P-TECH

PATHWAYS IN TECHNOLOGY

SUPPORTED BY THE AUSTRALIAN GOVERNMENT

The Australian Government is supporting 14 P-TECH schools across Australia to help young people develop the skills they need for the jobs of the future.

'We wish P-TECH students the very best and look forward to celebrating your future successes'

Senator the Hon Simon Birmingham
Minister for Education and Training

Why is the Australian Government supporting the P-TECH pilot?

Ensuring future generations of young Australians have the skills to equip them for the workforce of the 21st century is critical for maximising our economic and social wellbeing in an increasingly global and digital age.

Globalisation, economic reforms and technological improvements are changing the nature of work and the types of jobs that will be available in the future – and science, technology, engineering and mathematics (STEM) skills will play a major role.

In order to have young people entering the labour market with the capability to meet the growing demand for workers with STEM skills, we need to increase the number of students undertaking STEM studies in senior secondary school, and then in post-secondary education and training.

Partnerships between schools and industry provide opportunities for students to engage with the world of work and better understand the relevance of their learning to jobs and post-school pathways. The STEM focused P-TECH pilot will test and adapt key elements of this innovative approach to education-industry collaboration in the Australian context.

What are the key elements of the P-TECH model?

At its core, the P-TECH model is about collaboration, a partnership between education, industry and community. It is a partnership with a clear purpose—to provide an industry supported pathway for young people to achieve a qualification that strengthens their employment prospects.

To achieve this goal requires the education, industry and community sectors to work together to put in place the key elements that make up the P-TECH model, including:

Innovative curriculum

A key aspect of designing the learning program includes the way existing Australian Curriculum and Australian Qualifications Framework recognised education and training is sequenced (or ordered) to achieve the best outcomes for students.

Innovative approaches to learning

Partnerships between schools and industry enable innovative approaches to the way learning is delivered; approaches that would not be possible if schools, or industry, acted in isolation. Working together, schools and industry can provide opportunities for students to engage with the world of work and better understand the relevance of their learning to jobs and post-school pathways.

Industry mentoring and support

The mentor relationship between young people and industry personnel provides continuity of support for students to achieve a post-school qualification. The mentor relationship will ensure the students' learning stays on track and provides opportunities for guidance to help young people make informed decisions regarding their education, training and employment options.

A post-school qualification

Schools will partner with other education providers (TAFEs, registered training organisations and universities) to deliver elements of the P-TECH learning program (either on-site or off-site) and achieve a diploma, advanced diploma or associate degree. A strong relationship between the school, industry and post-school institution(s) will provide a seamless pathway and continuity of support for students as they transition from school to further education to complete their post-school qualification.

Links to employment

Collaboration between the education and industry sectors strengthens the connection between student learning and the skills that employers need. It improves young people's prospects of employment, including opportunities for employment with industry partners.

How is the P-TECH model different?

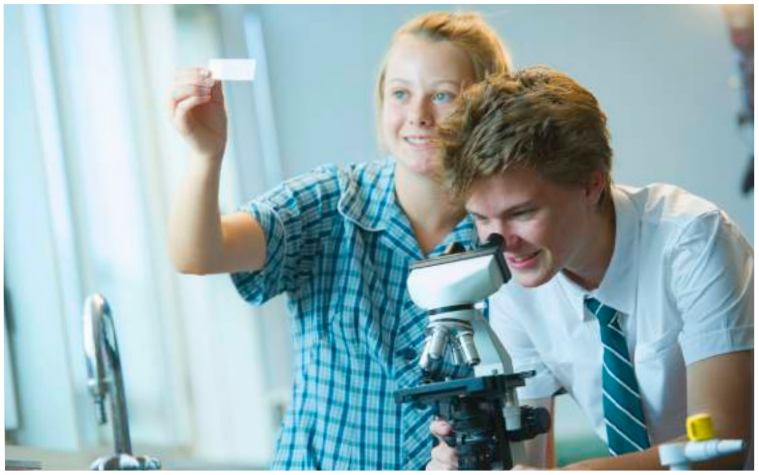
P-TECH provides a framework for employers to work alongside schools in preparing young people for success in further study and work. Local education and industry partners involved in the pilot work together to design and deliver P-TECH-styled learning programs suited to local circumstances.

The P-TECH pilot draws on many elements that exist in schools today, such as mentoring, workplace visits and industry and school collaboration. However, what is different about the P-TECH model is the way it brings all of these elements together. The focus on a long-term partnership between educators, employers and community, the combination of elements that make up the model, and the sequencing of student learning is what makes P-TECH unique.

Secondary students involved in the P-TECH pilot will be on a pathway to achieve two qualifications. Firstly, their Senior Secondary Certificate of Education, which will feature a STEM related vocational education component. P-TECH students will then extend their studies beyond secondary school to achieve a STEM related diploma, advanced diploma or associate degree.

The support and opportunities provided through the P-TECH model are particularly important for those young people living in communities with high youth unemployment and where the labour market is shifting to a modern knowledge and skills-based economy.

Collaboration between the education and industry sectors strengthens the connection between student learning and the skills that employers need. In addition, the relationships students develop with their mentors and the school's industry partners improve their prospects when employment opportunities are available with a partner organisation, or within the partners' broader business networks.



Geelong P-TECH Partnership - Newcomb Secondary College

Ballarat P-TECH Partnership - Federation College

The benefits of becoming a P-TECH industry partner

The P-TECH model allows industry to play an active role in the learning and development of young Australians to ensure that they are entering the labour market with the skills they need to succeed at work.

There are many forms of support industry can provide, including, but not limited to:

- working with teachers to align classroom learning to the skills employers need
- providing opportunities for hands-on workplace learning
- supporting authentic project-based learning (either in the workplace or at school)
- offering mentor support for students
- enabling access to the latest technologies used by industry
- providing traineeships, apprenticeships or internships as part of the P-TECH program.

