

Introduction

Australian startups play a critical role in creating Australian jobs, commercialising ideas and creating innovative solutions to social and community-based problems.

Government can stimulate the national focus on entrepreneurship, innovation and technology by making it possible for all Australians to further develop their ideas at university. This is why the Australian Government has committed to the Startup Year initiative.

The Startup Year initiative will offer income contingent loans to 2,000 final year undergraduate students, current post-graduate students and recent graduates through changes to the existing Higher Education Loan Program (HELP) system. This initiative will enable students to participate in university accelerator programs, with the view of commercialising good ideas and injecting new business dynamism into our economy. The program will also include access to mentorship, networks, and industry to help Australians develop the skills to succeed locally and in international markets.

This policy aims to support more productive relationships between industry and universities through supporting the development of HELP loans tailored to participation in university accelerators and incubators.

The Startup Year initiative will support the emergence of startups by students from a diverse range of backgrounds and regionally based enterprises.

The initiative will grow Australia's pool of new entrepreneurs and help drive innovation to grow much needed links between universities and the startup community.

The Department of Education (Education) and the Department of Industry, Science and Resources (DISR) are seeking your views on the development of the Startup Year initiative. The issues, rationale and key program design features are outlined below for comment. The key components for feedback include:

- Accelerator eligibility
- Program design to meet intended outcomes
- Student eligibility requirements

Please email your submission using the template provided to the Department of Education at <u>accelerator@dese.gov.au</u>. Submissions should not exceed 1,500 words.

Submissions close 11.59pm AEDT Tuesday 15 November 2022

Context

Australia has a world-class research system, with universities providing a bedrock for creation and innovation. However, Australia has been falling in the Global Innovation Index — which measures science and innovation investments, technological progress, and socioeconomic impact — from 17th in 2014 to 25th in 2021.¹

While Australia is the home to some of the world's most successful startups and brightest minds, more can be done to deliver government policies that support innovation and entrepreneurship at the higher education and startup level.

Data from the Australian Investment Council (AIC), shows record levels of late stage round investment in firms in Australia. In 2021, \$7.9 billion was invested by Venture Capital funds in Australian companies, doubling the 2020 figure, which was itself a record. However, angel and seed investment in Australia has not grown at the same rate as later stage investment². It is therefore critical to support early stage innovation in Australia and invest in skills development of new Australian entrepreneurs and their ideas.

This priority becomes even more compelling when taking into account Australia's Relative performance on innovation. In the World Economic Forum's Global Competitiveness Index 4.0, Australia has fallen two places since 2018 to 16th overall, ranking as low as 29th in areas such as infrastructure and ICT adoption³. Australia ranks 91st in Harvard University's Atlas of Economic Complexity⁴, meaning Australia can drive greater innovation, productivity and real wage growth by increasing the diversity of economic activity. The need for greater economic diversification highlights the opportunity that can be derived from the commercialisation of Australia's world-class university research.

Beyond the contribution research can make, universities can also build skills and interest in entrepreneurship, building a cohort with the skills, knowledge and expertise to positively contribute to the labour market. However, the share of Australian adults deterred from starting a business by fear of failure (47.4 per cent in 2019) is above the OECD average (40.4 per cent) compared with countries such as Germany (29.7 per cent) and the US (35.1 per cent)⁵. This aligns with the results from the World Economic Forum in which Australia ranked 36th on attitudes towards entrepreneurial risk⁶.

As described by the Productivity Commission (2017) "the creation and adoption of knowledge, ideas, products, processes and ways of doing business — in short innovation — are critical for maintaining Australia's high standard of living, ensuring its ongoing international competitiveness, creating jobs and delivering future economic prosperity"⁷. Fostering entrepreneurship and startups will help to boost Australia's economic productivity, job growth, and solve complex social issues while building a pool of highly skilled and experienced graduates.

- 4 ATLAS of Economic Complexity (2022) Country & Product Complexity Rankings, https://atlas.cid.harvard.edu/rankings
- 5 DISR Department of Industry, Science and Resources (2021) *Australian Innovation System Monitor*, https://www.industry.gov.au/data-and-publications/australian-innovation-system-monitor

¹ WIPO (2021) Global Innovation Index, www.globalinnovationindex.org/analysis-indicator

² Australian Private Capital Market Overview – Australian Investment Council yearbook 2022

³ World Economic Forum (2022) Australia, https://reports.weforum.org/global-competitiveness-report-2019/economy-profiles/#economy=AUS

⁶ World Economic Forum (2022) Australia, https://reports.weforum.org/global-competitiveness-report-2019/economy-profiles/#economy=AUS

⁷ Productivity Commission, *Shifting the Dial: 5 Year Productivity Review*, Report No. 84, Productivity Commission, Australian Government, 2017, accessed 2022.

