

Insights into the Youth Entrepreneurial Education Ecosystem in NSW



Sydney School of
Entrepreneurship



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Collaborating Organisations

Young Change Agents

Young Change Agents (YCA) empowers young people to identify problems, reframe these as opportunities, and develop solutions with an entrepreneurial lens. YCA delivers educational programs that equip young people with the knowledge and skills they will need for the future. This is done through programs for young people and investing in ecosystem development, teacher capacity building and proprietary technology, all of which contributes to empowering young people to build their entrepreneurial mindset, skillset and toolset. YCA also actively amplifies the voice of young people, the value of entrepreneurial education, and develops and manages technology platforms and an educator community of practice to empower educators to embed entrepreneurial education in their schools.

Sydney School of Entrepreneurship

SSE is Australia's first, and only, Government-initiated School of Entrepreneurship. It was established to enhance and embed growth mindsets, entrepreneurial skills, and innovative thinking across diverse communities – empowering positive global impact both now and in the future. SSE's global networks and community impact is espoused by a unique foundation and structure; a not-for-profit organization, with a powerful association of founding member institutions comprising all 11 NSW Universities and TAFE NSW.

Organisation Leadership

Margaret O'Brien YCA Co-Founder and CEO

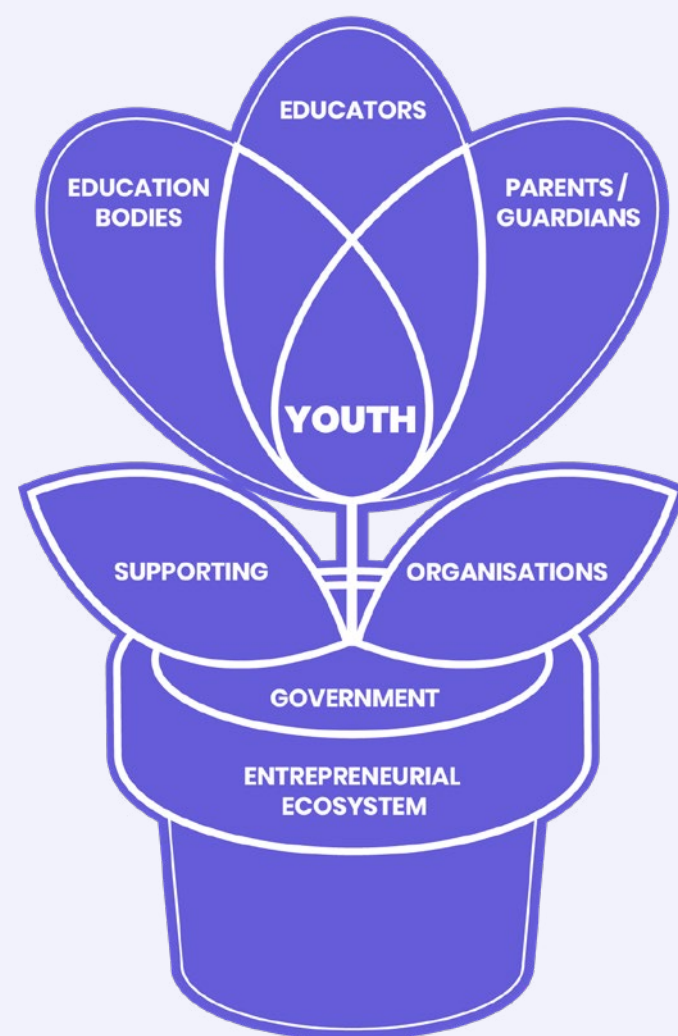
Margaret is one of Australia's leading entrepreneurial-education thinkers and works closely with state-based education departments and educators across Australia to support the introduction and sustainability of enterprise education for 10-18 year olds. In 2017, Margaret launched YINC the first high school incubator program in Australia for teen social entrepreneurs. In 2019, Margaret was engaged to lead the Codesign of the Australian Government's Academy of Enterprising Girls following her successful work delivering programs to 1500 girls as part of the Women in STEM and Entrepreneurship program (WISE) in 2018/19. In 2020, Margaret led the development of a social-enterprise -in-a-box initiative within schools and is responsible for the development of Young Change Agents' proprietary technology – our Buddy App, Amplify Platform and eLearning. Additionally, Margaret is an investor in women-led business through SheEO. Margaret oversees all our partnerships and programs in Sydney and South Australia.

Dr Sarah Jones SSE CEO

Sarah Jones is responsible for leading a high-performing team to inspire change, deliver impact, and realise SSE's vision of creating a diverse community of next-generation of entrepreneurs, jobs and businesses. Building on the strong foundations of our unique collaboration, she is helping develop, implement and drive the provision of strategic direction and leadership at SSE. Sarah has a PhD from the University of Sydney and almost twenty years combined leadership, research, teaching, and strategic operational experience in higher education and large matrix organisations. Sarah worked at the University of Sydney for over ten years and is a dedicated and passionate leader with proven capability in the delivery of business outcomes and leading significant change. She is committed to supporting and nurturing talent and harnessing the collective strength of NSW universities and TAFE NSW to build a state-wide culture of entrepreneurialism.



Executive Summary



In today's world, providing young people with the entrepreneurial tools, skillsets and education to solve society's most wicked problems and get them job ready has never been more vital. This is why Young Change Agents (YCA) and Sydney School of Entrepreneurship (SSE) have joined forces to provide insights into the state of entrepreneurial education for youth (aged 10-24 years) across the state of New South Wales (NSW).¹

This Paper is designed to facilitate efforts that help drive NSW to become a state where young people, regardless of their background, have access to entrepreneurial learning at all levels of their educational journey as a means to raise their self-agency, wellbeing and employability outcomes and thus advance the state's economic growth.²

From our combined 10+ years empowering youth through entrepreneurship, we know that developing their entrepreneurial mindset, skillset and toolset will better prepare young people for the future, regardless of their career pathway or entrepreneurial aspirations. We are therefore advocating for the youth entrepreneurial ecosystem to collaborate to work to achieve a future state for youth where:

1. Entrepreneurship is championed as a premier priority
2. Entrepreneurial education is integrated with industry and supported by parents as mentors
3. Every child has an entrepreneurial mindset, skillset and toolset
4. There are entrepreneurial pathways and credentialing for educators and all students
5. There is a dynamic tribe of entrepreneurial educators who form a community of practice
6. Entrepreneurial education is valued and measured

YCA and SSE spoke with a broad cross-section of voices including youth, parents/guardians, education bodies, Government, industry and community on the state of entrepreneurial education for youth in NSW, to capture and amplify their perspectives and to develop and share recommendations that can help strengthen the future state of entrepreneurial education for youth in NSW. The perspectives of each of these stakeholder groups are captured throughout the paper, and through this exploration we explore the following high-level themes:

Theme 1 Clear pathways and recognition

Youth need clear pathways to help nurture their growth and success in life. Entrepreneurial thinking and practice are core to developing innovative learners, and require more than inspirational speeches, attending one-off events, individual determination, or 'luck' to deliver these lifelong learning skills. Further, youth want their entrepreneurial learning and achievements to "count" and be recognised by higher education, their parents, future employers and their own peers.

Theme 2 Guidance for parents on the future of work

Parents/guardians need guidance to engage with, nurture and empower entrepreneurial young people in meaningful, structured and safe ways. Many parents worry that their lack of familiarity will hinder their child's future prospects, while others feel disengaged from their children's entrepreneurial learning journey.

Theme 3 Champion and support

Teachers and career advisors are time-poor. To be successful, entrepreneurial education needs to be embraced by school leadership, embedded within the curriculum and be incorporated as part of the teachers' standard workload. Enterprising teachers who go beyond the curriculum to provide their students with these critical, entrepreneurial learnings, feel unrecognised, undervalued, and unrewarded, as well as overloaded with additional but necessary work. Schools need to be adequately resourced, and teachers must receive the necessary professional development in which the appropriate resources and tools can be provided; these efforts raise teachers' confidence in teaching entrepreneurial methods, and elevate recognition of their efforts and achievements, while contributing to their professional development.

