backed up by insights HEDx have gained from interviews with global HigherEd leaders. These have found that poor student experiences, a failure to move from a time-based to a competence-based model of education, and the need to move to a skills-based lifelong learning model is needed. This is to keep up with accelerating and continuous changes in the nature of work as a dominant issue for higher education leaders and policy makers globally. HEDx has also found that solutions are typically partial and The New Leadership Agenda (Betts, 2023) arising with interviews from 50 global leaders sees a greater focus on partnerships.

67%

of young people say they feel anxious about their career planning process, followed by 54% who are stressed.

"My career planning process has been rough. I feel like I'm at a stage in my life where I know I should be learning skills or studying to get a specific job for the future, yet I have no idea where to start and the more time I take to figure it out the more anxious I get because I feel like I'm running out of time."

MALE, 20, NSW, REGIONAL

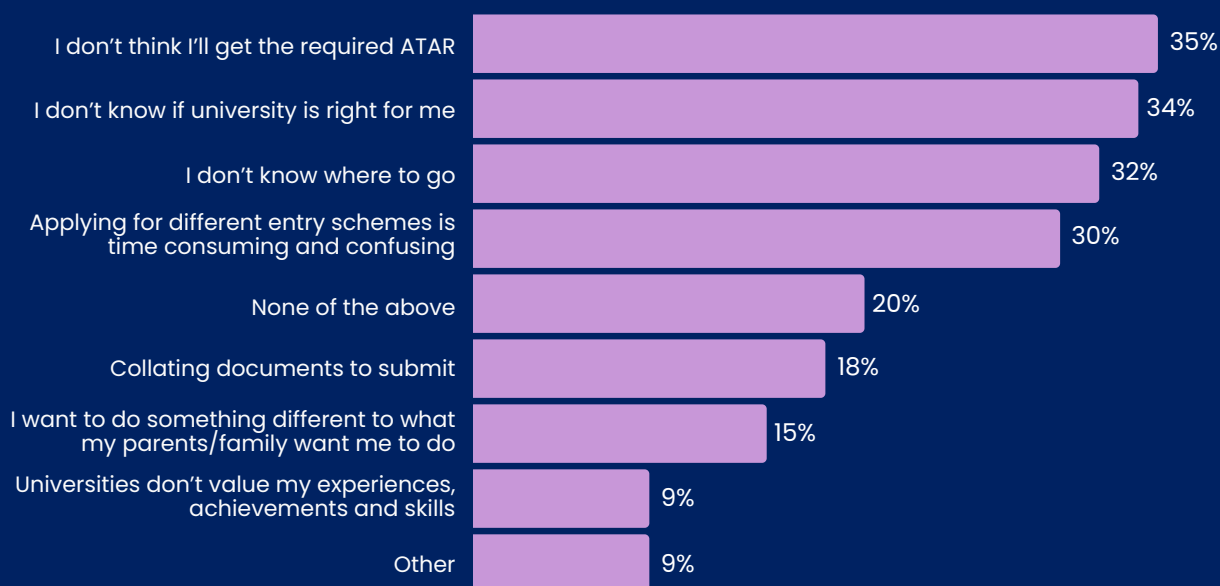
One such example of this in the current education landscape is the ATAR (the Australian Tertiary Admissions Ranking). There is overwhelming consensus that the ATAR is not an accurate representation of a student's full future capabilities, skills and potential to succeed in further education and training. In other words, we are measuring the wrong metrics, and therefore, valuing the wrong things. However, as Universities Australia have said, "the problem is not how the ATAR works, but how people think it works." (Shergold Review, 2020). The ATAR, as defined by the Universities Admissions Centre (UAC), is "a number between 0.00 and 99.95 that indicates a student's position relative to all the students in their age group." It is not a measure of total educational performance in high school, it is not a cumulative grade or mark, and takes into account nothing beyond how well a student performs compared to others in an exam, at a point in time.

So why is it used as the core indicator of success and why are we placing such massive value on this single metric that is primarily used as a supply and demand system for first year university undergraduates, when “it has become progressively less important in achieving the purpose for which it was intended”? (Shergold Review, 2020).

This comparative approach to measuring learning outcomes is mirrored in higher education where a time-based model that accompanies a measure of comparative performance without recognising other ways of learning or goals at stages of life when individual learners might see them emerge. This assumption of comparative performance is a barrier to a competency-based approach being pioneered in some places in higher education notably in US universities like SNHU and WGU, in Mexico at Instituto Tecnico de Monterrey and at Singapore Institute of Technology.

This failure to see the need for more flexibility and personalisation in how we assess and provide pathways for learners is mirrored by the lack of diversity and differentiation in higher and tertiary education providers. The dominant adherence to university rankings, by providers increasingly becoming more like each other, fails to recognise the opportunity for providers to diversify their offerings as a means to offer more personalised pathways to diversified and individual learners and their needs.

What challenges have you faced when applying for university? (Tick all that apply)



89%

of young people would like ways in addition to the ATAR or IB to show their skills, strengths and abilities when applying for jobs and university.

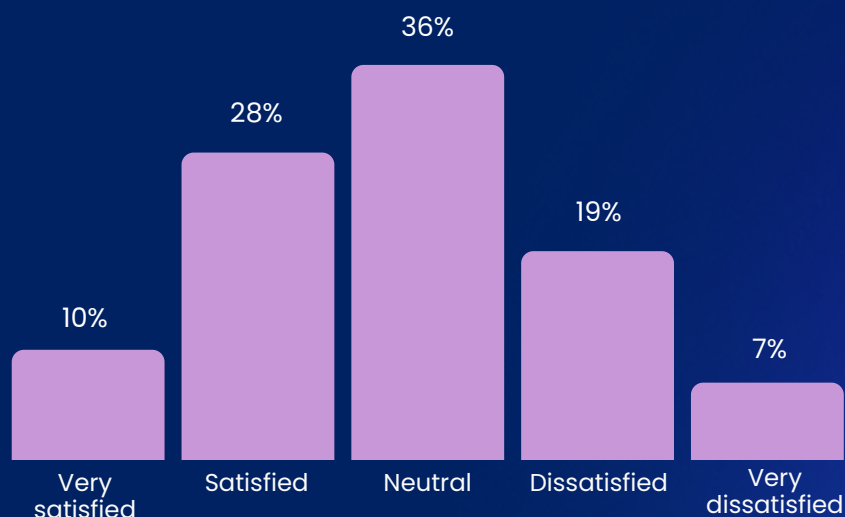
81%

of ATAR takers say it isn't a good measurement of all their skills, strengths and abilities

88%

of young people would like to have an official way to show their extracurricular activities and achievements they accomplished at school when applying for jobs and university.

How satisfied are you with the ATAR system as your way to get into university?



The misrepresentation and misuse of the ATAR is an example of such systems that have been established to benefit those in the ecosystem, except for the most important; the student. They are more an operational convenience for those administering the system.

There is also evidence that for those with ATARs below 80, it is not a reliable predictor of success in tertiary education, and yet these students are increasingly applying to university (Pilcher & Torii, 2018). We also know that there is significant research highlighting that a student's ATAR is very closely correlated with their socio-economic status (Cardak & Ryan 2009; George, Lucas & Tranter 2005; Palmer, Bexley & James 2011; Teese 2007), and so we must also question the level of the system's equity.

Shockingly, during our research interviews, we heard multiple stories from those working within the high school environment that not only are students "playing the game" of the

ATAR and making subject decisions based on perceived weighting and scaling, but that some teachers themselves are encouraging students to pursue non-ATAR subjects in an effort to maintain the school's status and reputation benchmarking.

For as long as the system is saying that's what matters, given, funding for schools is still linked to their ATAR results, then that's what the focus is going to be on at the school level. It is the same bizarre response to how universities prioritise things other than their students in pursuing a place in rankings.

“We measure what we value and we value what we measure”

Marie Previte, Edmund Rice Education Australia Flexible Schools

“I’ve been unsure of what I am going to do my whole life and now that I am in year 11 it’s getting scary as I still have no career path and I feel like I should at least have something in mind about what I want to do for the rest of my life. I’m being challenged as my school doesn’t really tell me what I might be interested in doing based off my subjects and skills, and I need support to assist me to find out.”

MALE, 17, VIC, METROPOLITAN

“I feel as if I’m stuck at a crossroad. I’m so passionate about so many differing things to the point that I’m so beyond overwhelmed. I lack formal qualifications, so on paper I’m a less desirable candidate for the majority of positions. Employers are far more likely to take someone with proven experience, regardless of how eager I am to learn and develop my skills.”

FEMALE, 18, NSW, METROPOLITAN

This misuse and lack of understanding about how the ATAR works also highlights a crucial need for much more comprehensive information on not just the ATAR, but on post-school pathways, industries, opportunities, admissions processes and more.

