

COMMUNIQUE

18 MAY 2017

Business partners with schools on Science, Technology, Engineering and Mathematics

The inaugural meeting of the STEM Partnerships Forum, established by the COAG Education Council, was held at Parliament House on Monday 15 May 2017. Business and education representatives met to map out opportunities to facilitate efficient and effective partnerships between industry and Australian schools to improve STEM education.

Members of the Forum include representatives from some of Australia's largest companies, such as Boeing Australia, BHP Billiton, Commonwealth Bank, CSL Limited and Google Australia, as well as senior representatives from across the education sector.

The STEM Partnerships Forum is a collaborative action under the *National STEM School Education Strategy 2016-2026*, endorsed by all Australian education ministers in December 2015. The Forum will initially run for two years.

The purpose of the first meeting was to lay the groundwork for a more strategic approach to school-based STEM partnerships with industry, to build the workforce of the future and assure the continued competitiveness and prosperity of Australia. Stronger partnerships with industry can engage and inspire students, providing them with a better understanding of real world applications of STEM skills and related career opportunities.

The Forum heard from a range of industry and education experts about existing STEM industry partnership initiatives, including topics such as: discipline-specific professional development for teachers, additional support in disadvantaged schools; evidence of successful industry-school partnership models; and campaigns to raise awareness and interest in STEM education and careers.

In today's fast-changing world driven by technological change, the strategic skill sets inherent in STEM subjects are in high demand. Within that context, the Forum recognised the need for:

- 1. A highly skilled workforce to power the future competitiveness and prosperity of the nation.
- 2. Strong community understanding of the critical role that STEM skills play in a knowledge-based economy.

The Forum agreed to focus its initial attention on three areas to support industry partnerships:

1 Evidence and impact

There is a need for more consistent monitoring and evaluation of the outcomes of STEM initiatives to build a reliable evidence base to inform industry partnerships with schools.

For a longer term perspective, there would be value in a longitudinal analysis of the impact of STEM education.

2 Industry partnerships to support discipline-specific professional development for teachers

Industry can support both general STEM, and discipline-specific, in-service professional development of teachers. It can also provide broad support to principals and career advisors. Existing international and Australian models for how industry can best provide this support will be explored at the next meeting.

3 Career opportunities

Jobs and industry are changing rapidly. Members spoke of the many exciting, high paying, and interesting career paths in Australia for STEM graduates. It was noted that the incorrect expectation that STEM graduates should only work in traditionally recognised STEM careers still exists and industry has a significant role in dispelling such views.

It was acknowledged that it is increasingly difficult for schools and parents to keep up with new career opportunities, so that they can meaningfully advise students on their future careers.

The Forum will explore ways for industry partnerships to help equip teachers, career advisers and parents to advise students about emerging career opportunities and the specific skills and knowledge required.

In addition to the above priorities, Forum Members identified the need to learn more about the role of commercial providers of education services. They also noted that there would be value in developing networks to bring together industry partners supporting STEM education. These will be pursued as additional work streams at future meetings.

Forum membership

Dr Alan Finkel AO, Australia's Chief Scientist (Forum Chair)

Office of the Chief Scientist

Ms Maureen Dougherty President (Deputy Chair)

Boeing Australia, New Zealand and South Pacific

Professor Andrew Cuthbertson AO, Chief Scientific Officer, Head of Research and Development CSL Limited

Ms Vittoria Shortt, Group Executive, Marketing and Strategy

Commonwealth Bank of Australia

Ms Laura Tyler, Head of Geoscience, Chief of Staff to the CEO

BHP Billiton

Ms Sally-Ann Williams, Head of Community Outreach

Google Australia

Mr Tony Cook, Associate Secretary

Australian Government Department of Education and Training

Ms Meg Brighton, Deputy Director-General

ACT Education Directorate

Mr Lindsay Hale, Executive Director, State-wide Services

WA Department of Education

Dr David Howes, Assistant Deputy Secretary

VIC Department of Education and Training

Dr Lee-Anne Perry, Executive Director

Queensland Catholic Education Commission

Ms Mary Mulcahy, Director of Education and Outreach

CSIRO

Professor Brian Schmidt AC, Vice Chancellor

ANU

Professor Jo Ward, Dean of Science

Curtin University

Ms Jodi Schmidt, CEO

QLD TAFE

Mr Dennis Yarrington, President

Australian Primary Principals Association (APPA)

Mr Geoff Williamson, Principal

Huonville High School