EMPOWER THE NEXT GENERATION OF INNOVATORS

The **STARportal** is the ***go-to place for families*** to *discover local STEM activities* for the children in their lives and for providers to find partners with which to collaborate. It offers the most comprehensive collection of STEM activities and providers.

The *STARportal* makes the connections that inspire young people to explore, discover and create.

https://starportal.edu.au/

The Future of STEM Careers

Capabilities in STEM offer exciting career opportunities now and into the future.

Experts predict computerisation and technology are likely to change the nature of 44% of Australian jobs over the next 20 years.

While some jobs will become less common, other interesting and new jobs will be created. Jobs will increasingly be characterised by non-routine thinking and high levels of originality and creativity.

To realise our potential, Australia needs to have a workforce that is technologically savvy and able to innovate. One of the best ways to do this is by improving capabilities in STEM.

What is STEM? STEM, or Science, Technology, Engineering and Mathematics is a curriculum based on the idea of educating students in these four specific disciplines using an interdisciplinary and applied approach. Each has a critical role to play but also enables discovery and progress in other fields. They may be defined as follows:

Science encompasses disciplines within the natural and physical sciences such as chemistry, physics and biology; and selected disciplines from agriculture and environmental studies. These sciences are characterised by systematic observation, critical experimentation, and the rigorous testing of hypotheses.

Technology provides goods and services to satisfy real world needs; operating at the intersection of science and society. Information and communications technology is playing an ever increasing role in our society and provides enabling capacity to the other STEM disciplines. The output of the technology provided must eventually stand the test of users and the marketplace.

Engineering draws on scientific, mathematical and technological knowledge and methods to design and implement physical and information-based products, systems and services that address human needs, safely and reliably. Engineering takes into account economic, environmental, and aesthetic factors.

Mathematics seeks to understand the world by performing symbolic reasoning and computation on abstract structures and patterns in nature. It unearths relationships among these structures, and captures certain features of the world through the processes of modelling, formal reasoning and computation. It is often referred to as the 'language of the sciences'.