Theme 4 Empowering every child

Access to entrepreneurial learning is inequitable across NSW, and barriers are more pronounced in the rural and remote areas of the state. Aboriginal and Torres Strait Islander youth and youth from regional or remote communities and those experiencing disadvantage experience barriers to learning more severely than their metropolitan counterparts and lack the same exposure to visible role models. Private and Catholic schools are paying private providers and/or recruiting for specific innovation and entrepreneurial educator roles within their schools to offer a point of difference, exacerbating the uneven spread of entrepreneurial learning opportunities.

Theme 5 Starting early is key

Entrepreneurial education needs to be introduced at the earliest appropriate age. Research continues to demonstrate that when entrepreneurial education is introduced early in life, prospects for advancement are enhanced. Students learn critical problem-solving and other transferable skills that can support them in both employment and life more broadly. When these learnings are introduced at a later age, young people find it more difficult to adapt to and apply this new style of learning. Developing the entrepreneurial mindset and innovative skill sets among youth has been recognised by schools and the NSW Government and recently led to the start of drafting an entrepreneurial curriculum for secondary schools in NSW.

Theme 6 An innovation ecosystem approach

Members of the entrepreneurial ecosystem strongly acknowledge that entrepreneurial education is a key ingredient in fostering a vibrant and resilient innovation ecosystem that supports a pipeline of new and emerging talent, bringing new products and services to market, and creating a more sustainable future for all. To create a sustained long-term impact, an integrated, ecosystem approach must be taken towards entrepreneurial education, with visible, equitable and accessible pathways for every child to grow an entrepreneurial mindset and advance the economic state of NSW. The key players of the ecosystem require access and touchpoints with the education system to remove perceived and real barriers and engage directly with youth and educators.

We invite you to read the full Paper outlining the insights of each stakeholder group, as well as the characteristics of an ideal future state we identified and the recommendations to help us get there.

We invite you to explore the insights from the stakeholder groups who, together, make up the fabric of the youth entrepreneurial education ecosystem. We are also excited to share a perspective on the ideal future state that has been envisioned from these insights and the recommendations that form the roadmap of how we can get there. If you are reading this, we know that you are likely to be a critical part of our youth entrepreneurial education ecosystem and we welcome you to partner with us on this journey.

¹ For the purposes of this Paper, young people will refer to those aged 10-24. Maximum age being 24 as in accordance with Australian Bureau of Statistics. (2020). 6227.0 - Education and Work, Australia - Survey data over time on current or recent study, educational attainment, and employment: <https://www.abs.gov.au/statistics/people/education/education-and-work-australia/may-2020/engagement-in-employment-and-or-education>.

² SSE and YCA have endeavoured to capture the perspectives and opinions of a diverse, but inevitably limited, cross-section of stakeholders; to supplement these gaps, this paper acknowledges and builds on extant, current research that explores innovation ecosystem mapping (i.e., Global Entrepreneurship Monitor or this mapping of the ecosystem: <https://www.linkedin.com/posts/liz-jackson-l9ab83119-startupstatus-entrepreneurship-education-activity-6772845369853378560-c0JR>), system-level research, design initiatives (i.e. Learning Creates Australia) and government initiative reviews such as The NSW Curriculum Review Report, as well as general desktop research.

Introduction

Entrepreneurship plays a pivotal role in supporting the rebuild of economies; consequently, the reimagining of our ways of work and life has never been more pronounced. Globally, the value of the skills, capabilities and mindset required for entrepreneurship is becoming increasingly recognised both by governments as a means to increase the number of businesses, opportunities and jobs, and by employers seeking agile, adaptive problem-solving workers.³ However, the volatility of our environment is placing ever more pressure on young people to seek stability in their lives and careers, potentially reducing the appeal of exploring entrepreneurial pathways.

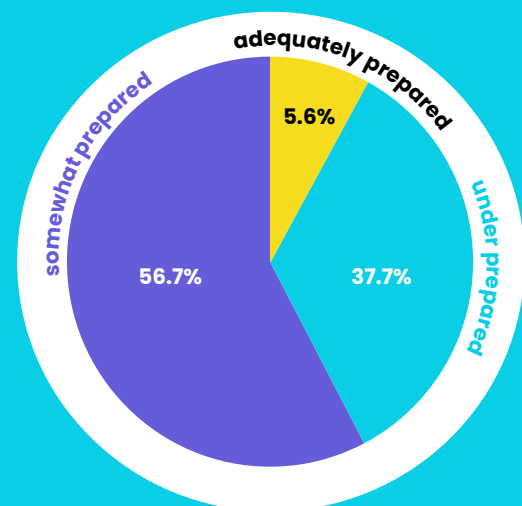
The immediate impact of the pandemic on our ways of living is being felt acutely across the globe. At the same time it is critically important to consider the lasting effects the pandemic has had on young people's prospects, which will continue to impact the next generations. By way of example, the proportion of **youth who are not engaged in any employment or study increased to 12% in 2020, compared with 8% in 2019.**⁴ In New South Wales (NSW) in particular, **youth unemployment increased to 13% at the start of 2021, compared to 10% in 2019.**⁵ Evidence demonstrates that entrepreneurial pathways can help people find meaningful careers and become engaged, active citizens.⁶ It is therefore crucial that young people are equipped to pursue these pathways through such means as entrepreneurial education.

Entrepreneurial education (EE) is the process of equipping learners with the skills and tools they need to be entrepreneurial, combined with building their entrepreneurial growth mindset. For the purposes of this

Paper, we will use the term 'entrepreneurial education' to describe education that uses design thinking, lean startup tools, and/ or involves concepts that are used in the process of creating a business. This type of education may be focused on preparing learners to be effective job-creators (entrepreneurs) and/or internal value creators (intrapreneurs). In this definition, we include an understanding that entrepreneurial education includes the development of critical skills and capabilities, including creativity, critical thinking, resilience and problem solving.⁷

Australia scores only 3.7 out of 10 for entrepreneurial education at the school stage, where 0 is highly inadequate.⁸ Since NSW alone accounts for 33% of all primary and secondary schools in Australia, the State is well placed to take a leading role in transforming the way entrepreneurial education is delivered across the education system.

This Paper provides a fresh look at the state of entrepreneurial education for youth (aged between 10 and 24 years) by sharing the key insights from a cross-section of voices—from youth, educators, parents/guardians, education bodies, Government, industry and community, and the challenges they face, and gaps that have emerged. In addition to capturing and amplifying these perspectives, we have developed recommendations that aim to increase the dialogue, and inspire action, between and from all of these stakeholders. We particularly aim to inspire Government departments to play a significant and active role in driving the future state of youth entrepreneurial education in NSW to increase the employability outcomes and opportunities for youth and, thus, advance the state's economic growth.



Out of the people we spoke to, **56.7%** of people believed young people were "somewhat prepared" for the changing nature of the workforce, while **37.7%** of respondents felt that young people were "under prepared". Only **5.6%** believed young people were adequately prepared for the changing nature of the workforce.

Scope/Methodology

This Paper has been developed by curating existing research, mapping and programs in the space of entrepreneurial education globally, nationally and with a focus on NSW. From this research, it was identified that there was a gap in the literature amplifying the voices of members of the youth entrepreneurial education ecosystem. Interviews and focus groups were then conducted with approximately 120 individuals across the following stakeholder groups: youth, parents/guardians, educators, education bodies, supporting organisations, Government and the entrepreneurial ecosystem.

Data from these interviews were then collated and key insights were identified from each stakeholder group. These informed the identification of gaps, opportunities and recommendations. Case studies and research were then further explored to supplement these recommendations. This paper includes insights from each stakeholder group as crucial members

of the youth entrepreneurial education ecosystem in NSW. Young people should always sit at the centre of this process, as should those with a direct support role. For this reason, young people, parents and educators have been given more space in the paper as the key users of the recommendations we have identified.

This Paper acknowledges and builds upon existing work that is underway, such as innovation ecosystem mapping, system-level research and design initiatives and government initiative reviews.⁹ Through the interviews conducted, insights were carefully collected and analysed and various research sources were consulted which have been included in the key findings of this Paper. Whilst SSE and YCA endeavoured to interview a diverse cross-section of stakeholders in the youth entrepreneurial ecosystem and those outside it, it is acknowledged that there are limitations around what can be captured.