Lack of awareness and perception was something highlighted by almost all of our interviewees and for good reason. At Year13, we’ve worked with industry and employers for many years, in an effort to increase awareness and consideration of various industries, jobs and skills.

One such vehicle is our e-learning Academy platform, focused on educating students through an engaging and interactive format, created by Gen Z for Gen Z. Despite whether we’re looking at an industry like hospitality, or a typically more stigmatised pathway like mining, the feedback from students in our post-uplift survey is always consistent, with the average result being a significant increase in those interested in pursuing that pathway, across the sample size, given they now understand more of what’s involved. At the

end of their schooling journey, students are required to make a decision about what they will pursue, and without the relevant and necessary information, they struggle to do so.

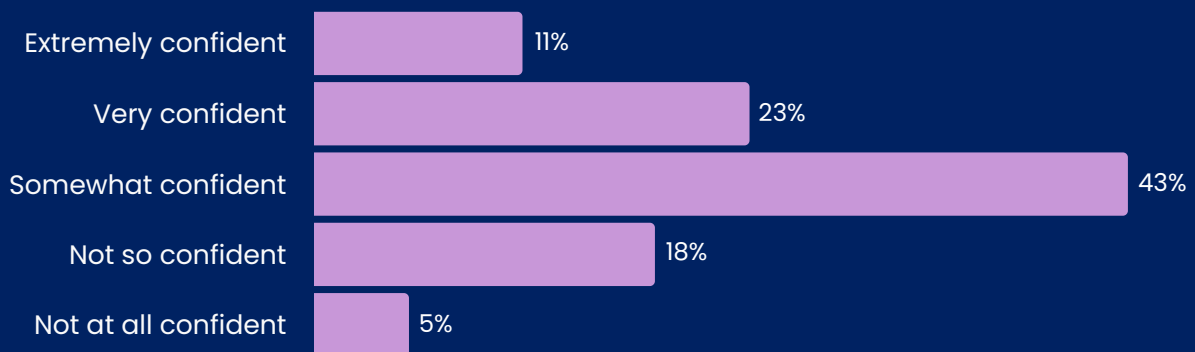
Our latest research reveals that 67% of young people feel anxious and 54% are stressed as a result of their career planning process.

What is really concerning about this is that stress significantly affects the ability to make clear decisions and adapt to change (Walden University, n.d.) so how can we expect teenagers to be able to make well-informed decisions, without the necessary information and understanding, and when they are dealing with such immense mental health and wellbeing challenges, with one Sydney-based University stating “If I were a student, where do I even begin?”

72%

of our users agree that before committing to a career path, they need to have some experience or exposure to it. (Year13, 2022).

How confident are you feeling about being able to get into a career you are passionate about?



34%

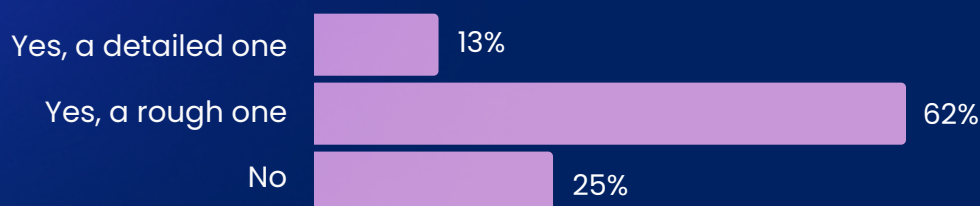
of young people say they don't know what career they want to pursue.



33%

of young people say they don't know how they can utilise their skills for a potential career path.

Do you have a post-school career plan?



74%

of young people with a post-school career plan say it helps them feel more confident about their future.



81%

of young people without a post-school career plan say having one would help them feel more confident about their future.

"Career planning is overwhelming, there are so many options and different pathways to get into careers. I am just about to finish year 12 and have changed career paths every few months due to me being so indecisive. I don't get any support and it is scary going into university for at least 4 years and paying thousands of dollars just hoping that I will actually enjoy my job."

FEMALE, 17, NSW, REGIONAL

Such examples and data shine a light on significant flaws in the current school to work transition and highlight the need to upgrade the traditional systems to a more fit-for-purpose model; one that places the student at the centre, facilitates connectivity across the ecosystem, implements technology for scalability, and leverages data capabilities to amplify impact, with the ultimate measure of success being more young people supported into meaningful work.

Two of the most significant innovations in higher education with regard to equity of opportunity and serving the personalised needs of individual students have been by Southern New Hampshire University (SNHU) and Western Governors University (WGU) in the US. Each has grown to be of around 250,000 student enrolments of largely unconventional pathway students who are poorly served by a conventional school to college transition model. They each are strong proponents of a competency-based approach, and their models are well described in *Changing Higher Education for Good* (Betts. M., 2024) where interview transcripts with them both can be found. The model at SNHU is also well-articulated in the book *Student's First* (LeBlanc 2022).

Observation 2

Career practitioners have an impossible job, at scale

Career practitioners today are operating in an environment of massive societal change, where new jobs and ways of working are emerging at a rapid rate.

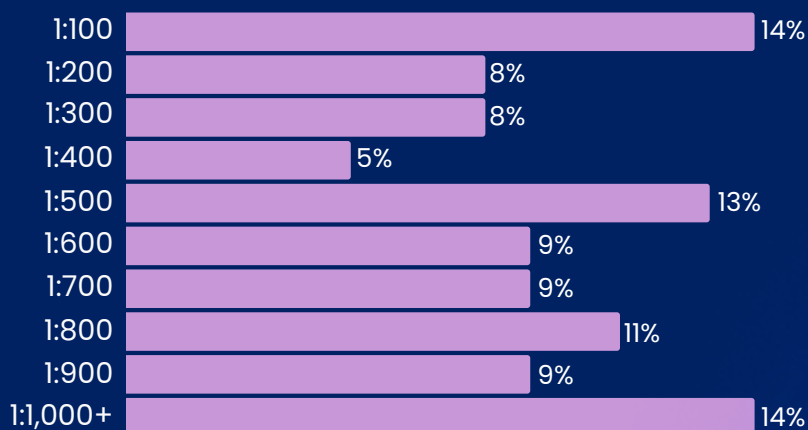
The next major problem and gap in the current school to work transition identified throughout the interview process and further supported by literature, is that career education is inconsistent, inadequate and under-resourced; significantly. A core contributing factor to the lack of standardised career education in regards to both time and quality, is the fact that the government does not mandate it within the Australia curriculum (House of Representatives Standing Committee on Employment, Education and Training, 2024).

Standardisation is a crucial mechanism in order to effectively and consistently measure anything at a large scale. With career education not mandated in the Australian curriculum, this, by default, removes the capability and capacity to accurately report

on, measure, and improve career education programs.

Across our stakeholder interviews, the quote “career advisors have an impossible job” was voiced multiple times from various positions within the ecosystem. To highlight the huge spectrum of career education, a Victorian study found that while 10% of schools are allocating just 45 minutes towards these programs, per student, per year, 10% are also spending 12 hours or more on career education per student, per year (House of Representatives Standing Committee on Employment, Education and Training, 2024). Therefore, it is unreasonable and invalid to assume that the efficacy of such programs are comparable to one another, when there are such huge variations in the delivery and resourcing.

Roughly what is the student to career practitioner ratio at your school?



The average student to career practitioner ratio in Australia is at least

560:1

Not only is there a lack of standardisation of career education, but there is also a major under-utilisation of data across the system (Shergold, 2020), and of technology-enabled scalability in general.

52% of career practitioners say they can't use student data to create tailored career programs in their school. (Career Tools, 2023)

Similar comments were also made in a 2016 research paper in the context of tertiary education, with the authors noting that increased and better use of these multi-touch-point datasets plays a critical role in improving admissions processes and better understanding how students can be more effectively supported through the school transition journey (Harvey et al., 2016). This appears to be an area of clear opportunity for AI to also play a part alongside data analysis.

The Tech Council of Australia stated during our interview process that “the whole point of having an education system is to prepare students for life after school” thus, the number one priority in effective career education should be providing students with unbiased, objective and industry-relevant career education that supports the student first and foremost (Rice, Gillis, Leahy, & Polesel, 2015).