The productivity gap between the global frontier and Australian firms has grown over time. This suggests that Australian firms have been slower to adopt cuttingedge technology and processes, and to improve their productivity performances. In turn, slower withinfirm productivity growth has weighed on aggregate productivity growth.

One of the key factors that could explain the slower catchup is a lack of policy focused on business dynamism and competition. Ultimately new business dynamism results in the entry of new Australian firms into the market to intensify competitive pressure on incumbents, forcing them to improve or exit. Entry also brings young firms into the market, which may be more likely to innovate and adopt new technologies or processes⁸. The Startup Year initiative supports this new market entry and a much needed injection of business dynamism into the Australian economy.

Startups

Startups have an important role in job creation, commercialising ideas, solving social and community-based issues, and strengthening links between universities and the broader community. On average across OECD countries, young firms account for approximately 20 per cent of employment and create almost half of all new jobs⁹. In Australia, startups have a high impact on the creation of new jobs. Research suggests that job creation is highly concentrated. In 2020, an increase of over 3,000 employees could be attributed to Australia's eight most successful startups¹⁰. The Tech Council of Australia estimates new tech startups can contribute 30,000 new jobs and \$7 billion in value by 2030¹¹. Supporting startup creation and the entrepreneurial skillset will play a role in growing productivity and incomes and build a workforce with the skills and capabilities to adapt and thrive in the future labour market.

Beyond job creation, startups have a role in driving research translation and commercialisation across a range of industries, particularly in the deep tech industry¹². This has been supported by the emergence of university-based accelerator programs, bringing together industry, academic expertise and resources to build and accelerate startup ideas. According to Universities Australia, there are more than 100 hubs in Australian universities¹³. These accelerator programs offer immersive, wraparound services to support students and first-time entrepreneurs with their startup ideas. Generally speaking, this includes:

- workshops, resources and educational elements,
- mentoring and networks,
- access to facilities, equipment, and co-working spaces, and
- funding components.

⁸ Reaching for the stars: Australian firms and the global productivity frontier; Dan Andrews, Jonathan Hambur, David Hansell and Angus Wheeler 2022#01 7 February 2022

⁹ OECD (2022) DynEmp: Measuring job creation by start-ups and young firms, www.oecd.org/industry/dynemp.htm

¹⁰ G20 Entrepreneurship Roundtable (2021) Entrepreneurship in Australia: Promotion of entrepreneurship and startups in the digital area 11 Tech Council of Australia (2021) Roadmap to Deliver One Million Tech Jobs

Startup Muster (2018) Startup Muster Annual Report, p19, <u>https://startupmuster.com/reports/Startup-Muster-2018-Report.</u> pdf?key=d3fcf8771af17253b761c908b5f7abe8b407c5c671bbafb74cfd51c09414efec

¹³ Universities Australia (2022) University Startup Hubs, www.universitiesaustralia.edu.au/our-universities/university-startup-hubs/

Workshops, resources and education

Workshops, resources and education within an accelerator program often focus on business skills and media and PR. The University of Wollongong through their iAccelerate program offers a robust education component through their pre-acceleration program – Activate. Activate is an educational program focusing on themes such as lean methodology, marketing and branding, basic business, pitches and turning ideas to Minimal Viable Products¹⁴. An educational component to accelerator programs helps to build important skills learners need to build their startups.

Mentoring and networks

Research from Startup Muster (2018), an Australian survey on the startup ecosystem, found that 58.5 per cent of startup founders accessed mentorship since founding their startup. Meaningful mentorship and access to a network of innovators and entrepreneurs is a key feature to an accelerator program (see RMIT University's LaunchHUB¹⁵, GRIST: The Mill House Social Enterprise Accelerator Program¹⁶ and the BETA Pre-Accelerator Program¹⁷).

Wide exposure to business networks is important for founders and researchers looking to test their ideas, overcome challenges, find capital, build a team, create or reach new markets and grow their business.