³ 63% of all jobs will be enterprise skill intensive by 2030, according to DeakinCo. (2017). Soft skills for business success. Deloitte. <https://www2.deloitte.com/au/en/pages/economics/articles/soft-skills-business-success.html>.

⁴ Australian Bureau of Statistics. (2020). 6227.0 - Education and Work, Australia - Survey data over time on current or recent study, educational attainment, and employment. <https://www.abs.gov.au/statistics/people/education/education-and-work-australia/may-2020#engagement-in-employment-and-or-education>.

⁵ Parliament of New South Wales. (2021). Regional Labour Force Trends and NSW (June 2021) <https://www.parliament.nsw.gov.au/researchpapers/Pages/NSW-regional-labour-force-data---interactive-portal.aspx>.

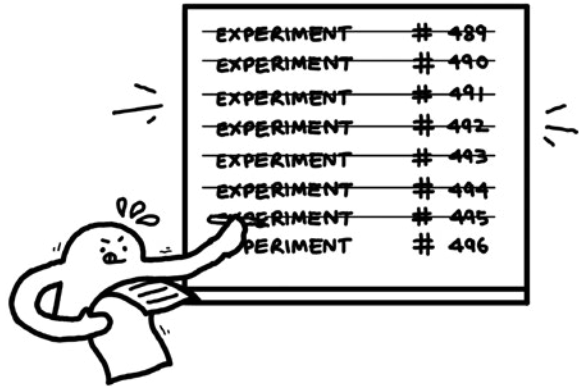
⁶ Allan, B., Dexter, C., Kinsey, R., Parker, S. (2016). Meaningful work and mental health: job satisfaction as a moderator. Journal of Mental Health, vol. 21(1). <https://www.tandfonline.com/doi/abs/10.1080/09638237.2016.1244718?journalCode=ijmh20> & <https://link.springer.com/article/10.1007/s10551-020-04512-6>.

⁷ This is an indicative list of a much longer set of capabilities and skills that are developed through entrepreneurship. A more comprehensive example of a list of the skills that young people develop and need in this space can be found in FYA's research: https://www.tya.org.au/app/uploads/2021/09/The-New-Basics_2016.pdf

⁸ Entrepreneurship education at school level is universally regarded as the least well-developed, according to 3. Startup Genome. (2020). The Global Startup Ecosystem Report GSER 2020. The New Normal for the Global Startup Economy and the Impact of COVID-19, p. 86. <https://startupgenome.com/report/gser2020>.

⁹ I.e. Global Entrepreneurship Monitor or this mapping of the ecosystem: https://www.linkedin.com/posts/jiz-jackson-19ab83119_startupstatus-entrepreneurship-education-activity-6772845369853378560-c0lR, Learning Creates Australia and government initiative reviews such as The NSW Curriculum Review Report.

Youth



Entrepreneurial pathways for young people are not visible, and many young people don't see entrepreneurship as a viable option. Our interviews with young people, along with Young Change Agents' co-design work with the Academy for Enterprising Girls and Indigenous Co-Design report, revealed the following insights:



1.

Young people are experiencing inequalities in engaging with entrepreneurial education.

Young people experience real and perceived barriers to pursuing entrepreneurial pathways. These barriers disproportionately affect young women, Indigenous young people, culturally and linguistically diverse communities, and young people from low socioeconomic backgrounds.

For Indigenous young people, the barriers include structural racism, lack of access to entrepreneurial education opportunities, a need for culturally appropriate entrepreneurial education content as well as strong, consistent role models. For young women, barriers include a lack of confidence in pursuing creative ideas and entrepreneurial pathways and the lack of a safe environment in which to fail.

Across all areas, access to appropriate entrepreneurial education content and environments, networks and mentoring, relevant role models, and resource support are key to helping these groups overcome these structural and emotional barriers.

2.

"It's not for me"

Most young people—from all backgrounds—have not had the opportunities to experience entrepreneurial education during their education journey—at school, university, or with relevant role models and other touchpoints. Entrepreneurial pathways can feel like they're meant for someone other than them:

For those from lower socioeconomic backgrounds, entrepreneurship is often perceived as a pathway only for those privileged enough to have an economic safety net in the case of failure.

For young people who have chosen paths outside business and STEM (the humanities, for example) entrepreneurship can feel as though it is designed for people motivated by profit, commercialisation and with business skill sets.

For those who have chosen a path that requires academic excellence and the attainment of a high ATAR, entrepreneurship is perceived as a risky option that has the potential to hinder and distract, rather than help, their academic trajectories.

At the same time, these young people recognise that the skills, resources and tools associated with an entrepreneurial mindset are important to succeed. However, they are often unaware of how and where to access these and are unlikely to go out of their way to do so. It is therefore crucial that entrepreneurial education is embedded within every student's educational pathway

3.

Young people feel that traditional education can stifle creativity and instil a fear of failure; a mindset that makes it difficult to get a foot in the door with organisations and deliver the innovative solutions that employers are seeking.

The demand for innovative, and entrepreneurial graduates, a shift towards the gig economy, a growth in independent contractors, and a hyperconnected world mean that there is both more opportunity to be innovative and entrepreneurial and a more significant disadvantage if you're not.

Young people feel that a rote-learning, "factory model" approach to learning is reinforcing their fear of failure and stifling the creativity they naturally possess, leaving them ill-equipped for the "real world". They also express concern about being outperformed by students who do get opportunities to be innovative and creative.

4.

For younger people, entrepreneurship is a mystifying concept.

For most young people, the concept of entrepreneurship is fuzzy at best. Young people often don't understand what an entrepreneur is or does and they generally don't see people in these roles that reflect them.

Without engaging with young people in school settings and fostering these ideas at an early age, entrepreneurship remains a mystifying concept, with real and perceived barriers to entry. This prevents young people from pursuing entrepreneurship and receiving the benefits it offers, including shaping attitudes, skills and culture from as early as primary years.¹⁰

"I am hesitant to create something new or innovative because of the potential of failure. It concerns me that myself and other young people are not equipped in understanding that failure is not something to be feared and lack the courage to try and create something new."

– Young person living in NSW, age 20

¹⁰ Liyanage, S. (2019), *Entrepreneurial Learning and Doing: A review of recent literature on entrepreneurial learning*, p. 17. <https://research.acer.edu.au/cgi/viewcontent.cgi?article=1008&context=aer>



Parents / Guardians

Success in Australia is still primarily expected to come from learning at school, however, this learning is often not fully preparing students for the future of work and parents are recognising that this needs to change.¹¹

In their workplaces, many are seeing significant disruption and are concerned about what that means for their children if the education system is not able to adjust. Our interviews with parents, some of whom are entrepreneurs themselves, revealed four key insights:

1.

Parents have varying levels of understanding and information about the skills required for the current and future workforce.

Two different groups of parents emerged from our interviews. One group who, mainly due to their occupation and workplace, are very aware of digital disruption and have a strong understanding of future skills. Conversely, there are parents in more traditional roles who aren't aware of what skills their children need for employment beyond what they had when they finished school.

Research has shown that 63% of all jobs will be enterprise-skills intensive by 2030.¹² The response to this statistic further highlighted a demarcation of understanding between these two groups of parents. The first group argued that this is true already. "You might be able to 'get by' but not do that well—I would say this is the reality we are in today. Without them, you float along without being very successful". The second group was quite shocked by this information and expressed concern for their children and their future. "That worries me, I don't know how to do a lot of that as a parent so I can't help them if they aren't learning those skills."

Parents articulated a recognition that entrepreneurial learning was not just important for young people starting businesses but also for their competitive value as employees generally.

"I'm not owed a wage, I think outside the box and solve problems to help my organization." – Parent

"It's a different mindset—if you have been an entrepreneur you can be a very powerful employee—an intrapreneur." – Parent



2.

There is a strong disparity across different schooling systems within Australia as well as with our international counterparts.