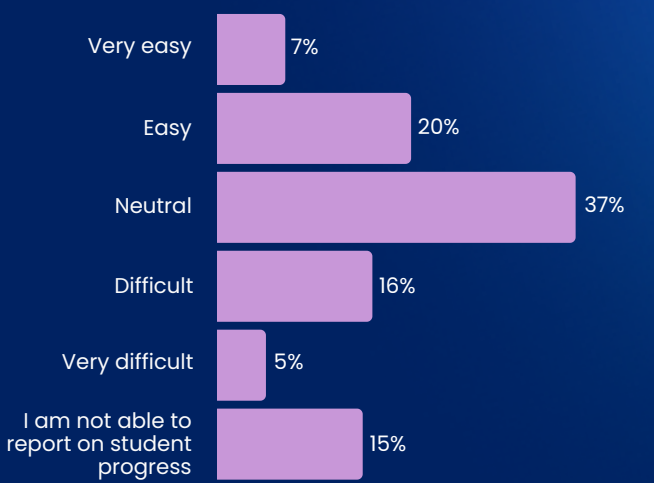
With so much importance being placed on career education and so many publications calling for significant changes and recommendations (Shergold, 2020; Universities Accord, 2024; Parliament of Victoria, Economic, Education, Jobs and Skills Committee 2018; Harvey et al., 2016; House of Representatives Standing Committee on Employment, Education and Training, 2024), there need to be mechanisms in place to track progress and measure success at both a school and system or government level.

As highlighted in the previous section, if our key indicator of success is the ATAR, and nothing else is being measured, then nothing else is going to be valued.

If there are to be significant changes and improvements made to career education across Australia, then there needs to be structures and frameworks in place that allow schools and governments to measure the impact of career development programs. “It’s a battle between the ‘targets’ of DoE and schools where success is only measured by the ATAR and university offers in a school in Western Sydney, where a large majority of students go into and find success in VET. It is a distorted view on what makes students successful.” (NSW, metropolitan, public, 6 years experience).

This statement highlights the hypocrisy of the system and the need for education to shift the focus from being solely measured by ATAR, to instead measure meaningful work, with the key metric of successful student readiness being the number of young people supported into and remaining in that meaningful work.

How easy is it to report on the career education progress you make with students?



Career Education Variability

A 2023 national survey of Australian career practitioners conducted by Career Tools in April 2023, revealed that the average student to career practitioner ratio is 560:1. Given that the recommendation is 450:1 (Economic, Education, Jobs and Skills Committee, 2018), and that 34% answered 800:1 or more, a very large percentage of students are not being provided with necessary and crucial career education and development programs.

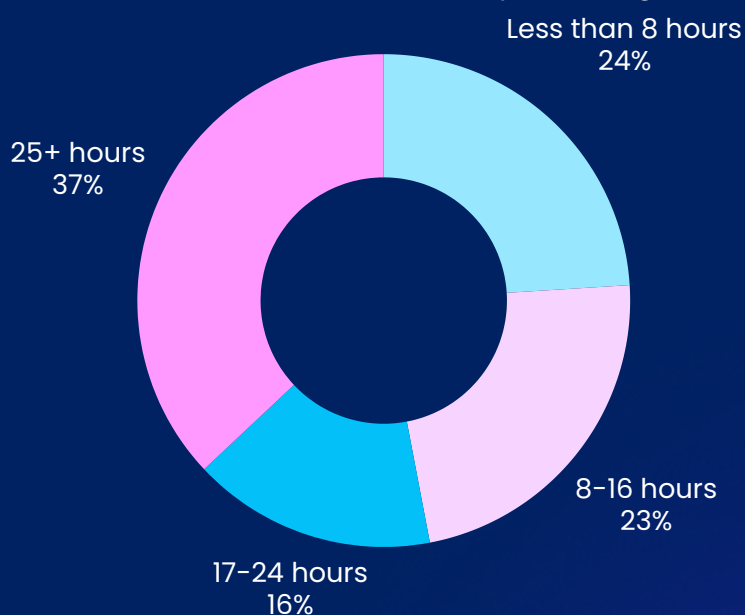
Career practitioners really do have an impossible job. Not only do they need to find one-to-one time with students, “at least once per year with each student in Years 7–9 and at least twice per year with each student in Years 10–12” (Parliament of Victoria, Economic, Education, Jobs and Skills Committee 2018), amongst their other work load and the administrative burden that forms part of the role, but they’re also expected to stay up to date on the latest and most-relevant pathways information and alternatives.

One high school career practitioner explained to us that whilst there are many incredible resources and tools for career education and development in schools, “there is no time to do any justice to these resources”, given the fact that career education is not mandated within the curriculum.

Further to this, 47% of career practitioners said they have 16 hours or less allocated to their career education work a week, with a 1 in 4 having just 8 hours or less a week.

It’s no secret that many career practitioners are also managing teaching loads, or are part time only, so given the recommendations for career education, what are we pretending not to know?

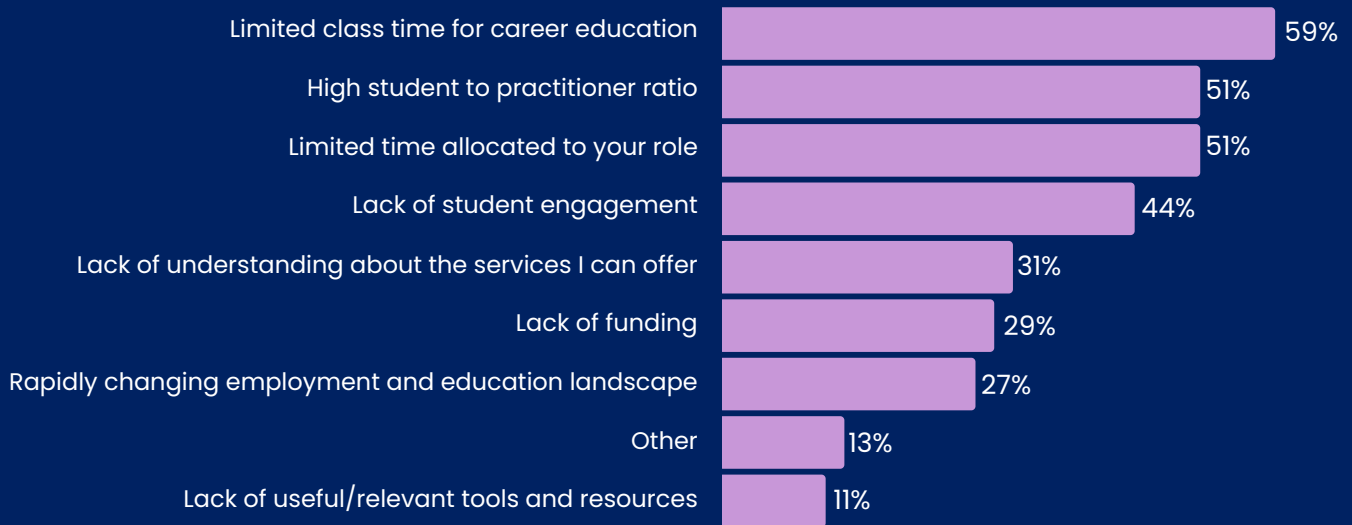
On average, how many hours per week does your school allocate to your career practitioner work?



“I am very fortunate that I have a lot of time allocated to my role as a careers adviser, and I still find it difficult to manage the workload and expectations and the requirements of the job.”

ACT, METROPOLITAN, PRIVATE, 5 YEARS EXPERIENCE

What are the biggest challenges you face?



"The biggest challenge is getting access to students – the curriculum is so packed that teachers are reluctant to allow students out of classes for careers education."

WA, REGIONAL, CATHOLIC, 20 YEARS EXPERIENCE

Getting career education right for school-aged students has a flow on effect to their post-school pathway. With the majority of young people intending to or having pursued University, TAFE, an apprenticeship or other vocational education and training, students need the necessary, up-to-date, and most aligned information in order to assist them in making a well-informed decision.

Given that '74% of young people with a post-school career plan say it helps them feel more confident about their future' (Year13, 2023), students having developed a career plan upon graduating high school should be a legislated requirement for all Australian students across all jurisdictions. The assumption* is (*although already validated through anecdotal work) that students are more likely to stay in their chosen further education and training pathway, ultimately leading to improved graduate outcomes.

Observation 3

Students are making uninformed decisions which is impacting tertiary education outcomes and attainment

Tertiary education is a major contributor to social and economic development through four core outputs being the formation of human capital, and the building, dissemination and use, and maintenance of knowledge (OECD, 2008).

The Australian Universities Accord final report highlights that 5.8M additional people will need a tertiary education qualification in 2052, roughly doubling the current number, and yet, with VET in long-term decline, completions of a first bachelor degree are at their lowest since 2014, emphasising the significant contrast between what is needed to ensure social and economic prosperity, and the current state of higher education in Australia.

Such ambitious tertiary attainment targets have resulted in the creation of numerous new and alternative entry pathways and enrolment incentives, as institutions strive to attract more students into their courses (Harvey et al., 2016).

