

Award-Winning Maths Program for Rockingham Schools

Maths lessons will never be the same when eight primary school teachers from the Kwinana-Rockingham area kick-start the award-winning Alcoa Champions of Maths program in Term 1.

Alcoa Champions of Maths is an intensive year-long program based on international best-practice teaching techniques that build ability and confidence in teachers to facilitate deeper learning of mathematical concepts. It introduces discussion, problem solving and reasoning to take students beyond rote learning to internalising the concepts they encounter.

Scitech and Alcoa Australia have been delivering the Champions of Maths program in the Upper South West, Peel and Kwinana areas since 2019, with remarkable results. Evaluation of the program has shown a 50% increase in teacher confidence to teach problem solving and a 34% increase in assessing reasoning. Students have also substantially improved performance in standard testing while participating in the program.

Scitech Chief Executive Officer Kalien Selby said empowering teachers with a different approach to learning clearly translates into improved maths skills in students.

“This is important to tackle from an early age to set students up for a successful learning journey that develops conceptual and abstract thinking; enabling meaningful workforce participation in the future,” Ms Selby said.

“We are excited to continue to work with Alcoa and to welcome our new 2021 cohort of teachers to shift the dial on developing real passion and excitement for teaching and learning maths.”

Suellen Jerrard, Alcoa Australia Corporate Affairs Manager, said “Alcoa is proud to continue to support ground-breaking ways to enhance maths education to help ensure students have the knowledge and confidence to be successful in the modern workplace, where STEM skills will be paramount”.

Alcoa Champions of Maths is an intensive mentoring and coaching program consisting of expert training, observation, reflection and assisted planning. Teachers are recruited into the program based on a demonstrable commitment to improve their maths teaching and desire to become a maths leader in their school community.

As well as improving their day-to-day classroom practice, participants share their learning with colleagues to create a multiplier effect that, ultimately, could benefit more than 8,000 students over three years.

In 2021, two teachers from Makybe Rise Primary School, Baldivis Primary School, Peter Carnley Anglican Primary School and Settlers Hill Primary School have been recruited into the program.

More information

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Editor's Notes

It is estimated that digitisation and automation processes will affect 40% of current Australian jobs over the next two decades¹, and that 75% of the fastest growing occupations will require STEM skills and knowledge².

Mathematics is a key foundation of many of these future jobs however global reports show that 45% of Australia's 15-year-olds are not proficient in this subject area and that Australia is one of 30 countries that has seen a significant decline in maths proficiency between 2003 – 2015³.

The Alcoa and Scitech partnership aims to address this challenge through the Alcoa Maths Enrichment Program (AMEP), which develops the capacity and confidence of teachers to facilitate deep learning of mathematical concepts. This, in turn, improves children's maths skills, equipping them to meet demands of a future STEM-enabled workforce.

The Alcoa Champions of Maths program is a component of the highly successful Alcoa Maths Enrichment Program (AMEP) that has been benefiting primary students in the South West, Peel and Kwinana regions of Western Australia and Portland Victoria since 2012.

In 2020, the Alcoa Maths Enrichment Program was awarded the prestigious Resources Sector Community Partnership Award from the Department of Mines, Industry Regulation and Safety.

The methods used in the Alcoa Maths Enrichment Program encourage learning and application of the 21st century skillset of engagement, independence, creativity, collaboration and critical thinking, which are critical for the application of STEM in the workforce.

Footnotes

¹ [Australia's Future Workforce](#) CEDA, 2015

² [A Smart Move](#) PricewaterhouseCoopers, 2015

³ [Reporting Australia's Results](#) Australian Council for Educational Research, 2015 and [PISA 2018](#)