There are stark differences between regional and metro schools across Australia, between public and private schools, and also between international education systems.

"My child [...] in Sydney in YEAR 9 in Commerce had the following assignments before Covid hit: you are selling a drone why would you sell a drone—how would you market it, who are your competitors and then, during Covid, come up with a solution to make home learning better; whereas in the country it wasn't like that. There was nothing like that." – Parent

"Country NSW schools, I don't think, prepare kids in any way shape or form for the modern workforce. This is a shame because there is remote work now so kids could get 'city jobs' and still live in the country if they wanted to." – Parent with one child in a metropolitan school and one in a regional school.

Parents are also concerned about Independent and Catholic schools that have significantly more funding to implement innovative learning than their public counterparts, and who have been able to hire Innovation/Entrepreneurial educators and contract external providers. Parents are also aware of international school systems, such as Israel and the USA, where entrepreneurial mindsets are revered and widely celebrated.

"There is a term for it, 'Rosh gadol,' which translates to, 'Big head' but means to think big—figure it out! You want to know these people ...they think bigger and make things better. They look at things and think how it needs to be changed or fixed or solved."

– Parent talking about entrepreneurial education in Israel

"A is for effort in the USA ... it fosters trial and error. Here it is only when you are top."

– Parent

¹¹ Wyn, J. (2009). *Touching the Future: Building skills for life and work*. Australian Education Review. <https://research.acer.edu.au/cgi/viewcontent.cgi?article=1008&context=aer>

¹² DeakinCo. (2017). *Soft skills for business success*. Deloitte. <https://research.acer.edu.au/cgi/viewcontent.cgi?article=1008&context=aer>

3.

In the face of immense uncertainty, the reaction becomes risk-reduction (i.e., pushing children into traditional/secure roles and jobs) but parents want this to change.

There are still some parents who consider success to be measured by the attainment of traditional jobs (consultants, doctors, lawyers, accountants) but many parents recognise that this needs to change.

"All of my friends have a child that is studying Commerce at Uni and not ONE of them are entrepreneurial. We are proud of them but at what point are we going to allow them to be a bit free-er." – Parent

Some parents consider Australia to be a "conforming society" which has been very useful during the Covid-19 pandemic where people follow rules, but not necessarily a key feature of an entrepreneurial society that will foster a new generation of innovative problem solvers.

"The mothers of a third of the kids were millionaire businesswomen but it was not being recognised as it was all about the sons and their fathers and it was about getting a job, not becoming an entrepreneur. The boys that were at the bottom academically are the ones setting up businesses and not given any credit by the school." – Parent describing her son's traditional educational experience.

"The way that humans are embracing tech is making us lazy and these skills such as solving problems are essential. Schools are not ready for that. Things are changing so quickly the education system is outdated in many ways. They are trying to react but they are going to need to change the way they approach the change [...]. You can't set up an education system the way we did years ago. I work for one of the biggest tech companies in the world, and we can't keep up with the change so the education system can't. As a parent, I ask the question to my teacher friends: "how on earth do you manage that?" I would call it the 'Education lag.'"

– Parent

4.

There is a need for structured, meaningful ways for parents to interact with and support their children's learning in this space.

Parents whose children have experienced entrepreneurial education identify that it has provided access to more opportunities for them to connect with their children and bring them closer together. The parents' skills were de-mystified to their children as they were able to relate their business experience to their child's new venture, which also opened up communication.

Parents are, by necessity, active in their child's education, however, they need to be involved in a way that is structured and meaningful, and which also allows them to act as role models for their children. Parents are seeking opportunities to be more involved and deliver impact.

"When she was building that (business) model, there was an air of passion in her voice, the commitment was there, the passion was there. We harness that because it doesn't happen often! Usually, we [only] get a few words!" – Parent

"Parents are dying for an opportunity to get involved ... I have free time and I would love to do that again, I'm not going to go to the school and push I want the school to offer opportunities to participate." – Parent



Educators

Effective entrepreneurial education is impossible without educators who have the confidence, resources, knowledge and capacity to support their schools. Currently, entrepreneurial education is not sufficiently prioritised in the training of new teachers or the professional development of existing teachers, nor is it prioritised within the curriculum generally or within school strategies. Our interviews with teachers revealed the following key insights:

1.

Teachers aren't currently encouraged, supported, provided with targeted development opportunities, rewarded or recognised for entrepreneurial education as it is not prioritised.

When entrepreneurial education is not supported by school leadership, it must become a passion project of one or a small group of teachers who see its value and who make use of the remaining, available resources to incorporate into their practice. These educators can often feel that their hard work and achievement in delivering entrepreneurial education goes unrecognised, leaving them to feel that they are "swimming upstream". This also means that important initiatives disappear during periods of disruption when teachers take on other tasks, or when passionate teachers who set up their own successful entrepreneurial projects leave a school - without backing from senior management.

This disproportionately affects low-ICSEA schools that do not have the same prioritisation and resourcing as private and Catholic schools. While accessing budget and resources to run entrepreneurial education programs is an important step, other hidden costs need to be considered, including the staff resourcing required to fill teaching gaps that may emerge as a result of running entrepreneurial education programs.

"We really need entrepreneurial education but it's not as embedded as it needs to be. It's a great experience when it happens but it often takes a teacher going beyond their role to deliver it. It's an 'add on'."

- Gayle Houlahan, Coordinator of HSIE & Manager of School Operations at St Columba Anglican School

2.

Teachers recognise the critical need to break down barriers between the classroom and the 'real world' through industry connections, but they need support to establish and grow these relationships and "make it real" for students.

Connection to industry and real-world application of skills and learning are at the heart of applied entrepreneurial education. However, educators face many challenges including:

- Understanding how to connect with industry partners
- Facilitating the process of ongoing engagement with industry partners
- Supporting students to apply the entrepreneurial skills they develop to their career progression and linking their skills in school to the workplace environment

"Entrepreneurship and innovation need to be a part of the curriculum but these also need to be translated to a workplace environment ... Schools alone cannot link the skills learned with the real world and external companies are needed to bring in that experience and those real-world connections."

- Rob Cousins, Careers Counsellor, St Joseph's College

3.

Entrepreneurial education has the potential to bring real-world relevance to school subjects across the curriculum, but it is primarily offered in commerce and business streams. To move beyond this, teachers need a redistribution or reprioritisation of workload; ideally, providing programs that are mapped to the existing curriculum and supporting them in the development of cross-curricular programs that work for their students.

In contexts where entrepreneurial education has been mapped and delivered in line with the curriculum, teachers and schools report that it brings relevancy to traditional subjects, providing real-world applications to subjects such as Maths, English, Drama and other disciplines through project-based experiential learning. However, schools require time, resources, leadership and concerted support to implement this work. This burden is often most heavily felt by teachers in the public school system.

"A lot of students aren't seeing the relevance in the curriculum but with entrepreneurial education suddenly maths becomes real and useful, English attains relevance, the curriculum seems a lot more aligned with the real world."

- Mark Woolley, Professional Officer, School Improvement, Wollongong Catholic Diocese

4.

Teachers recognise that they have an important role to play in facilitating entrepreneurial education but feel underprepared to deliver education on future pathways when even industry can't offer insight into what those future pathways will be.

Especially after the COVID-19 pandemic, teachers have seen a change in student career paths, requiring school offerings to adapt. Whilst teachers are working hard to ensure their students develop critical employability skills, the workforce is constantly evolving so it's impossible to do this with a static set of resources. To overcome this, teachers need a constant connection to the entrepreneurial ecosystem and with industry who can inject contemporary, up-to-date business challenges and approaches. Adopting a continuous improvement approach is also important to ensure entrepreneurial education remains contemporary and relevant.



Education Bodies

Primary and Secondary Education bodies

Entrepreneurial education is most effective for youth, and easily implemented by teachers, when it is endorsed by institutional leadership and embedded in the school. For this to happen, there needs to be a top-down endorsement that enables teachers to see the benefit of entrepreneurial education and not just to see it as an additional item on their list of competing demands. While some primary and secondary education bodies have the autonomy and resources to set the entrepreneurial agenda, others need greater support from the government to ensure entrepreneurial education is seen as a priority that can bring real-world relevance to other important subjects. In speaking with those who work professionally (not teachers) in primary and secondary education bodies, we identified the following insights:

1.