With the assistance of industry, the P-TECH program ensures students will enter the labour market with the technical and personal skills they need to succeed.

Central Coast P-TECH Partnership - Wyong High School

Southern Perth P-TECH Partnership - Cecil Andrews College

P-TECH pilot background

The P-TECH model was first established in 2011 in the United States by IBM and a consortium of education partners in New York City. In January 2016, Australia's first two P-TECH pilots commenced in Geelong and Ballarat in Victoria.

In 2017, over 30 Year 10 students at Newcomb Secondary College in Geelong are undertaking their second year of the P-TECH program. With support from industry mentors, these students are on their way to a nationally recognised STEM qualification. At the same time, a new group of Year 9 students is beginning their P-TECH journey. At Federation College in Ballarat, 25 students are actively involved in the second year of a dedicated P-TECH learning program, with enrolments in the P-TECH program growing in 2017. Students at both schools are engaged in authentic project-based learning, both at school and in the workplace.

On 30 May 2016, the Government announced an expansion of the P-TECH pilot from two to 14 sites across Australia. In 2017, five new P-TECH schools commenced in New South Wales, South Australia and Western Australia, with more to be phased in over the coming months. P-TECH pilot sites at Tec-NQ in Queensland and a joint initiative in Tasmania involving Burnie High School and Parklands High School will commence operations in 2018. The remaining five pilot sites are yet to be determined.The expansion of the pilot sees the following schools joining the P-TECH network, with more to be announced:

· Hunter River High School (NSW)
· McCarthy Catholic College (NSW)
· Wyong High School (NSW)
· St Patrick's Technical College (SA)
· Cecil Andrews College (WA)
· Burnie and Parklands High Schools (TAS)
· Tec-NQ (QLD)

Over 25 major employers across Australia have committed to be part of local P-TECH partnerships, with more signing up as the pilot rolls out. Some of the employers involved to date include:

· IBM
· Barwon Health
· GMHBA
· Bendigo Bank
· Tribal Campus
· Opteon Group
· Sanitarium
· Mars
· PwC
· Telstra
· Austal Shipping
· Defence Teaming Centre
· Varley Group
· BAE Systems
· Century Engineering
· Jetstar Airways
· Ampcontrol
· Ergon Energy
· Wilmar Sugar
· Canegrowers Burdekin
· Jayben
· Maltec Engineering
· Elphinstone/William Adams Group (CAT)
· Saab Australia
· PMB Defence
· Thales
· Civmec
· Deloitte
· Datacom

The P-TECH model enlists the support and expertise of industry to help prepare students for the world beyond school at a time in their lives when they are making decisions that will influence their career path.

Australian Government support

The Australian Government has engaged the Skilling Australia Foundation (SAF) to assist local stakeholders work together to implement P-TECH learning programs at all 14 P-TECH pilot sites.

SAF has experience in adapting the P-TECH model to suit local circumstances through its role in supporting education and industry partners at the original pilot sites in Victoria. SAF will ensure the 14 pilot sites across Australia are connected and can benefit from the collective experience of a national network.

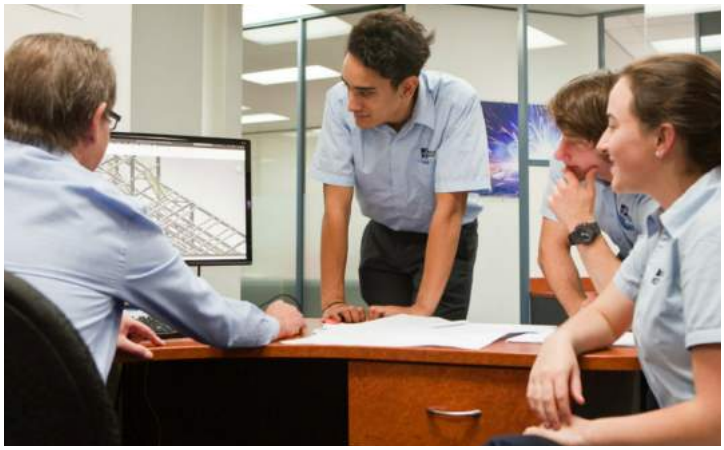
Seed funding for each pilot site will allow SAF to provide local partnership facilitation and support services over two years. These services include a locally-based Industry Liaison Officer to assist partners design and implement a P-TECH styled learning program that meets local community needs.

A key role for SAF is to support the development of an effective and sustainable education and industry partnership at each pilot site. As part of the local partnership governance arrangements, SAF will establish a local Steering Committee, comprising representatives from the education and industry partners, the school authority, and key community stakeholders.

Steering Committees are responsible for the detailed planning, design, implementation and ongoing management of operations of the P-TECH learning program. They have the authority to make decisions that ensure the P-TECH model is adapted to suit local circumstances.

While the majority of Government seed funding will go towards support services provided by SAF, a component of funding will be available to cover some of the costs associated with establishing a P-TECH learning program. The use of funding for establishment costs will be determined in consultation with the local Steering Committee to ensure any expenditure is considered alongside existing partnership and local community resources and capabilities.

While the Government has provided seed funding to support the establishment of P-TECH pilot sites, it is important to note that the success and sustainability of the P-TECH model is dependent on the commitment and investment (both cash and in-kind) of education and industry partners.



Northern Adelaide P-TECH Partnership - St Patricks Technical College

Western Sydney P-TECH Partnership - McCarthy Catholic College

Port Stephens P-TECH Partnership - Hunter River High School

The Australian Government has engaged the Skilling Australia Foundation to assist local stakeholders to work together to implement P-TECH learning programs.

Skilling Australia Foundation
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