One of the most obvious barriers to achieving increased retention and tertiary attainment targets is that the variety of pathways, admissions process, resources and information are extremely overwhelming, complex and confusing for not only students, but their primary influencers too.

This manifests into an inability to make a well-informed decision, both where to go and what course to choose, which can ultimately

impact student engagement and retention, with one University interviewee stating “we’re making it harder for them to make a decision.”

What we know through our engagement with young people is that quite often they’re making a decision under this idea that it’ll help buy them more time to figure out what it is they actually want to pursue.

This is where better utilisation of data and technologies, can be leveraged to not only help institutions make more informed selection decisions in an effort to impact retention, but also support students in making more informed choices when applying, and therefore positively impacting engagement. This is critical given that increasing retention is complementary to achieving more and higher quality enrolments (Harvey et al., 2016).

There is widespread agreement that the current system is not fit for purpose, given that every single stakeholder we interviewed for this paper made at least one comment about the complexity of the process.

Some of these comments included:



"Nothing is simple."



"Students need to sift through a lot of information, with very little time amongst the HSC."



"There is too much information; universities are all competing to try and get students which has a ripple effect."



"There is a lack of knowledge about the process – for the student, it seems very confusing."



"It's very complicated to figure out how to apply."



"Kids don't understand the system."



"It's a problem when every application process is different for every state."



"Very unclear on where to go for the information and who to trust and rely on."

One interviewee from the tertiary sector stated that "the challenge is that the increased range of pathways is putting a significant burden on university admissions teams and it needs to be technology that solves this."

This proliferation of tertiary pathways is predominantly for two primary reasons; to improve equity and increase retention. Tertiary institutions are increasingly acknowledging the need for more contextual information on individual applicants, however, the capacity and capability to do so is limited, with many of them, including Tertiary Admissions Centres (TACs), noting the additional workload that such applications

require (Harvey et al., 2016). Such upgrades to what is an extremely embedded and complex system demand solutions that only technology can provide.

Changing World of Work

The Australian Universities Accord final report emphasised innovation as one of the three essential elements for ensuring Australia's economic prosperity, warning that failing to increase participation and performance in further education and training could have detrimental impacts on the country's future (Department of Education and Science, 2024).

Australia, and more generally speaking, the World, are going through a fourth industrial revolution (World Economic Forum, 2016), characterised by rapidly increasing digital and advanced technologies.

The Global Forum of Competitiveness Councils, of which HEDx is a member, has a University and Research Leadership Forum which has pioneered the concept of Education or University 4.0 to mirror these developments in how universities need to focus on future skills, as outlined by Subic (2025).

The world of work in the future is incredibly uncertain, with one industry participant highlighting that "the only certainty is uncertainty."

It's difficult to build the perfect system, but we can strive towards the most efficient and effective one, where students are matched with the most suitable and relevant pathways for them at an individual level, providing objective and unbiased information through data and technology, and guided through a simplified and central application process that highlights the student through a holistic picture of what they're capable of.

Observation 4

Industry skill shortages are impacting economic productivity and competitiveness

The global skills gap is projected to cost \$11.5T in potential GDP by 2028 if it is not addressed.

The Australian Chamber of Commerce has highlighted that 'one in five occupations across Australia are experiencing skill shortages and more than one in four businesses report difficulties finding suitable staff to fill jobs' (2022).

When we look at the skills shortages in Australia, there are three core levers that can be pulled to try and solve this issue: immigration, re-skilling/up-skilling, and building a domestic pipeline. In May 2024, the Australian Government announced the 2024–25 permanent Migration Program which will make available 185,000 positions as a short-term strategy to address national skill shortages.

There are also many programs and initiatives in place that focus on re-skilling and/or up-skilling existing mid-career employees across the country as part of a mid-term strategy, such as online learning initiatives like Telstra's Workforce of the Future Program, Microsoft Learn, LinkedIn Learning, and IBM's pledge to skill 30 million people by 2030. The work of the Future Skills Organisation in programs such as 'Earn While You Learn' and other workplace-based skills initiatives are also targeting this issue mirroring leading international programs such as the Skills Future work in Singapore.

As all are finding, immigration is a short-term solution and is exposed to the additional limitation of emerging population decline

from falling birth rates globally. This means that the most sustainable lever available to pull is enhancing the quality of the domestic pipeline, given it requires a much longer-term approach.

The alarming statistic here is that while the national unemployment rate is at it's lowest since 2008, at 4%, the youth segment is more than double that, at 9.3% (Australian Chamber of Commerce, 2022). To put it bluntly, Australia is not meeting our current skills needs and will fail to do so moving forward if we do not ensure more people are achieving higher education and VET qualifications (Universities Accord, 2024).

With youth unemployment more than double the national benchmark and higher education enrolments steadily declining, dropping 8.2% just from 2021 to 2022 for commencing domestic undergraduate students (Department of Education, 2023), the targets set by the 2024 Universities Accord seem intrinsically unachievable.

There is a crucial need for the development of a longer-term holistic strategy to support more young people (along with every other demographic segment) into further education and training. In addition, we need much more integration between VET and HE in an integrated tertiary education system and much clearer pathways and articulation between them as the Universities Accord final report argues.

Given that 78% of young people intend to pursue University (Year13, 2023), a number that has remained consistently high over the last four years of conducting our After the ATAR research, it is clear that something is impacting this intent between the survey, and actually pursuing University after school, that needs to be addressed.

Some of the obvious reasons for this can be attributed to conflict between learning and cost of living and tuition fees, linked to long-term debt exposure. However, the most significant barrier is inextricably a lack of holistic student readiness and career preparation resulting in a lack of confidence to make a well-informed decision at Year 12 and to re-examine and update that decision throughout careers.

ONLY
19% of young people feeling confident about their future

ONLY
27% said that their high school helped them feel prepared for their post-school futures

The latest surveys reveal that just 41% of bachelor's students complete their degrees within four years, and 62% complete their degrees within six years, making it the lowest six-year completion rates to date (UniRankAU, 2024).

This is where optimising the school to work transition to focus on student readiness and meaningful work would see students better supported into the right further education and training most aligned to them. This would mean they would be more likely to complete, and therefore be more prepared and confident when they enter the workforce.

The question is, why are we not using social and economic metrics to measure post-school pathways, given that traditional metrics like the ATAR significantly distort and obscure the true outcomes of these pathways?

Not only are students lacking adequate support when transitioning from school into further education and training and ultimately employment, but there is a critical divide between the education sector and industry.

"There is a disconnect between schools and universities, and universities and the real world" (University employee). Another University interviewee highlighted that "we need to prepare people for the world in which they live", a statement that many would argue is the primary purpose of an education.

However, there is clearly misalignment between what is being taught in tertiary education and what is needed by industry. This gap needs to be bridged urgently. This fragmentation is widely acknowledged by the whole ecosystem too, with one industry stakeholder emphasising that "education can't operate at the speed that industry needs it to".

Many programs and organisations have been established to help address some of these issues that exist across the ecosystem. One such initiative includes the Jobs and Skills Councils (JSC) that were announced in late 2022, "to provide industry with a stronger voice to ensure Australia's vocational education and training (VET) sector delivers better outcomes for learners and employers" (DEWR, 2024).

These not-for-profit, industry-owned organisations bring together employers, unions and governments to "find solutions to skills and workforce challenge" (DEWR. 2024).

Another initiative that was established by the Department of Employment and Workforce Relations is the National Careers Institute (NCI) as a vehicle for providing reliable and accurate careers information and resources to all Australians (DEWR, 2024). A representative from the NCI highlighted that "Everyone's trying to achieve the same thing, but in different ways." (National Careers Institute, 2024).

Despite the numerous beneficial programs, websites, and organisations at local, state, and federal levels, the proliferation of information sources often duplicates existing content, adding confusion and complexity to the system. This ultimately results in a counterproductive and detrimental effect. When stakeholders operate in silos, we miss the opportunity for transformative improvement.

Connecting the entire ecosystem could turn the fragmented, disjointed system into a cohesive, efficient network, unlocking the full potential and supporting more young people into meaningful work, ultimately delivering far greater value for everyone involved.

Some quotes that emerged from our stakeholder interviews on the topic include:



"It [education] needs to be far more integrated"



"Give people capacity to explore and find their right path; these support mechanisms are not currently working at their best."



"We need a curriculum that matches based on industry needs."



"There's a big divide between finishing school to university."



"Labour market speed of change; changes in more than just AI, such as coding languages, advanced technologies, etc."

Skills Shortages and AI

The impact that skills shortages is and potentially will have on industry, employers and the economy is a direct reflection of the need for more consistent, effective and resourced career education earlier on.