Education bodies recognise that the impact of entrepreneurial education reaches beyond creating startup businesses, but this sentiment isn't always recognised by everyone.

Creating innovative thinkers and the next generation of entrepreneurs who can solve society's most complex challenges is an important outcome of entrepreneurial education but it's not the only one. Emotional wellbeing, increased self-agency and the opportunity to prepare youth for the ever-changing nature of work are other vital outcomes of entrepreneurial education.

Entrepreneurial education has the power to:

- Teach resilience, grit and determination
- Engage young people who may not have been engaged in a traditional classroom environment
- Prepare students for the workforce by developing skills most critical to their success in an environment that is continuously changing, and at a rapid pace; these skills include critical thinking, problem-solving, collaboration, communication, and creativity.

Time-poor schools and teachers often don't have the opportunity to experience entrepreneurial education firsthand, meaning its impact often remains unrealised or invisible.

"Without entrepreneurship and innovation skills being embedded in the curriculum, schools and teachers will always struggle with making time and resources available."

– Rob Cousins, Careers Counsellor, St Joseph's College

2.

Top-down endorsement is crucial to ensure entrepreneurial education is prioritised and sustainably embedded in schools.

While education bodies offer opportunities to teachers, without the top-down support and endorsement, entrepreneurial education remains outside the curriculum as "just another thing to do" for teachers who are pressed for time and who face heavy workloads. Teachers and career advisors are heavily stretched with competing demands and priorities. Mapping entrepreneurial education to individual subjects requires time, resources and support that teachers currently lack. For education bodies, this often means the entrepreneurial education programs they offer don't get the buy-in or uptake they need to succeed.

"It would be effective if it was embedded systematically. Entrepreneurial education needs a longer-term focus and to be curriculum-aligned."

– Zane Van Den Berg, STEM Project Officer, Rivers Academy of STEM Excellence

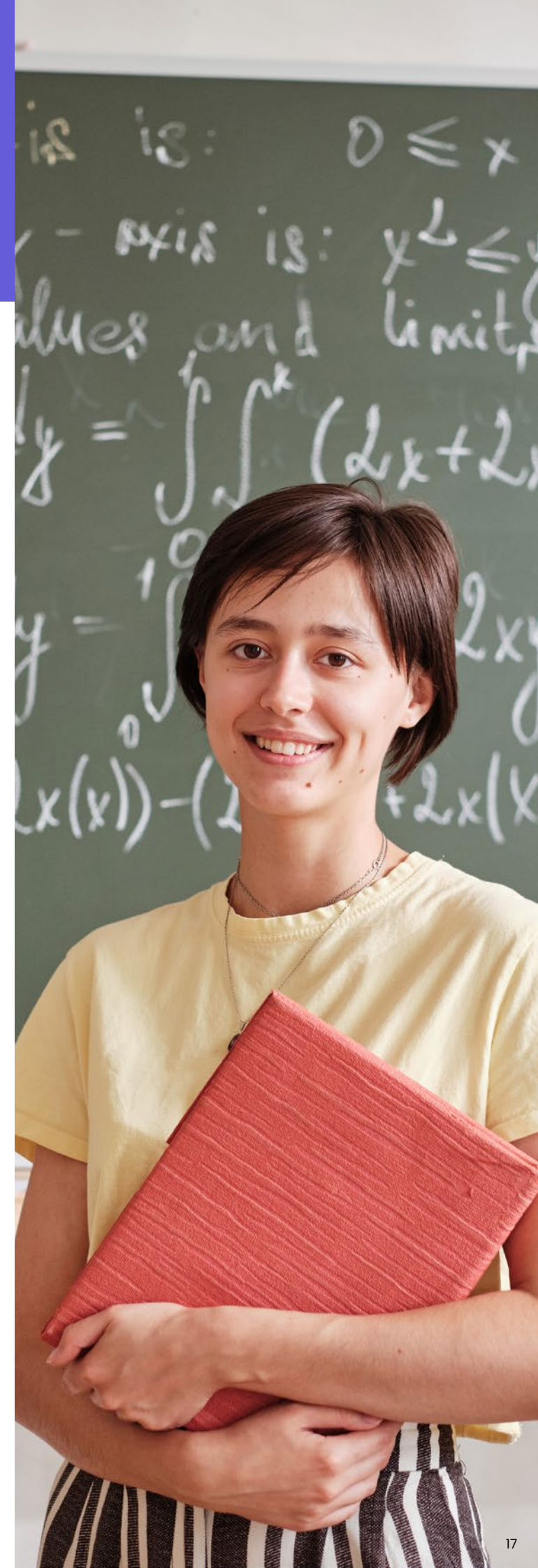
"If entrepreneurial education becomes recognised by the government (similar to what happened with STEM) that would give more leveraging power to the likes of myself. Would give more power to make it happen. More of a push around its importance. If you've got that government tick of approval it gives more leverage to people like me."

– Ben Woods, School Improvement Officer, Wollongong Catholic Diocese

3.

Celebrating successful case studies are crucial to momentum in the education space.

Without celebrating the success of entrepreneurial education initiatives, schools lack inspiration and encouragement to implement entrepreneurial education in their contexts. Schools also require case studies and examples to identify visible ways in which they can address challenges in their schools or creative ways to embed entrepreneurial education without sacrificing other topics or priorities.



Education Bodies

We have looked at primary and secondary education bodies, as well as tertiary education bodies, including universities and TAFE NSW. As they each have unique perspectives, their insights are presented separately in this section.

Tertiary Education Bodies (Universities & TAFE NSW)

Opportunities for NSW students to participate in entrepreneurial education has significantly increased over the past few years. However, it still only represents a small fraction of their overall higher education experience and remains far from reaching the ‘tipping point’ where it is a core part of the education experience. Our interviews with stakeholders in the higher education sector revealed the following three key insights:

1. Entrepreneurship is still limited to STEM and business education in tertiary education.

There is a stronger emphasis and prominence of innovation and entrepreneurship subjects in business schools or technology and engineering degrees. Health, Arts and Social Science faculties often find it challenging to incorporate entrepreneurial education into their subjects and demonstrate the relevancy of these skills to students, parents and funding bodies. An example initiative that is addressing this issue includes SSE’s collaboration with Macquarie University to embed innovation and entrepreneurial skills into their Bachelor of Arts first-year subjects and the fourth-year capstone project as a key pillar students’ development of employability skills.

2. Traditional assessment structures in tertiary institutions make it difficult for students to develop the entrepreneurial mindset that views failure as a tool to learn and improve.

Whilst it is a cornerstone of the entrepreneurial learning process, most higher education curriculums today are not designed to facilitate an experience where students can develop a growth mindset and are encouraged to ‘fail fast and learn through iteration’. This can lead to a mismatch between students’ current education experiences and their experience in the work environment where you are constantly problem-solving and challenging thinking.

When entrepreneurial activities have real, social outcomes, youth are more invested and engaged. Ensuring the learning is focused on adding value to society, the environment or their direct community through solving problems rather than a pursuit of profit is critical to keeping it playful, and inspiring.

“Focus on creating value for others, experimenting and collecting evidence, not on profit. Profit is important and needs to be threaded in more subtly otherwise students’ eyes glaze over.”

– Martin Bliemel, Director of Research & Associate Professor at Transdisciplinary Innovation School, University of Technology Sydney



3. There is a competitive opportunity for entrepreneurship to be embedded into teaching degrees to ensure budding future teachers can reap the rewards.

There is appetite and interest in incorporating entrepreneurial education into the curriculum of the Bachelor of Education as it is recognised that these development experiences create opportunities for future teachers to develop the exposure, skills and build their network in becoming workplace ready; whether that workplace is within the school grounds or elsewhere.