Access to facilities, equipment, and co-working spaces

Universities are developing state of the art facilities, co-working spaces, and innovation precincts, available to students to access as part of an accelerator program. Through the Melbourne Accelerator Program, students have access to the University of Melbourne's innovation hub that brings together research, industry, government, higher-degree students and other elite thinkers in a purpose-built precinct to foster collaboration and amplify innovation¹⁸. The University of Technology Sydney's UTS Startups program is a notable example of the creation of new startups at scale. Visiting 100 schools each year around NSW, conducting workshops for 5,000 UTS students each year, and addressing the public on the busiest street corner in Sydney to drive desire to pursue tech entrepreneurship. This program then provides free space and support to 490 active student-launched startups, in return for these startups participating in peer mentorship, providing internships and in-subject projects, and helping to inspire the next generation of founders.¹⁹.

These shared spaces and access to world-class facilities helps to strengthen concepts and build prototypes to get startups market ready.

¹⁴ iAccelerate (2022) Accelerate Your Idea. Grow Your Impact with iAccelerate, www.iaccelerate.com.au/

¹⁵ RMIT University (2022) LaunchHUB, www.rmit.edu.au/partner/hubs/activator/startups/launch-hub

The Mill House Ventures (2020) *Mill House Social Enterprise Programs*, <u>www.millhouseventures.com.au/social-enterprise-programs/</u>
 Victoria University (2022) BETA 2022 Pre-Accelerator Program,

www.vu.edu.au/vu-rise-recover-innovate-sustain-evolve/about-vu-rise/beta-2022-pre-accelerator-program
 The University of Melbourne (2022) Australia's leading startup accelerator, www.themap.co

¹⁹ UTS (2022) *Techcelerator*, <u>www.uts.edu.au/about/faculty-engineering-and-information-technology/research-faculty-engineering-and-it/</u> funding/techcelerator

Funding

There is often a funding component in the current university-based accelerator programs. This can be through equity-free seed funding or a Simple Agreement for Future Equity (SAFE), which allows the university investors to purchase stock in a future equity round subject to the parameters set out in the SAFE²⁰. Through the University of New South Wales (UNSW) SynBio 10x program, students have access to \$20,000 in seed funding from UNSW and up to \$120,000 from Main Sequence Ventures as a SAFE, which can be extended to \$380,000 for phase two participants²¹. Another example is the University of South Australia's Venture Catalyst (Accelerator) Program, which offers a \$10,000 stipend for eligible participants²².

Access to funding and stipends are important to startup acceleration and to encourage participation by helping to navigate the financial barriers to building a business.

Startup Policy Ecosystem

There is a broader ecosystem supporting innovation and entrepreneurship in the public policy domain against which the Startup Year scheme needs to align. Most significantly, the Government has a key policy agenda aimed at expanding Australia's critical technology capability. This includes the \$1 billion Critical Technologies Fund, within the Australian Government's planned National Reconstruction Fund. This will provide investment through loans, equity and guarantees to boost high-tech manufacturing to power future economic growth and job creation²³.

The Early Stage Venture Capital Limited Partnerships and the Venture Capital Limited Partnerships support industry innovation and entrepreneurship by seeking to attract investors through tax benefits to encourage investment in innovative early stage businesses²⁴. The Cooperative Research Centres Program, delivered through AusIndustry, encourages industry-led collaborative research through a range of short to long-term grants.²⁵

Main Sequence Ventures was created by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) to support the commercialisation of research²⁶ and has recently been expanded under the University Research Commercialisation Action Plan. CSIRO also runs the ON Program, coaching publicly funded researchers to develop an entrepreneurial mindset and commercialise their science. Since 2015, more than 3,000 participants have been upskilled through the ON Program²⁷.

Market ready Australian startups and scaleups can gain access to a range of international innovation hubs, co-working spaces and networking opportunities through the Government's Landing Pads initiative, based in cities such as San Francisco, Singapore, and Berlin²⁸.

The Startup Year policy will need to connect into and add value to this existing policy ecosystem, supporting the flourishing of Australian startup and entrepreneurial businesses by enabling greater participation in university-based accelerator programs.