It's important to also recognise the profound impact that AI will have on both industry and education. Failure to do this would be not only irresponsible but also detrimental to Australia's future economic and social well-being. The integration of AI into many, if not all sectors, necessitates a well-coordinated response to ensure that the workforce is adequately prepared and that educational institutions are aligned with the evolving demands of the job market.

The recent report "Meeting the AI Skills Boom" identified that by 2030, there will be approximately an additional 200,000 jobs created as a result of the introduction and augmentation of AI in the workforce. This represents a potential \$115 billion boost to economic growth, provided we act swiftly, with 70% of this increase driven by productivity gains (Tech Council of Australia, 2024).

This underscores the direct connection between skill shortages and economic productivity and ignoring this critical technological advancement could exacerbate skill shortages, diminish economic productivity, and further fragment an ecosystem already struggling to foster innovation and growth.

Facilitating the mechanism for connecting the ecosystem together is a crucial component in solving the national skill shortages and our ability, as a country, to positively impact workforce quality and productivity. Even with a comprehensive domestic pipeline strategy, all efforts will be in vain if the school-to-work ecosystem remains disconnected.

Before we move into the opportunities for improvement in the school to work transition, we need to first articulate what the 'Ideal System' looks like and what we should be striving for, to effectively provide context to the three key opportunities that will be discussed.

The Ideal System

In the ideal school-to-work transition, the journey begins early, with students receiving continuous, high quality, human guidance and student readiness support throughout their education. This connected ecosystem leverages data, technology, and AI to create a seamless experience, ensuring that every step is informed and aligned with the student's strengths, interests, and aspirations.

From the early years of high school, students engage with dynamic post-school readiness tools powered by AI, providing personalised insights into career preparation, essential skills and social-emotional development based on individual aptitudes and real-time labour market data. Advanced AI technology offers personalised support anytime, anywhere, helping students make informed decisions about their education and career trajectories throughout their entire transition.

As students progress, their achievements, skills, and interests are continuously tracked and analysed, creating a comprehensive profile that evolves with them. This technology also identifies skills gaps and surfaces the most relevant and aligned courses, trainings, or micro-credentials to help students bridge those gaps. This data is shareable by the student across educational institutions, training providers, and potential employers, ensuring a cohesive understanding of each student's journey.

The scalability of technology and AI in this ecosystem ensures that all students, regardless of their background, location, or social capital, have equal access to high-quality career guidance and opportunities. This approach promotes equity in education and equal opportunities, embodying the principles of Technology for Social Good. By leveraging AI and technology, we can provide consistent, personalised support to every student, democratising access to essential resources and information.

The Opportunities

Connecting the Ecosystem Together

One of the primary factors contributing to the highlighted issues is arguably the lack of connectivity within the ecosystem surrounding the school-to-work transition.

When we refer to the 'ecosystem', we're referencing the stakeholders that play a key role in the school to work journey, typically categorised by K-12 Education, Tertiary Education, Industry and Employers, and Government. There is a substantial gap between employers' skills needs and what is being taught at school that needs to be addressed urgently (DWER, 2024).

"Education cannot move at the speed at which industry needs it to."

One industry participant highlighted that education cannot move at the speed at which industry needs it to, and therefore, education is being left behind, whilst advancements in technologies, jobs and industries continue to be made.

This misalignment between industry needs and education is extremely detrimental and comes at the expense of the student and their post-school pathway. It's again where we see the value placed on the ATAR as being one of the major contributors to the disjuncture in what should be being taught at school as opposed to what is actually being taught at school (Pilcher & Torii, 2018).

With so much information, all saying similar things, but in different places and from different sources, the ability to not only make a well informed decision, but to actually identify which source to trust or rely on or prioritise, is made increasingly difficult for students and their primary influencers.

This fragmentation highlights the opportunity to consolidate information and resources, and start connecting the dots together. Ensuring that these tools are easily accessible and user-friendly is more important than ever, as it directly impacts a young person's ability to navigate the transition from school to work successfully.

The Shergold Review acknowledged that "one of the important goals of schooling is to provide a foundation that prepares young people for the world of work", and yet 75% of employers reported significant revenue losses due to their inability to fill vacant skilled positions (World Economic Forum, 2023). This unsettling statistic, on it's own, is reason enough to face the hard truths.

There are not enough skilled workers to fill much needed positions, meaning that there are not enough people pursuing further education and training or the right pathway for them, and the education they are pursuing is not adequately preparing them for the world of work.

Better Utilisation of Data

There is a greater need than ever to utilise data and analytics to improve the school to work transition across the ecosystem.

The current landscape of student readiness, and the inconsistency and under-resourcing across the system, is resulting in a bottleneck effect at the career practitioner level with 27% of career practitioners saying that one of the biggest challenges they face is the rapidly changing employment and education landscape (Career Tools, 2023).

With so much information to keep on top of, the constant introduction of new pathways and admissions programs, and rapid changes within the workplace due to phenomena like accelerated progress in technology generally, and Artificial Intelligence in particular, and COVID-19, among others, career practitioners cannot possibly retain knowledge of every opportunity and option available to students.

A fundamental component of connecting the ecosystem together is by utilising data capabilities and better understanding the student, on an individualised level, in regards to their academic history, their learning journey, their skills, interests and achievements, as well as their intent, career

goals and challenges, and weaving this thread throughout their entire learning journey. AI in turn then has much to offer to augment the analysis of this data to aid personalised understanding and choice.

A senior leader from a University said themselves that “there’s a never-ending addition of more pathways and entry ways – there’s always more, more, more.” This is where there are two key options; significantly increase resources to meet the recommended student to practitioner ratio, which is handled by humans, make better use of data and technology, or invest in both.

In higher education, better use of data has transformative potential to not just the application and enrolment processes, but also in regard to retention and student outcomes. For the student, it helps to contextualise what they’re learning, surface the most relevant and aligned pathway information to them. For the institution, it provides valuable insights that can be utilised to re-design courses, update learning content aligned with industry needs, and ultimately better support their students throughout their course into meaningful work.

Extensive literature and research has continuously called for better use of data and insights to effectively improve the current school to work journey, from admissions practices to student support, and lifelong learning.

The Shergold Review underscored the importance of leveraging big data, urging governments to "make much better use of big data" to accurately understand the choices students make as they transition from school to further education and training, and ultimately, employment (2020). However, without the right mechanisms in place, and a consistent and standardised approach, such insights and data capabilities are not accurate, let alone possible.

Multiple participants in our interviews also called out for greater resourcing and focus on data as a crucial backbone for an upgraded system, with Jobs and Skills Australia emphasising that we need to be "using data to drive more decisions."

Given the rise in interest and substantial growth of contextual admissions (Harvey et al., 2016) for further education and training, particularly in Universities, harnessing the available data to streamline and simplify these processes is imperative. However, under-resourcing and a lack of mandatory frameworks in place means that the full potential of such data often remains untapped.

Imagine the potential for significant change across both social and economic outcomes if

the system was able to access data driven evidence-based career information right from the start of a student's journey. This change in focus, augmented by the effective use of technology support, has been critical to the success and growth of innovative new pathway providing U.S. universities such as Southern New Hampshire University and Western Governors University. It also lies behind some of the principles of the classic US success story which is Arizona State University and the success of mature learners in a number of OPM university partnerships in Australia and the UK.

Not only does this create a much more personalised experience for the learner, but it also removes the possibilities of bias or subjectivity; a fundamentally human characteristic that can severely limit a student's potential, with one participant stating that, "Career advisors set the ceiling for the students as to what they're capable of."

At an enterprise government level, such comprehensive data and insights enable much more informed and measured policy and program development, to ensure education systems are set up for social and economic advancement of the country.

Leveraging Technology and Artificial Intelligence (AI)

What starts off as a small challenge for a young person leaving school, becomes a significantly bigger problem for everyone else.

It's clear from our research and interviews with the ecosystem that career education is inadequate, inconsistent and under-resourced. As previously highlighted, the average student to career practitioner ratio is 1:560. A 2018 inquiry into career advice activities in Victorian schools recommended that school career practitioners should conduct one-to-one meetings at least once per year with each student in Years 7–9 and at least twice per year with each student in Years 10–12 (Economic, Education, Jobs and Skills Committee, 2018). When we look at these numbers and overlay it with data that examines how much time career practitioners are allocated for their career work, with 47% saying they have 16 hours or less a week (Career Tools, 2023), it highlights the challenge of the role and the crucial need for technology-enabled scalability.

With the rapidly evolving needs of the labour market and that of the future, along with increasingly complex admissions processes, systemic teacher shortages, lack of funding and resources, and many other factors, it is clear that technology and AI can solve the problem in a way that humans alone simply can't at the scale required.

