

**Senate Committee: Education and Employment**

**QUESTION ON NOTICE  
Additional Estimates 2015 - 2016**

**Outcome: Schools and Youth**

**Department of Education and Training Question No. SQ16-000417**

Senator Carr, Kim provided in writing.

***Enhancing the Training of Mathematics and Science Teachers Program***

**Question**

In the 2014 Budget, the Government terminated the Enhancing the Training of Mathematics and Science Teachers Program. What is the Government doing now to ensure that the training of maths and science teachers meets the needs of Australia's young people and the economy?

**Answer**

As part of the National Innovation and Science Agenda (7 December 2015), the Australian Government is investing \$64.6 million under the Education and Training portfolio for a suite of digital literacy measures and to support Science Technology Engineering and Mathematics (STEM) engagement in the early years. These initiatives build upon the \$12.0 million announced under the Industry Innovation and Competitiveness Agenda (14 October 2014) to Restore the Focus on STEM.

The Government has also funded the following specific programmes to enhance the skills of generalist primary teachers and specialist secondary teachers to meet the current and future needs of Australian students:

***Mathematics by Inquiry (\$7.4 million)***

- The Australian Academy of Science, in collaboration with the Australian Association of Mathematics Teachers, will develop, disseminate, and ensure widespread awareness and uptake of a suite of mathematics teaching and learning resources for Foundation to Year 10 students, teachers, and school leaders (\$6.4 million from 2015–2018).

***Scientists and Mathematicians in Schools programme \$7.3 million (2012–2016)***

- This CSIRO led project aims to increase student interest and motivation in science, mathematics and the information and communication technology (ICT) profession through exposure to the breadth of real world science, mathematics and ICT. The programme links practising scientists, mathematicians and ICT professionals with classroom teachers and their students.

***Science Connections \$10.0 million (2012–2018)***

- This project, which aims to deliver high quality student and teacher resources, is being undertaken by the Australian Academy of Science and incorporates the very successful Primary Connections: Linking Science with Literacy and Science by Doing initiatives. There are now 31 Primary Connections units and 16 Science by Doing units freely available online to school teachers and students as a result of the project.

*Advice for teachers of science and school laboratory technicians \$1.7 million (2012–2016)*

- Science Assist, led by the Australian Science Teachers Association, provides advice and support for teachers of science and school laboratory technicians to ensure excellent teaching and stimulating, safe classroom activities (particularly, practical laboratory activities).

*Advice for teachers of mathematics \$0.5 million (2012–2016)*

- The ‘Connect with Maths’ Project provides teachers of mathematics at all levels with access to a range of online networks and activities that support quality teaching of mathematics. Five communities have commenced focusing on: teaching mathematics to Indigenous students; early years learning in mathematics; engaging all students with mathematics; utilising applications of mathematics and mathematical modelling to engage students in solving real world problems; and digital learning and mathematics.

*Mathematics and Science Illustrations of Practice \$0.6 million (2012–2015)*

- This Australian Institute for Teaching and School Leadership project has developed and made available online videos which illustrate the National Professional Standards for Teachers in mathematics and science classrooms, including science laboratories — thereby raising the standard of teaching and, consequently, student engagement in mathematics and science education. Three groups of online materials have been released.

On 11 December 2015, the Education Council comprising all state and territory education ministers endorsed the National STEM School Education Strategy 2016–2026 which aims to ensure that students have a stronger foundation in STEM and are inspired to take on more challenging STEM subjects.

Education Council also agreed that, from 2018, every student entering a primary teaching course will be required to graduate with a subject specialisation, with a focus on subject or curriculum areas which are in demand, such as mathematics and science.