



SCIENCE AND
INDUSTRY
ENDOWMENT
FUND



PENRITH
CITY COUNCIL

STEM Community Partnerships Program

Penrith local scenario

Skills and employment opportunities for young people

Over the past few years, technology and changing ways of working have led to new jobs being created and new skills being needed for existing jobs. More employers are looking for a range of transferable skills such as problem solving, digital literacy, teamwork and communication skills – in addition to technical skills associated with a job or industry.

In Western Sydney, local developments and infrastructure projects are bringing new industries, employers and jobs. 200,000 new jobs are expected to be created in the Western Parkland City in industries such as aerospace and defence, manufacturing, healthcare, freight and logistics, agribusiness, education and research – many of these jobs will be in science, technology, engineering and maths (STEM) fields. This will create opportunities for local businesses to reach a wider market for their products and services, and for residents to work in diverse industries and learn new skills.

Young people in the current generation are generally more educated than prior generations, and in most cases, enter the workforce with more years of schooling. Yet many young people continue to struggle with finding a suitable job and employers often cannot find candidates with the right skills. At the same time, there is a disconnect between the career aspirations of young people, their chosen tertiary education pathways and the actual jobs available.

Young people were also amongst those most impacted by COVID-19. Young people aged 15-24 represented over half of all workers in the most directly adversely affected industries, particularly as many worked in entry-level jobs, or in the retail and hospitality sectors.

With the changing skills and employment landscape, there are ways for technology and innovation to play a role in providing greater awareness about skills and training programs, local employment opportunities and the jobs in demand, as well as ensuring businesses are well-equipped to train and support young people as they enter the workforce.

How your Council tackles the complexity of this issue impacts you now and in the future.



Photo courtesy of CSIRO

Your task

Your task is to use the information above and resources provided below as a start to identify a local problem and design a STEM-focussed solution.

(Question, Design, Explore, Communicate)

Resources

CSIRO research

- Tomorrow's Digitally Enabled Workforce, January 2016
<https://publications.csiro.au/rpr/download?pid=csiro:EP161054&dsid=DS1>
- Small satellites could lead to new future jobs
<https://digitalcareers.csiro.au/en/News/Dec2018Jan2019/NanoSatellites>

Reports

- Dream Jobs? Teenage Career Aspirations and the Future of Work, Organisation for Economic Co-operation and Development <https://www.oecd.org/berlin/publikationen/Dream-Jobs.pdf>
- The New Work Order reports, Foundation of Young Australia <https://www.fya.org.au/our-research-2/>
- COVID-19 and Youth Unemployment, Centre for Social Impact response, May 2020
https://www.csi.edu.au/media/uploads/csi_fact_sheet_social_covid-19_youth_unemployment.pdf

Articles and other resources

- Automation to transform manufacturing employment landscape by 2034
<https://www.manmonthly.com.au/news/automation-transform-manufacturing-employment-2034-according-acr-report/>
- Greater Sydney Commission: Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis <https://www.greater.sydney/western-city-district-plan/productivity/jobs-and-skills-city/leveraging-industry-opportunities>
- Western Sydney Aerotropolis <https://www.planning.nsw.gov.au/Plans-for-your-area/Priority-Growth-Areas-and-Precincts/Western-Sydney-Aerotropolis>
- Jobs for the future, Western Sydney City Deal <https://www.wscd.sydney/jobs>
- MyFuture website <https://myfuture.edu.au/home>

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