By going back to our core belief that effective career education significantly improves social and economic outcomes by supporting more young people into meaningful work, we need to start with career education

and student readiness as a whole.

As we heard time and time again in our interview process, career practitioners quite literally have an impossible job at scale. Not only are student to career practitioner ratios far exceeding the recommendation, but there are an estimated thousands of data points that a career practitioner is expected to manage per student (O*NET, 2024; National Centre for Education Statistics, 2024; LinkedIn, 2024; U.S. Bureau of Labor Statistics, 2024).

It would seem that the most practical option is to use technology, as well as better use of data, to effectively and efficiently transform the school transition. This will be vital to allow us to further education and training in the way and at the scale required.

The by-products of doing so include enhanced impact of career practitioners, refined post-school pathway offerings, implementing meaningful change from a government and policy development lens and providing much more individualised support to learners.

The Tech Council of Australia also highlighted that the school to work transition “needs to be outcomes focused”, and this is quite often what is being pushed to the side for more immediate and short-term metrics, like ATAR results and enrolment numbers.

How much more successful and effective would the school to work transition be if instead of the media publishing ATAR results and ranking schools accordingly, they highlighted the schools that have the most students participating in extra-curricular activities, work experiences, micro-credentials and industry-led programs? It would be of the same nature of us finding alternatives to university rankings, currently based almost exclusively on research, to measure the performance of each university by the distinctive approach it took to support learners finding pathways to meaningful work as in the Social Mobility Index published by HEPI in the UK.

The use of technology and AI not only enhances the school to work journey for the student, but also empowers the stakeholders involved in the process by enabling them to focus on supporting the highest need students, make better informed decisions around policy and program development, and improve areas like student outcomes, higher education retention and completion, and continuous development for economic productivity.



Conclusion and Recommendations

As a company, we are committed to taking action to upgrade the school-to-work transition. However, meaningful change requires collaboration across the entire ecosystem. This responsibility cannot rest on a single entity; every organisation, company, and institution plays a vital role in shaping a brighter future for Australia and its people.

Outlined below are the top five recommendations and potential solutions identified through the interview process.

#	Recommendations
1	Legislate career education in the Australian Curriculum.
2	Prioritise skills over scores by implementing a secondary school success measure beyond the ATAR.
3	Utilise technology to re-balance the student to teacher ratios
4	Facilitate industry-education collaboration to equip young Australians with future-ready skills.
5	Empowering students through data ownership for a seamless school-to-work journey

Recommendation 1: Legislate career education in the Australian Curriculum.

As evidenced throughout the findings, one of the most crucial elements of ensuring Australia is able to efficiently and sustainably address economic productivity is to standardise and mandate career education within the Australian Curriculum. Every student in Australia deserves and should have access to high-quality career education and support, regardless of geographic location, background, or school type. This commitment aligns with the United Nations' Sustainable Development Goal 4, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. This approach not only prepares students for the evolving job market but also supports their personal development and lifelong learning, ultimately leading to a more skilled and adaptable workforce.

Case Study: North Carolina's Bill 193 – Mandating Career Development Plans

In 2023, North Carolina took a groundbreaking step by passing Bill 193, legislation requiring all middle and high school students to complete a career development plan as a graduation requirement. This initiative represents a transformative shift in how career education is integrated into the K-12 education system, elevating it from a fragmented and inconsistent approach to a standardised and equitable priority.

By embedding career education into the core curriculum, North Carolina has demonstrated the critical role this support plays in fostering student readiness and its impact on economic development.

By adopting this model, local governments can demonstrate their commitment to building a more skilled, adaptable, and resilient workforce while supporting the personal and professional development of future generations.

34%

of young people said they don't know what career they want to pursue

72%

of young people with a post school career plan say it helps them feel more confident about their future.

80%

of young people without a post-school career plan say having one would help them feel more confident about their future.

Interviewee Comments:

"Careers advice in school is a mixed bag."

"No place within the curriculum for these [transferrable/soft] skills."

"A gap in the current system is the absence of compulsory pathway planning."

"It should be embedded in all schools."

"Resourcing is great, but time is appalling as it is not mandatory; There is no time to do any justice to these resources."

Recommendation 2:

Prioritise skills over scores by implementing a secondary school success measure beyond the ATAR.

The ATAR is not fit-for-purpose for at least 65% of Australian young people and yet as a country, we need to significantly increase higher education attainment as highlighted in the Universities Accord. Introducing a comprehensive secondary school success measure that evaluates students' skills, experiences, and competencies will provide a more holistic understanding of their capabilities.

Case Study – Australia's National Skills Passport Initiative

The Australian Federal Government's National Skills Passport is a innovative initiative designed to provide individuals with a portable, verifiable record of their skills, competencies, and experiences. By moving beyond traditional academic metrics, this initiative offers a much more holistic representation of an individual's capabilities, aligning education outcomes with workforce needs and fostering lifelong learning.

This approach demonstrates the value of prioritising skills and competencies over singular measures like the ATAR, addressing the need for a more inclusive and equitable system. By implementing a secondary school success measure beyond the ATAR, we can ensure young people are equipped and recognised for the skills they need to thrive in life and their careers.

89% of young people would like ways in addition to the ATAR or IB to show their skills, strengths and abilities when applying for jobs and university.

81% of ATAR takers say it isn't a good measurement of all their skills, strengths and abilities

Interviewee Comments:

"It's not for the student; it's for the system."

"Skills and capabilities aren't being measured and therefore aren't valued."

"An ATAR is just how well you sit a test."

"Schools need to be preparing them more for adulthood, rather than focusing on scores."

"Schools forcing students to go non-ATAR so they don't bring the grade down."

"The whole system is very degrading and doesn't show your self worth and who you are as a person."

"ATAR is a tool for supply and demand and only for first year."

"I understand that we need a cut off and some kind of measure but it's become less about student achievement and more about a game they can play."

"It becomes the currency in the marketplace of private schools; Parents are huge drivers behind this – very little agency for students and CAs when up against the parents."

Recommendation 3:

Utilise technology to re-balance the student to teacher ratios

One of the greatest challenges facing schools today and impacting the quality of career and student readiness is the imbalance in student-to-teacher ratios, which often leaves educators overstretched and unable to provide personalised support to every student. Whilst we advocate for more teachers and career practitioners being available for students, we understand the economics of scaling this is challenging.

Therefore, technology provides a scalable solution to support this challenge, offering tools that can complement teacher efforts, provide personalised support, and free up valuable teacher time for more impactful human interactions. By leveraging technology and AI-powered tools, schools can enable every student to receive the guidance they need while reducing the burden on teachers.

Case Study – Khan Academy's 'Khanmigo'

Khan Academy's Khanmigo is an AI-powered tool designed to enhance the learning experience by acting as a tutor for students and an assistant for teachers. Built leveraging AI technology, Khanmigo provides real-time support for students, guiding them through complex topics, answering questions, and offering tailored suggestions to strengthen their understanding.

For teachers, Khanmigo serves as a valuable resource by reducing the time spent on routine tasks, allowing educators to focus on higher impact activities like personalised mentoring, collaborative projects, and fostering critical thinking in their students. By addressing the imbalance in student-to-teacher ratios, tools like Khanmigo demonstrate how technology can bridge resource gaps and create a more equitable, efficient, and impactful educational system.

560:1

The average student to career practitioner ratio in Australia, with 34% at 800+.

52%

of career practitioners say they can't use student data to create tailored career programs

51%

of career practitioners say the biggest challenge they face is the student to teacher ratio

Interviewee Comments:

"The resources are great but time is appalling as it's not mandatory, so, they don't get used."

"Current support systems are too under-resourced"

"Careers is getting very little time amongst trying to fit in the rest of the curriculum"

"It's too much for one role. There's so much information to digest and understand for each student."

Recommendation 4:

Facilitate industry–education collaboration to equip young Australians with future–ready skills.

We need to prepare young people for the world in which they’re entering. To ensure Australia’s competitiveness in a rapidly evolving global economy, it is essential to strengthen partnerships between industry and education. By fostering closer industry–education collaboration, we can provide students with practical, real-world experiences and insights, preparing them for future careers in a world that will be drastically augmented and disrupted by advanced technologies, like AI. This approach not only bridges the gap between education and employment but also supports economic growth and innovation. Enhanced collaboration will lead to more relevant and dynamic learning environments, ultimately benefiting students, educators, and employers alike.

Case Study – The Tech Council of Australia’s Tech Jobs Initiative

In a report titled ‘Getting to 1.2 million’ (2022), the Tech Council of Australia (TCA) identified a significant need to expand the nation’s tech workforce to 1.2 million jobs by 2030. To achieve this ambitious target, the TCA recognised the importance of creating accessible pathways for young Australians into the tech industry.