Government

Over the past decade, entrepreneurial education has gained greater attention from federal, state and local governments in Australia. This has been at varying levels and with different scopes across different levels of government and within different locations. In NSW, government departments are doing an excellent job driving the creation of entrepreneurial hubs, such as the Sydney Startup Hub, and broader areas that will drive the growth of innovation, such as the new Precincts emerging across Greater Sydney. They are also introducing entrepreneurial subjects and programs, but this is occurring across multiple departments and portfolios. However, there is an opportunity for improvement to better support entrepreneurial education in NSW. Our interviews revealed the following key insights:

1.

There is a void of departments taking a clear leadership role for driving entrepreneurial education.

Entrepreneurial education has a pivotal role in providing the right conditions to enable operators and educators in the education system to flourish and help parents prepare youth for a rapidly changing world, filled with wicked problems to solve. Currently, these responsibilities are spread across various Government departments. Some departments may even be tasked to support youth entrepreneurship without having direct access or control over the tools and resources to enforce and implement the appropriate changes. Making it a difficult task of developing an integrated, systematic approach to entrepreneurial education, and creates the impression that there isn't a clear public stance from the NSW Government or that it values entrepreneurial education.

2.

There is no comprehensive or comparable impact measurement approach.

Government bodies are not able to measure the impact of various youth entrepreneurship initiatives and programs on the entrepreneurial capacity of youth as there is no nationally agreed benchmark (such as Startup Muster or Global Entrepreneurship Monitor) to define the measures of success and set the bar for states and territories to compare and compete. Developing an impact measurement framework is crucial.

3.

The ability of entrepreneurial education to address key government priorities is not always recognised.

Entrepreneurial education can help address a multitude of government priorities and social issues. For example, entrepreneurial education is widely acknowledged as an approach to reduce youth unemployment through equipping youth with the skills and mindsets to create value for their employers or become job creators themselves. However, often due to the multifaceted nature of the challenges they are facing, all levels of Government departments are spearheading various task forces and initiatives to address issues such as youth unemployment and often do not identify or support entrepreneurial education as a cohesive initiative and potential solution. There is an opportunity to take a systematic approach in tackling government challenges and using entrepreneurial education to tackle priority areas such as youth unemployment, community resilience, and youth mental health.

"If NSW has a vision to lead entrepreneurial education in Australia and globally, we need to achieve consensus on how best to track and measure the milestones to success."

– Melanie Farmer, Concierge of Co-creation – CrazyMightWork



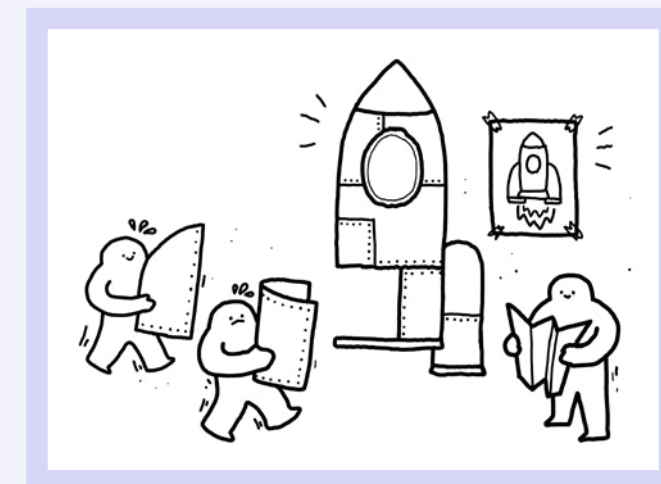
Entrepreneurial Ecosystem

NSW has a thriving entrepreneurial ecosystem supported by multiple organisations, government initiatives, and education bodies. Much of the ecosystem has been mapped out by Liz Jackson which is accessible [here](#). Interviews with stakeholders in the entrepreneurial ecosystem indicated that they are ready, available and excited to be more involved in nurturing and uplifting the capability of youth at an earlier stage of life. Key insights distilled from discussions with them include:

1.

There is a strong acknowledgement that entrepreneurial education is a key ingredient in fostering a vibrant and resilient innovation ecosystem.

This is necessary to support the continuous flow of new and emerging talent that bring new products and services to market—creating a more sustainable future for all. However, despite the strong desire to contribute to growing the entrepreneurial capability of youth, entrepreneurial ecosystem players struggle to connect industry mentors with students in a meaningful and safe way, as they are hampered by their lack of proficiency in dealing with ethics and child safety, for example.



2.

Government has a critical role in supporting entrepreneurial education.

There is a strong consensus in the ecosystem that the Government needs to play a significant role in building the ecosystem. While pockets of funding are available, these are split across four or five government bodies and this makes it difficult to have a coherent, long-term, policy framework to develop entrepreneurial education.

"Many successful founders mention how early they started and how much that has supported their journey to becoming a founder but not everyone has that same opportunity. Everyone has a role to play—teachers, parents, even fellow students but it needs to be supported by Government from the top down."

– Phoebe Zhang

3.

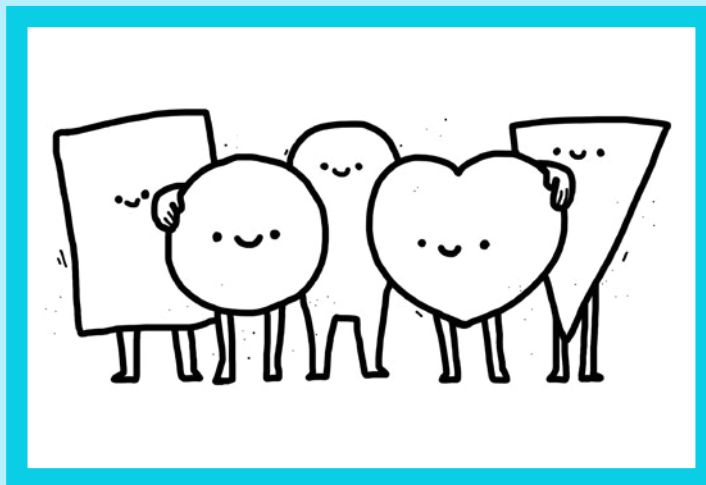
There is still a popular perception that entrepreneurship is reserved for a specific 'type of people' and requires significant capital and funding.

Ensuring a greater diversity of entrepreneurially-minded role models, varying from a business owner and non-business owner role models is essential. There is an increased focus on a coordinated "Team Australia" approach to entrepreneurship. In this team effort, it is important to understand and support the key influencers of young people who will help entrepreneurial education thrive as it increases the visibility of entrepreneurial role models and clear pathways to entrepreneurship.

"We need to stop only teaching people. We need to give them the picks and axes to mine for gold. Learning is a by-product of doing."

– Stephen Rutter

Supporting Organisations



There are a plethora of organisations in NSW supporting young people through multiple different methods and approaches, providing the fundamental services and support young people need to survive. The interviews conducted for this Report highlight the opportunity to build stronger connections between these organisations that share a common goal of supporting the success of youth with many youth entrepreneurial education providers. Insights from interviews revealed:

1.

There is an opportunity to provide clear and easy pathways for youth.

Supporting organisations looking into the youth entrepreneurship ecosystem can clearly see many one-off workshops and events that support youth resilience, wellbeing or career success. They identified that there is a missed opportunity to provide clear and easy pathways for youth to progress their interests and to embrace the transferable nature of skills developed through entrepreneurial education across contexts. These organisations value the skills that are learnt through entrepreneurial education, such as adaptability and empathy, and would like to see this clearly communicated as not only relevant for the pursuit of commercial or market opportunities but as essential capabilities for life.

2.

Talent is spread across NSW, however, there is unequal access to opportunities to entrepreneurial education in the regional areas of NSW.

Supporting organisations see remote schools crying out for help as distance and technology limitations remain an overwhelming challenge for many rural communities. Many supporting organisations do crucial work with communities and young people experiencing disadvantage; there should be more collaboration to engage this audience.

3.

There is a gap between expectations from schools and the industry.