²⁰ Australian Government Business (2020) SAFE Notes, https://business.gov.au/grants-and-programs/venture-capital/safe-notes

²¹ UNSW SynBio Accelerator, unswfounders.com/synbio10x-accelerator

Innovation & Collaboration Centre (2021) Venture Catalyst, <u>https://icc.unisa.edu.au/programs/venture-catalyst</u>
 Albanese, A. (2022) Australia Can Do Better on Tech Jobs,

https://anthonyalbanese.com.au/media-centre/australia-can-do-better-on-tech-jobs-marles-husic

²⁴ DISR (2022) *Venture Capital*, <u>https://www.industry.gov.au/science-technology-and-innovation/industry-innovation</u> 25 DISR (2022)

²⁶ CSIRO (2022) Main Sequence, CSIRO's Innovation Funds, www.csiro.au/en/work-with-us/funding-programs/funding/main-sequence

²⁷ CSIRO (2019) CSIRO's ON program, https://www.csiro.au/en/news/News-releases/2022/ON-Program-returns-to-continue-buildingentrepreneurial-skills-of-Australian-researchers

²⁸ Australian Trade and Investment Commission (2022) Landing Pads, www.austrade.gov.au/landingpads

Vision and overarching program design

Startup Year is an income contingent loan program for up to 2,000 final year undergraduate students, current post-graduate students and recent graduates per year to support their participation in higher education based accelerator programs to develop their innovative startup ideas. These will be available through changes to the existing HELP system, which is available to university students at Australian universities.

Purpose	 Support the development of new startups through accelerators at Australian higher education providers Stimulate the national focus on entrepreneurship and an innovation culture and boost business dynamism Grow innovation and links between universities higher education providers, industry, and the startup community and the broader community Build a pool of skilled graduates and entrepreneurs with experience in the startup ecosystem
Student Eligibility	 Up to 2,000 final year undergraduate students, current post-graduate students and recent graduates per annum enrolled at a participating Australian higher education provider Meet standard HELP eligibility requirements, including citizenship
Funding mechanism and amount	 Income contingent loan, delivered through changes to the existing HELP system Up to the maximum student contribution amount for Band 3 (predicted \$11,800 for 2023) Allocated to providers in a manner similar to the current OS-HELP scheme Tops up funding for students to access higher education schemes in priority areas
Funding use	 Allow students to take a business-focussed capstone year, working with an accelerator to develop their innovative ideas Funding is allocated to higher education providers to cover costs associated with running the program as an accredited course of education. Alongside educational attainment, funds may also cover the student's access to: Labs and facilities to build and prototype concepts ICT infrastructure and programs Co-working spaces Networks and industry partners
Priority areas	 The program aims to support innovations and boost sovereign capability in areas of national priority and promote social good to support the Government's National Reconstruction Fund, such as: value-add in resources value-add in the agriculture, forestry and fisheries sectors transport medical science renewables and low emission technologies defence capability enabling capabilities

Program design features for consideration

Participating Accelerators

There are over 100 accelerator hubs across the higher education system, which typically offer small cohorts of individual entrepreneurs or teams of entrepreneurs with wraparound services and supports while they develop their startup ideas. These innovative hubs bring together academic enquiry, industry expertise, and world-class facilities to help students accelerate and commercialise their ideas. While the nomenclature of these programs varies across the higher education sector, at their core, these programs are aimed at supporting early-stage startup ideas through specialised supports, services, and assistance.

Definition

For the purpose of Startup Year, an accelerator program will be defined as any higher education provider-based program that provides wraparound advice and services to support prospective and new entrepreneurs build their innovative startup ideas and create new firms.

Question

Does the proposed definition appropriately reflect higher education accelerators?

Registration process

A recurring registration process will be established for providers to participate in the Startup Year initiative. To register, providers will be required to submit an application, which must include the following information:

- Program overview and outcomes, including any supporting documentation, policy documents and business outcomes
- Program components over the business-focused year
- Student enrolments (actual and projected)
- Activities, facilities and non-financial support provided and their associated costs or value
- Funding available to participants
- Eligibility criteria for applicants
- Established industry, higher education and/or government partnerships
- Experience of key partners, supervisors and program contributors, including any successful former founders
- Faculties/industries (if applicable)

Optional: links to existing case studies

Questions

What other accelerator success measures could be considered as part of the registration process? For example, growth in student numbers, diversity in student cohort, number of successful startups or commercialised products from participating students, job creation, and industry partnerships?

What social and community impact measures could be included?