In early 2024, the TCA partnered with Year13 to launch a Virtual Work Experience (VWE) program, aiming to connect high school students with the tech sector and provide clear career pathways. Collaborating with TCA members such as Microsoft, Commonwealth Bank, and nbn co, the program offers an engaging and interactive alternative to traditional work experience. By overcoming demographic, resource, and geographic barriers, the VWE ensures that students from diverse backgrounds have equal opportunities to explore tech careers.

Co-designed with industry leaders, the program provides students with up-to-date insights, resources, and activities that reflect the real-world needs of the tech industry. This initiative not only aligns with the TCA’s goal of creating 1.2 million tech jobs by 2030 but also equips young Australians with the skills and experiences necessary to thrive in a rapidly evolving, technology-driven workforce.



Interviewee Comments:

“School education is not aligned to what is actually needed.”

“It’s obvious that people are not coming out of education with the required skills to prosper.”

“Lack of grit and resilience because they’re not being challenged and taught life skills.”

Recommendation 5:

Empowering students through data ownership for a seamless school-to-work journey

For young people to successfully transition from school to work, they must have ownership and control over their educational and career data. However, the current system is fragmented—when students leave high school, they must start over in tertiary education and then again when entering the workforce. Their progress, skills, and experiences are stored across multiple institutions, but never with them. As a result, students are forced to navigate a disjointed system where everyone—except them—owns their data.

This lack of continuity creates barriers that limit students' ability to confidently transition between stages, leading to inefficiencies and inequities in access to further education and employment opportunities. A system that prioritises student data sovereignty does more than streamline individual transitions—it future-proofs the workforce by ensuring young people are equipped not just for their first job, but for a lifetime of learning and career evolution.

With students at the centre, this approach benefits the entire ecosystem—employers gain better insights into emerging talent, tertiary institutions can make more informed decisions, and policymakers can create smarter, data-driven workforce strategies.

Case Study –NSW Digital ID: A Model for Student Data Ownership

The NSW Digital ID, managed through Service NSW, provides individuals with secure, user-controlled access to personal credentials like driver's licenses, Medicare, and government services. It allows users to verify and share their identity seamlessly, while maintaining control over their data.

This model could be applied to education, enabling students to own and manage their academic records, skills credentials, and work experiences within a trusted digital identity system. Instead of relying on multiple institutions to verify qualifications, students could securely share verified records with universities, employers, and training providers, reducing administrative burdens and ensuring a seamless transition from school to work.

The same principles—trust, security, and user control—are already transforming how individuals manage their personal data across finance, healthcare, and government services. These solutions have proven that seamless, user-owned digital records are not only possible but highly effective. By applying these tested models to education, we have a unique opportunity to empower students with a continuous, portable record of their learning and skills, ensuring they can move through education and employment with confidence, control, and greater access to opportunities.

Interviewee Comments:

"There is a big gap in the transfer of information."

"There is an opportunity for self-driven career journeys for students."

"When career information is static, it's not as valuable anymore. It needs to be dynamic."

How Year13 is Applying This Research: A Student-Centred Solution



A truly student-centred solution prioritises preparing young people for life after school—not just academically, but holistically. While the K-12 education system adequately addresses academic learning, the non-academic elements of student preparation are critically underserved. When considering what it means for a student to be fully ready for life after school, three core pillars emerge:

1. Career Readiness
2. General Capability Skills
3. Social and Emotional Intelligence

The research conducted for this report underscores the significant gaps in these areas. This collective concept of **student readiness** is essential not only for ensuring young people are equipped for the challenges of an evolving workforce but also for driving broader economic development. By enabling students to transition successfully from education to employment, the entire ecosystem—educators, employers, governments, and industries—benefits from a more skilled, adaptable, and future-ready workforce.

The school-to-work transition remains one of the most complex and inconsistent phases in a young person's life. Despite the efforts of educators, career practitioners, governments, and industry, the system is fragmented, leaving students with inadequate guidance and disconnected pathways. To tackle these challenges, Year13 has developed a student-first AI-powered platform that bridges these gaps, creating a seamless, connected, and empowering experience for young people.



Why is marine biologist great for me?

✦ Your love for **exploring** the natural world, combined with a keen interest in **solving complex problems**, aligns perfectly with a career that involves studying **ocean life** and understanding **ecosystems**.

Empowering Students and Enabling the Ecosystem

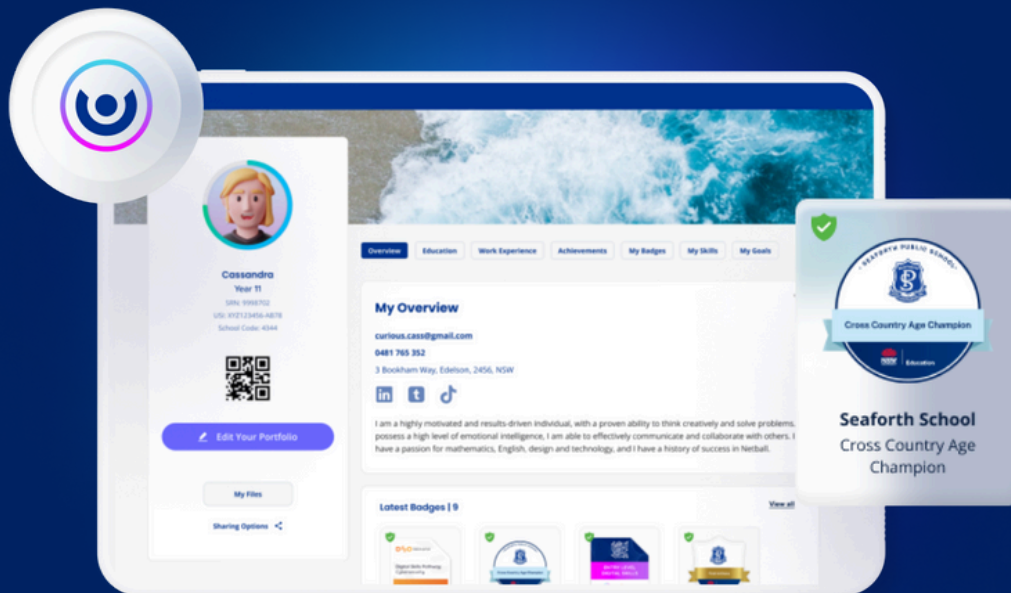
The platform is built with two primary goals:

- **Empowering Students:** Providing personalised, scalable guidance to help them achieve meaningful outcomes such as further education or employment.
- **Enabling the Ecosystem:** Creating a connected, data-driven network that bridges educators, governments, and employers—ensuring better alignment, seamless collaboration, and improved outcomes.

At the heart of the platform is its AI Agent, a lifelong guide for students, delivering tailored advice and support anytime and anywhere. This ensures students receive consistent, relevant, and actionable guidance throughout their educational and career journeys.

Unlike other platforms that focus solely on high school career planning, this solution stays with the student beyond school, supporting their lifelong learning journey as they move through further education, and into meaningful work. By providing continuous guidance and a connected experience, the platform ensures students are not only prepared for their next step but also equipped with the skills and confidence needed for long-term success in an evolving workforce. By ensuring students can take their learning history with them, the platform eliminates fragmentation and restarts, enabling seamless transitions at every stage of their journey.

By integrating employers and industry into the ecosystem, the platform ensures students have access to real-world insights, relevant opportunities, and industry-aligned guidance. This connectivity enables students to understand the skills and competencies in demand, explore career pathways, and engage with work experience opportunities that prepare them for life beyond school. For employers and industry, the platform provides a direct link to emerging talent, ensuring that education outcomes align with workforce needs and fostering a stronger pipeline for future-ready skills.



Focusing on Outcomes Over Outputs

What sets this platform apart is its unwavering focus on **outcomes rather than outputs**. Traditional systems often emphasise academic scores or box-ticking exercises that fail to measure meaningful progress. Instead, the platform adopts a three-step framework—**Plan, Learn, and Apply**—to guide students toward real-world results.

Supporting this process is the **Education Wallet and Learner Profile**, a secure digital repository that captures and tracks every milestone in a student's journey. By giving students ownership of their data, the platform fosters transparency and trust while ensuring portability across their lifelong learning journey.

