

JOINT STATEMENT ON PROPOSED MATHS CURRICULUM

WHY MATHS MUST CHANGE

At the end of this month, proposed revisions to the Australian maths curriculum will be released for public consultation. We cannot underestimate the value of this revised maths curriculum and the importance of getting it right.

Curriculum reviews and updates are challenging tasks. What must be forefront in the minds of those crafting the document is the learners and the society those learners will ultimately serve.

More than ever, our society needs students who are adaptable, resilient, responsive to challenges and able to handle unfamiliar situations. It is not enough to have knowledge – they must have the skills to take that knowledge and apply it to solve unknown problems, and do it quickly.

The pandemic in particular has shown us the value of this.

We need education systems and curricula that help deliver students to society who are up for such a challenge – just having knowledge is no longer enough. Instead, the abilities to problem-solve, mathematise, hypothesise, model are all skills that add worth to acquired knowledge. Mathematics learning cannot sit in silos that focus on content and procedures. Instead, it must be something that gives the knowledge purpose.

As such, the suggested revisions in the curriculum are not just welcomed – they are necessary if we are to maintain our position as a leader on the world stage in fields such as mathematics, science, engineering and finance.

The outcomes of recent reputable global assessments have been a reminder that our students are owed a curriculum that aims high – according to the PISA results, we have fallen behind by 14 months of schooling since 2003.

Adjusting the focus of a curriculum so that it emphasises these types of competencies is an authentic approach to the curriculum review. Focusing on these skills as well as knowledge and content will have a positive impact on young people’s experience of learning mathematics. And it will have a direct impact on results like PISA.

But it is not enough to just change the curriculum. We must ensure that there is an ongoing commitment from all stakeholders to deliver effective professional development that gives our teachers the skills to teach not just the content but the skills and competencies necessary.

A focus on skill acquisition and proficiency development must be key drivers to a curriculum review in mathematics. Content should be adjusted according to this.

In doing so, we equip our young people and our nation of tomorrow with the skills to be able to handle the next challenge that comes our way as a society – because, rest assured, there will be one.”

Signed,



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- **Australian Association of Mathematics Teachers (AAMT) Inc.** <https://aamt.edu.au/>
AAMT is a national organisation that has been representing mathematics education across Australia for over 50 years. AAMT works with stakeholders in education, government, industry and the community to advocate for mathematics educators and promote the importance of mathematics education. AAMT and its affiliated state and territory mathematics associations have a wide range of members, including teachers, schools, institutes, commercial providers, managers, educators, researchers, parents, students and anyone who has an interest in mathematics education.

- **Australian Aboriginal and Torres Strait Islander Mathematics Alliance (ATSIMA)** <https://atsimanational.ning.com/>
ATSIMA is an Indigenous-led, non-profit, member-based group representing organisations, communities, institutes and individuals around Australia. It aims to inspire, promote and support improved mathematics outcomes of Aboriginal and Torres Strait Islander students. ATSIMA is a network to connect 'change agents' to transform mathematics education. ATSIMA's vision is that "all Aboriginal and Torres Strait Islander children will be successful in mathematics".

- **Mathematics Education Research Group of Australasia (MERGA)** <https://www.merga.net.au/>
MERGA exists to provide a range of forums for raising important issues in mathematics education and sharing research findings that speak to how these issues might be effectively addressed. Through two peer-reviewed journals – Mathematics Education Research Journal and Mathematics Teacher Education and Development – and an engaging annual conference, it promotes, shares and disseminates rigorous research in mathematics education across Australasia. Through its awards, it recognises and celebrates its members' achievements.

- **Australian Academy of Science** <https://www.science.org.au/>
The Australian Academy of Science provides independent, authoritative and influential scientific advice, promotes international scientific engagement, builds public awareness and understanding of science, and champions, celebrates and supports excellence in Australian science. The academy was founded on 16 February 1954 and is a not-for-profit organisation of individuals elected for their outstanding contributions to science and research.

- **Australian Mathematical Sciences Institute (AMSI)** <https://amsi.org.au/>
AMSI is the collaborative enterprise of Australia's mathematical sciences. It exists to give independence to its disciplines and provide infrastructure so that it can take initiatives on the national and international stage. These measures fall largely into three classes – research and higher education, school education and engagement with the industrial and commercial world. AMSI has built a record of achievement in these areas and is recognised by government and industry as a leading provider of services, activities and strategic initiatives.