Selection Criteria

To be eligible to participate in the Startup Year initiative, tertiary providers must meet the following criteria which will be assessed by Education and DISR:

- Be an Australian University or University College
- Have clearly defined program outcomes, industry partnerships, and student engagement strategies
- Demonstrated experience supporting students accelerate their startup ideas and build their skills and experience or a well -defined strategy to support this
- Have established research and commercial links to facilitate translation, commercialisation and immersion in the startup ecosystem
- Alignment with areas of national priority
- Have the ability to deliver an accelerator program with a diverse student cohort including regional students, including First Australians
- Demonstrated value proposition for the student and/or industry

Questions

Do the proposed eligibility requirements foster the required industry-university partnerships and student engagement? Are there any additional requirements that should be considered?

Are the proposed criteria for registering higher education provider accelerators fit for purpose?

Allocation Process

Places will be allocated yearly, in a similar manner to the OS-HELP mechanism. There will be two rounds of revision and adjustment each calendar year.

Question

With places being limited to 2,000 per year, what are some key factors to prioritise allocation? For example, links to priority areas, industry and regional connections, market value and commercialisation opportunities, social and community impact, diversity metrics.

What strategies can be in place to ensure students from educationally disadvantaged backgrounds have access to, and can achieve success through the Startup Year initiative, including to support regionally-based startups?

Program design to meet intended outcomes

A key ambition for the Startup Year initiative is to supplement the funding and resources in existing and emerging accelerator programs to allow more students to build and market their innovative startup ideas. As there will be diversity in the ideas, industries, and student background, a key consideration of the program is how to best provide value to the student, ensure quality program delivery, and best facilitate positive student outcomes.

Questions

Does the proposed approach fill a gap in the market? Is there a clear value proposition for students and higher education providers? What other design elements could be considered to ensure quality, a positive student experience and outcomes? What else could be considered to support the ambition to establish new firms? What data is required to measure the success of participating in university-based accelerator programs?

How do we measure the success of the Startup Year initiative and the participating students?

Student experience

Students are the central stakeholder for Startup Year initiative, as the recipients of loans and the driver of startup creation and innovation. As such, it is important that the student experience is considered in the Startup Year design and delivery, to ensure the program meets their needs and provides them with the opportunity to develop the suite of skills and experience required to grow their startup ideas and build their businesses. Students will be required to complete micro-credentials or qualifications as part of the Startup Year program.

Questions

How can we ensure the Startup Year program brings the most value to students?

Should students be able to receive formal and informal learning as part of the program?

How could a micro-credential or qualification best work in practice?

How would students access test, trial and learn facilities and projects to help build skills and understanding towards their own business idea?

Should there be opportunities for students to engage with and build networks with domestic and international partners in finance and startups, as well as in their own industry of interest?

Student Eligibility Requirements

When considering the current cohorts accessing higher education-based accelerator programs, two key personas emerge. The first are students and recent graduates who might have identified a startup idea through their studies and need wraparound support and mentorship to build and iterate their ideas. The second are more advanced in their careers and have identified problems within their industries or communities for development.

We propose Startup Year loans focus on the former group, that is final year undergraduate students and current post-graduate students. Students participating in an accelerator program, who are recommended by their supervisors, can access these loans as additional support to bring their startup ideas to market.

Option: the loans could help bridge the gap between supply and demand, providing loans to students who miss out on a place within an accelerator program, are recommended by their supervisor as benefitting from access to additional specialised advice and time to refine their startup concept.

Questions

What are the benefits and risks in expanding the program to recent graduates?

What are the benefits and risks in providing Startup Year loans to students who have been accepted into accelerator programs? Does this provide a value add to entrepreneurs accessing these existing programs?

What are the benefits and risks in providing Startup year loans to those who are earlier in their startup journey and have missed out on a place in an accelerator? Do the benefits, learning and experience outweigh the risk of failure? How can universities ensure these loans are allocated to the most suited students?

What other options could be considered?

Startup Year Pilot

The Startup Year initiative is anticipated to commence in July 2023. This can be achieved through a full program rollout, or through a first-year pilot phase. A first-year pilot phase would help to inform the future direction of the initiative, including validating processes such as registration and bidding, identify key themes in priority areas, student eligibility, and measures for success. The pilot would include a small number of places at a select number of existing higher education provider-based accelerator programs. This would include a national footprint, including at least one regionally based accelerator.

Questions

What are the benefits and risks for undertaking a first-year pilot?

What lessons can be learnt from a pilot program?

What criteria could be established for pilot participants? For example, location, student numbers, industry of focus.

Next steps

The outcomes of this process will be supported by targeted stakeholder engagement and will be used to inform final program design features. Any follow up engagement will be determined on the basis of submissions provided.