Supporting organisations are working with schools that are actively searching for creative ways to find truly meaningful work experiences for their students. However, there is a lack of opportunities for young people as businesses focus on attracting talent that can quickly “hit the ground running” rather than those who need to learn as they work. This means the gap continues to exist and potentially widens as opportunities to support youth in ‘ramping up’ their readiness for workplaces remain limited. Extending beyond workplace readiness, the interviews also surfaced the need to ensure that youth are exposed to the diversity and changing nature of work as a way to enable their development of a growth mindset and innovative thinking.

“Empathy creates a greater understanding of one another, making us feel safe. Without safety, creativity diminishes, and the source of innovation dries up. These skills should be prioritised within the education system.”

– Melanie Farmer, Concierge of Co-Creation at CrazyMightWork



The future state of entrepreneurial education for youth in NSW



Drawing on insights from the interviews and from research into international best practice, we have identified six key characteristics of an ideal future state of entrepreneurial education for youth in NSW.

On the following page, we have explored the actions we recommend to achieve this state.

Six Key Characteristics

1. Entrepreneurship championed as a priority for the Premier of NSW

Supported by the Minister for Education and championed by Principals on the same level as literacy, numeracy and STEM.

"Entrepreneurial learning will benefit and enrich the lives of individuals, strengthen the economy and contribute to the development of a prosperous and interconnected society."

- Entrepreneurial Learning strategy. Minister foreword by Hon. John Gardner MP. Minister for Education¹³

2. Entrepreneurial education integrated with industry and supported by parents as mentors

The walls between the classroom and the entrepreneurial ecosystem have been eroded and authentic, experiential, entrepreneurial learning experiences combine the best of educators, industry and parents' knowledge.

"At my child's school, they had parents fill out a survey of what extracurricular activities they wanted to see for their children. The demand for entrepreneurship far surpassed any of the other activities listed."

- Lenny Repole, PMO Manager at CBA, Activator at SheEO™ and Young Change Agents Board member



3. Every child has an entrepreneurial mindset, skillset and toolset

Structural and perceived barriers that prohibit participation in entrepreneurial learning pathways have been removed and there is equitable access to entrepreneurial pathways for all students in NSW.

4. Entrepreneurial pathways and credentialing for educators and all students

Entrepreneurial pathways are recognised and rewarded for both teachers and students, encouraging the take-up and celebration of entrepreneurial education.

5. A dynamic tribe of entrepreneurial educators who form a community of practice

Educators have not only the resources they need to succeed but a dynamic tribe that helps them to grow their entrepreneurial education practice and inspires them to deliver innovative entrepreneurial education experiences for their students.

6. Entrepreneurial education is valued and measured

New South Wales establishes a measurement system that empowers schools to measure the effectiveness and value of entrepreneurial education and understand how this strengthens the pipeline of entrepreneurial thinkers and job creators.

Australia's current rating of 3.7/10 in entrepreneurial education (Global Entrepreneurship Monitor Report, 2020) has increased, with NSW leading the way.

¹³ Department for Education, Government of South Australia (2018). Entrepreneurial Learning Strategy. Creating a mindset for world class education. <https://www.education.sa.gov.au/sites/default/files/entrepreneurial-learning-strategy.pdf>.

Recommendations

To achieve the ideal future state, we need to implement the following:

Multiple touch-point programs for youth that build educator capacity

Start: Increasing department, philanthropic/corporate funding for schools to participate in externally led programs to bring expertise in entrepreneurial education into schools to deliver multi-touchpoint programs for students that also train teachers.

& Creating entrepreneurial clusters of schools that can share capacity building opportunities and build local communities of practice and have a supportive ecosystem with industry relationships and connections to local stakeholders.

Do more of: Immersive programs that build teacher capacity and have multi-touchpoint pathways for students who want to continue building their skills and ideas throughout their school journey.

& Providing whole of school packages and approaches to entrepreneurial learning that creates supportive ecosystems within schools and local communities.

Do less of: One-off entrepreneurial education activities that don't have any follow up for students or build teacher capacity e.g., hackathons/one-day incursions.

Providing resources for teachers for entrepreneurial education

Start: Rewarding and celebrating schools, teachers and school leaders that support and promote entrepreneurial learning (e.g. with funding, awards or media) and connecting educators with subject matter experts (e.g. setting up dedicated entrepreneurial educators within the NSW public school system).

Do more of: Building teachers' entrepreneurial capacity is further supported by easily accessible and applicable resources linked to the curriculum and acknowledgement/accredited by the Department of Education.

Do less of: Considering entrepreneurial education delivered by teachers as an additional activity beyond their standard role.

Learning from existing effective entrepreneurial education providers and activities

Start: Start investing in a pathway approach to entrepreneurial education in partnership with entrepreneurial education organisations to provide long term scaffolded learning for students. Collaboration with and between existing Heads of Innovation and Entrepreneurship at schools and other schools that can't afford a similar resource.

Do more of: Utilising the learnings of existing evidence-based programs and building on those.

Do less of: Replicating and re-creating effective content and programs.

Practical work-integrated learning

Start: Focus the Regional Industry Education Partners on supporting the embedding of industry connections specific to entrepreneurial education. Provide opportunities for teachers to apply their own entrepreneurial mindset to developing opportunities for their students.

Do more of: Providing work-integrated learning experience in partnership with industry or with student-led enterprises and businesses that operate within a school.

Do less of: Work experience not supported by a context/framework.

Entrepreneurial education for pre-service teachers

Start: Entrepreneurial education and capacity building as a requirement for pre-service teachers, encouraging them to develop and adopt an entrepreneurial mindset in relation to their teaching.

Do more of: Collaboration between entrepreneurial education providers, universities and key entrepreneurial ecosystem stakeholders.

Do less of: Waiting until teachers are in the classroom to introduce them to and equip them for entrepreneurial education.

Acknowledging the broad relevance of entrepreneurial education

Start: Champion schools that are already doing this successfully e.g., Rooty Hill High School, Merrylands East Public School as well as celebrating teachers who are embodying an entrepreneurial mindset.

Do more of: Integrating enterprise skills into other subjects e.g., Health, Education, Geography, English etc.

Do less of: Thinking of entrepreneurship as something that can only be linked to the business curriculum.

Industry integration

Start: Offering dedicated support to education institutions to create and sustain meaningful relationships with entrepreneurs and industry (e.g. a toolkit of resources/tools and how to identify appropriate stakeholders in the media).

Do more of: Connecting industry, young people and educators through different valuable networks via experiential and work-integrated learning with a focus on entrepreneurship.

Do less of: Industry struggles to engage with youth in a safe, and meaningful way. Therefore, there is currently minimal connection between schools and industry.

Amplifying the value of entrepreneurial education

Start: Amplifying the value of entrepreneurial education and how to provide access to all stakeholders within the youth entrepreneurial ecosystem using existing networks and activities (e.g. role models in media, information and parent nights, tapping into the Regional youth taskforce and Regional Industry Education Partnership program).

Do more of: Amplifying entrepreneurial role models and benefits to young people and educators (e.g. through awards programs).

Do less of: Leaving young people, educators and parents to find information about accessing entrepreneurial education and its benefits independently.

Integrating entrepreneurial education into the classroom

Start: Providing dedicated time within the NSW curriculum for entrepreneurial education in every stage and dedicated grant funding to help schools embed entrepreneurial education if it will not be done from a holistic Government perspective.

Do more of: Integrating entrepreneurial education activities within the classroom and aligned to the curriculum.

Do less of: Considering entrepreneurial education as an extracurricular activity for students rather than vital for their future.

Credentials and recognition for young people

Start: Valuing entrepreneurial skills and learning as useful for pursuing education and career opportunities and recognising ePortfolios as a way to get access to these opportunities.

Do more of: Using industry and university recognised credentials and ePortfolios to empower young people to capture, value, articulate and demonstrate their entrepreneurial skills and learning.

Do less of: Running entrepreneurial education activities where young people aren't empowered to capture, value, articulate and demonstrate their entrepreneurial skills and learning.

Entrepreneurial education with a careers-lens

Start: Careers NSW to work with entrepreneurial education organisations to position enterprise skills and entrepreneurial learning as valuable for young people's career development and encourage this to be shared and championed by careers advisors and educators. This can be linked to creating T-shaped professionals prepared for the workforce.

