

MEDIA RELEASE

18 June, 2021

Maths teacher survey finds a knowledge and skills gap in Australian classrooms, compounded by remote learning

Oxford's latest research collaborates with industry and education leaders to support Australian students' maths knowledge and skills development

The latest research from Oxford University Press (OUP) reveals a knowledge and skills gap in Australian Year 7 students, following the transition to secondary school. As a result, students without the necessary pre-requisite knowledge are falling further behind as they move through Years 7–10, with consequences for their longer-term learning.

Australian maths teachers were surveyed earlier this year, with the findings revealing the size of the knowledge and skills gap ranged from 1–5+ years, with the widest spread of skills in year 7–9 classrooms. Moreover, the OUP survey revealed low teacher confidence in preparedness of students moving into Year 10 and senior mathematics.

The majority of teachers surveyed also believed that COVID-19 and remote learning has had a negative impact on students' progress and transition from Year 6 to Year 7.

The survey results, along with expert opinion and teaching advice from the Australian Maths Trust and seven education leaders, are revealed in a new paper *The knowledge and skills gap in Australian secondary mathematics classrooms*. The paper considers the spread of maths understanding; explores different learning needs; 'maths anxiety', and how to develop students' problem-solving skills for the real world.

More than 91% of teachers said they need problem-solving activities with different entry points (and exit points) to differentiate their teaching and ensure students were more successful.

According to AMT, a carefully targeted problem-solving approach to mathematical learning supports the development of grit for future success, and demonstrates to students that communication, thinking and strategies are as important as the solution.

Oxford has partnered with AMT and leading Australian maths experts to develop *Oxford Maths 7–10*, a suite of resources designed to help educators bridge the knowledge and skills gap in the classroom, empower students to achieve mathematics success at their skill level, and become better problem solvers at school and in other areas of learning.

Lee Walker OUP Director, Publishing and Editorial, says: "*As the future of work becomes more STEM focussed, mathematical knowledge and skills have been defined as critical to future life chances. Knowledge isn't enough; strong understanding, reasoning, and problem-solving skills are necessary traits for students' working futures.*"

On mathematical problem-solving, Nathan Ford, AMT CEO, says: “At AMT, we see *mathematical problem solving* as an invaluable pedagogical approach that helps bring maths teaching and learning to life.”

To read the paper, please visit www.oup.com.au/mathsgap or to learn more about the new series please visit www.oup.com.au/math

ENDS

For more information please contact: Sharlene Vinall E: sharlene.vinall@oup.com M: +61 406 599 357

About Oxford University Press

Oxford University Press (OUP) is the world’s largest university press with the widest global presence. OUP Australia & New Zealand is the oldest continuous educational publisher in Australia, supporting Oxford University’s objective of furthering excellence in research, scholarship, and education in the region since 1908. We believe that education changes lives, and the right learning resources can make a positive difference for learners of all ages.

About the Australian Maths Trust (AMT)

AMT’s competitions and programs give young Australians the opportunity to challenge and extend their creative problem-solving skills and prepare them for a future of real-world problems. We publish supporting and complementary materials aligned with the Australian curriculum, including problemo.edu.au, our online teacher platform that makes it easy to source good problems.