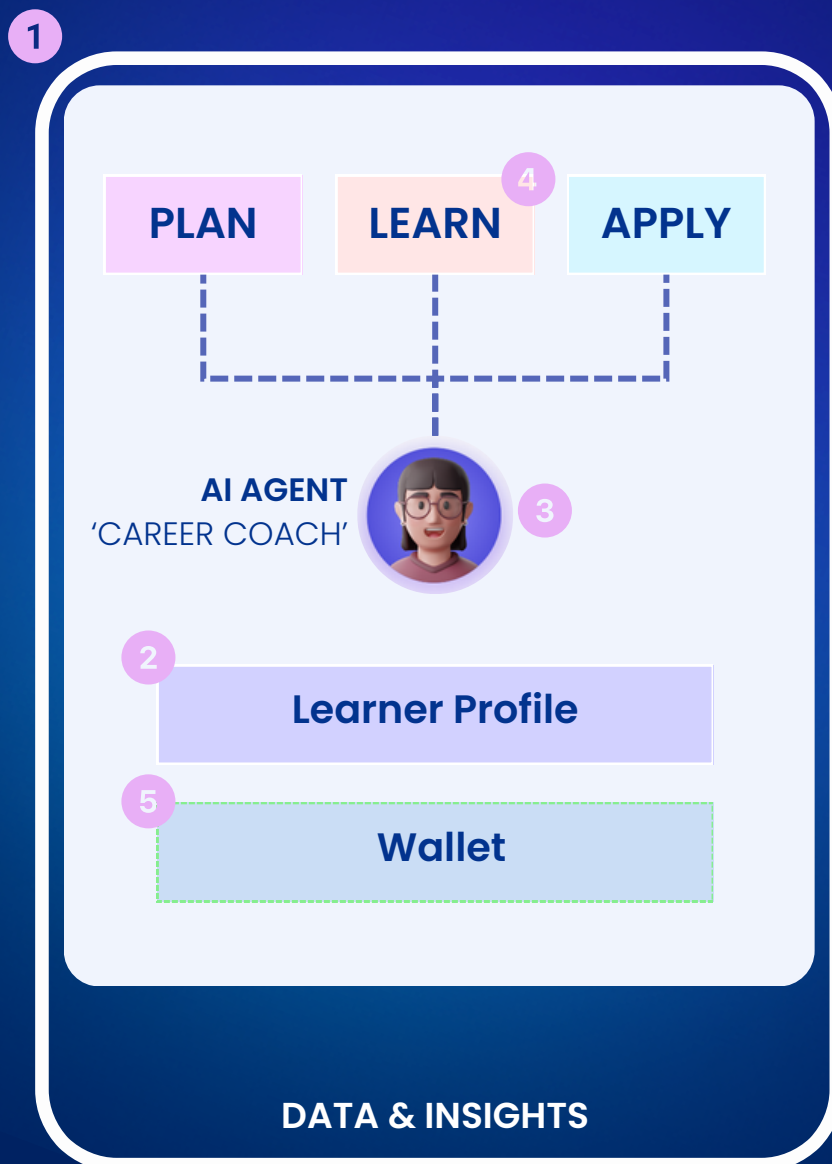
By prioritising student readiness, this platform creates a ripple effect that strengthens the entire ecosystem. Students gain the tools, confidence, and guidance to navigate their transitions successfully, while schools, governments, and employers benefit from a more aligned and prepared workforce. This alignment not only improves individual outcomes but also fuels economic growth, innovation, and resilience in an ever-changing world.

Through its focus on direct-to-student engagement, ecosystem connectivity, and outcomes over outputs, this platform represents more than a solution—it's a transformative approach to rethinking the school-to-work journey. By placing students at the centre, we create a system where every step of their journey is purposeful and aligned with their goals, ultimately contributing to a stronger, more future-ready economy.

At Year13, our work isn't about identifying problems for others to solve; it's about using insights to drive real solutions for young people. We know that no single organisation can fix the school-to-work transition alone. That's why our philosophy has always been to share our research openly, ensuring that governments, educators, and employers can use these insights to better support young people.

Our Solution

Grounded in research and built for impact, this platform translates insights into action—empowering students, connecting the ecosystem, and driving meaningful outcomes. The core features of the product ensure that every young person has the tools, guidance, and ownership they need to navigate their journey from school to work with confidence, while also providing the ecosystem with the security, data, and connectivity needed to deliver more effective, scalable, and aligned support.



How We're Delivering on the Recommendations

1 Data & Security

(Aligned with Recommendation 1: Legislate Career Education in the Australian Curriculum)

Building a Trusted, Secure, and Accessible Future

Our platform meets high standards of security, privacy, and accessibility with ISO 27001 accreditation and WCAG 2.1 AA certification. With advanced data and reporting capabilities, we provide the infrastructure needed to embed career education into the curriculum, ensuring every student has access to structured career guidance.

2 Learner Profile

(Aligned with Recommendation 2: Implement a Secondary Success Measure Beyond the ATAR)

A Holistic Picture of Every Student

The Learner Profile acts as a dynamic digital portfolio, capturing a student's skills, strengths, achievements, and learning journeys beyond traditional scores. This feature ensures that students are recognised for their full capabilities, providing a more comprehensive measure of success that extends beyond the ATAR.

3 AI Agent

(Aligned with Recommendation 3: Utilise Technology to Rebalance Student-to-Teacher Ratios)

24/7 Personalised Guidance at Scale

Our AI-powered assistant is always available to support students, processing thousands of data points to provide tailored recommendations on careers, skills, and pathways. This allows students to receive instant, personalised support, while also freeing up teacher resources to focus on high-impact engagement.

4 Learn & Engage

(Aligned with Recommendation 4: Facilitate Industry-Education Collaboration for Future-Ready Skills)

Connecting Students with the Ecosystem

The Learn & Engage feature delivers curated content from education providers, industry leaders, and skills organisations to help students develop career readiness, essential skills, and social-emotional intelligence. This fosters stronger collaboration between industry and education, ensuring that learning is relevant and future-focused.

5 Wallet

(Aligned with Recommendation 5: Empowering Students Through Data Ownership for a Seamless Transition)

A Student-Owned, Portable Learning Record

The Wallet gives students full control over their learning and career data, securely housing academic transcripts, qualifications, micro-credentials, and other evidence of learning and skill development. This ensures seamless transitions from school into further education and employment, allowing students to take their verified achievements with them wherever they go.

Other Innovations in Practice

One of the arguments made in the book *The New Learning Economy* (Betts and Rosemann 2023) is that educational wellbeing for life will become better served by tools and services that are developed to give lifelong learners consciousness of their competences at different life stages. This consciousness can be enabled by well informed aspirations of personalised career and learning ambitions that guide pathways for lifelong learning. This applies at the Year 13 transition and at all stages of a lifelong learner's life.

A number of other innovations that support lifelong learners gain access to appropriate learning as part of pathways to successful career development are noteworthy.

One is the the **Starbucks College Advancement Program** with Arizona State University. This partnership has just matured by graduating its 10,000th ASU graduate among Starbucks's employees. All US based Starbucks employees are able to take advantage of a corporate scholarship program put in place by Starbucks in a partnership with ASU. The program allows full sponsorship of an ASU online degree program for a Starbucks employee exclusively available at ASU.

Typical students on the collaborative program include single parents who have missed out on school leaver education or services veterans. There is widespread recognition of the scholarship program and its availability among Starbucks employees and CEO level endorsement and promotion of the relationship from both the employer and university.

This innovation is less of a replica of the Year13 initiative as a mature age lifelong learner catch up for learners that missed out on Year 13 school leaver study while clearly having the potential to gain university qualifications as more than 10,000 of them now have.

It is a demonstration of how ultimate career success can be demonstrated by more than school leaving exam qualifications and how the potential for learning built upon prior skills development and pathways that support job skill and formal learning, and qualifications have multiple orders and pathways in which they can be successfully attained.

The example has similar other instances with the multiple university and employer partnerships with companies including WalMart and AWS that are offered by SNHU and WGU supporting a mission to democratise access to tertiary education and support students on multiple pathways to succeed. They widely embrace data and predictive analytics and AI applications in being scalable to achieve outcomes.

The success of online programs of study particularly in partnerships with OPM providers such as OES in Australia and the UK are similarly over-subscribed by mature learners with career advice for mature learners and recognition of prior learning together with targeted support to mature learners common among them.

These innovations are key to increasing access to tertiary education to more learners and achieving the high targets being set by policy makers and needed by employers if skills gaps are to be met from domestic pipelines and meeting the needs of diverse learners who require multiple and flexible pathways for study.

Closing Thoughts



The transition from school to work is more than a logistical process—it is a transformative journey that shapes the lives of young people and the future of our communities. Addressing the systemic gaps identified in this report requires bold action, innovative solutions, and a collective commitment to change. By placing students at the centre, leveraging the power of technology and AI, and fostering collaboration across the ecosystem, we have the opportunity to create a system that not only supports individual success but drives social and economic progress. The insights and solutions presented here are not just ideas—they are a call to action. **Together, we can empower every student to lead a fulfilling and meaningful life.**

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