Do more of: Helping young people understand the link between their participation in entrepreneurial education activities and preparing to join the workforce, e.g. through careers workshops and resources before and after programs.

Do less of: Delivering entrepreneurial education without a careers-lens for young people or educators.

Activating and engaging parents in entrepreneurial learning

Start: Activate and support the parent body that sits behind each school through top-down encouragement from the government to encourage their children to engage in entrepreneurial education and careers, and leveraging parent experience to support entrepreneurial education.

Do more of: Involving parents in programs and entrepreneurial learning through volunteer roles, showcases, and sharing information about programs and their value and outcomes with parents.

Do less of: Not actively recognising and responding to the fact that the majority of parents aren't equipped to support their students with entrepreneurial career ambitions despite having valuable experience to offer from their own career journey and life experiences.

Engaging diverse youth in codesign

Start: Scholarships, funding and specific programs for young people with more barriers to participating in entrepreneurial learning to provide equitable access and opportunities based on codesign insights.

Do more of: Actively empower young people to co-design approaches to entrepreneurial learning (e.g. see case study).

Do less of: Designing solutions without considering the different barriers that young people in different contexts face becoming an entrepreneur or accessing entrepreneurial learning.

Collaboration across the ecosystem

Start: Scholarships, funding and specific programs for young people with more barriers to participating in entrepreneurial learning to provide equitable access and opportunities based on codesign insights.

Do more of: Creating the space (including virtual) for providers/ecosystem to come together to collaborate and help join dots for young people including through programs.

Do less of: Operating in silos to build entrepreneurial education activities.

Measurement of the value and quality of entrepreneurial education

Start: Establish a nationally agreed benchmark and framework upon which quality of entrepreneurial education in NSW and other states and territories can be measured, to incentivize the various players with a structured assessment for schools to self-assess their readiness for change in implementing entrepreneurial education, and setting achievement targets accordingly.

Do more of: Measuring the impact of entrepreneurial education for young people, educators and the youth entrepreneurial ecosystem with an impact measurement framework.

Do less of: Delivering and championing entrepreneurial education without a way to evaluate its impact.

Case studies

South Australia – Entrepreneurial High Schools

Problem/opportunity: How might we equip all public high schools to deliver entrepreneurial education?

Solution: To encourage entrepreneurialism in high schools, the South Australia Department for Education selected five high schools to provide specialist entrepreneurial education within the public system. These five schools each received significant funding to deliver entrepreneurial education including funding to recruit dedicated staff, build specialty spaces, organise professional development for their teachers, connect with industry and business, and fund student ventures. The aim was that they would deliver entrepreneurial education in their own school and take the resources and knowledge they develop to schools in nearby areas and share their expert staff, facilities and resources with other schools across the state. This approach was supported by a state-wide entrepreneurial learning strategy, new entrepreneurial focused subjects and VET qualifications, and learning and networking opportunities led by the specialist schools for other schools in the state.

Highlights: This approach used a cluster approach of building up expertise in key innovative schools that could champion entrepreneurial education and share their learnings and resources to empower other schools. It had both a top-down and bottom-up approach with endorsement and leadership from the SA Department of Education whilst also acknowledging and championing the work of schools that were already leading the way in entrepreneurial education (the five specialist schools chosen).

Results: The teachers at the five entrepreneurial high schools have all completed significant professional development and provided numerous opportunities for young people to participate in entrepreneurial education within the curriculum. They have run programs with their surrounding schools and have had some incredible young people emerge from these programs, for example, **Noah**.

Warners Bay High School – a regional school active in entrepreneurial education

Problem/opportunity: How might we provide a multi-touchpoint entrepreneurial learning journey for our students?

Solution: Warners Bay has worked to provide multiple entrepreneurial education programs in their school. They run the \$20 Boss program with their students and also had Young Change Agents run their explorer program with their Year 9 Commerce students to help them implement a design thinking process as part of their studies in entrepreneurship. Their teachers participated in the Young Change Agents teacher capacity building program to build their own capability, confidence, knowledge and resources to deliver entrepreneurial education. Furthermore, Rachel Noonan – leading entrepreneurial education in the school – completed the Sydney School of Entrepreneurship's SSE Entrepreneurial Educators Program (EEP) in 2019 which was part of the NSW Department of Education iEntrepreneur Project. Through the program, teachers from across NSW were equipped with the entrepreneurial tools and resources to apply in their classrooms and pass onto their students. Students have also participated in programs from Tech Girls Movement Foundation and startup.business.

Highlights: Rachel was the 2020 recipient of the NSW Premier's First State Super Financial Literacy and Capability Teaching Scholarship. As part of her scholarship, she will research the successful partnerships that exist between stakeholders to provide a real-world context and improve the financial capability of secondary school students, with a focus on entrepreneurial learning as an ideal way to teach financial literacy skills.

Results: Warners Bay students have been able to have a multi-touchpoint entrepreneurial learning journey. Some of the ideas from the Young Change Agents program can be seen **here**. Long term, it is unclear how sustainable the entrepreneurial education programs will be without clear messaging of the value of it from the Department of Education and sufficient time and resources for teachers.

Denmark's Nation of Solutions Innovation Strategy

Problem/opportunity: From a global perspective, how might we incorporate entrepreneurial learning into the education system and improve youth capacity to find solutions to global challenges?

Solution: In 2012, the Danish government launched a broader innovation strategy called 'A Nation of Solutions' that brought forward 27 policy initiatives with the aim for the education system to increase the innovation capacity of learners, translating knowledge into value and ways for innovation to drive societal challenges beyond today.¹⁴

Highlights: Denmark acknowledged the critical importance of entrepreneurship and innovation throughout the entire education system – from primary school to PhDs – as a first step for students to become more innovative employees in the future and increasing their motivation and interest in entrepreneurship from an early stage.

Results: Denmark introduced new learning objectives and forms of teaching, integrated at least one touchpoint—at every education level—by embedding entrepreneurship into the common objectives of subjects, made entrepreneurship a compulsory topic in the initial teacher training for secondary and higher education, and paved the way for a cohesive primary school system that promotes talented and independent students by providing them with the opportunity for subject choice in innovation and activity lessons involving businesses and organisations.

Kauffman, United States

Problem/opportunity: How might we encourage connection and collaboration between schools as well as their connection with industry?

Solution: Dedicated community engagement programs developed by Kauffman (United States) offer schools the support required to create valuable, long-term connections with other education bodies and industry partners in their community.¹⁵

Highlights/results: Through Kauffman's 'Great Schools Visit' community engagement program community members conduct sponsored visits to other schools to gain insight into the innovative education model that is being used. The program increases knowledge-sharing, the ability to identify resources or tools that may be applied back home as well as increased cohesiveness and collaboration between education providers.

Another powerful community engagement program is the Kauffman 'Parent Power Lab' in which ordinary parents dive deeper into educational matters, realign interest, and share knowledge with other parents and staff members of the school. This enables parents who may not necessarily have the entrepreneurship skill sets to be guided and educated in nurturing and empowering their children for the ever-evolving workforce.

¹⁴ The Danish Government (2012). Denmark – a nation of solutions. Enhanced cooperation and improved frameworks for innovation in enterprises. <https://ufm.dk/en/publications/2012/files-2012/innovation-strategy.pdf>.

¹⁵ Ewing Marion Kauffman Foundation. (2021, September 23). Community Engagement. <https://www.kauffman.org/education/community-engagement/>.



Conclusion

In conclusion, the collective contribution of a cross-section of voices—from youth, educators, education bodies, parents/guardians, supporting organisations, Government and entrepreneurial ecosystem—has highlighted the need for an integrated, systemic approach to embedding entrepreneurial education into the curriculum in order to create sustained long-term impact.

Through capturing and amplifying the perspectives of the aforementioned stakeholders, this Paper has summarised a set of characteristics of an ideal future state and developed a framework of recommendations that can help us get there.

We invite you to contribute to this Paper and share further observations and suggestions on how we might bring an ecosystem approach to entrepreneurial education, with visible, equitable and accessible pathways for every child to grow an entrepreneurial mindset and advance the economic state of NSW.



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