

## MEDIA RELEASE

### Real-world learning through maths modelling

#### *Research Conference 2016*

**4 August 2016:** Schools have a critical role in encouraging students to see their world through a mathematical lens, and in ensuring that students learn to use their mathematical knowledge to deal with work and other life challenges, delegates at ACER's *Research Conference 2016* will hear in Brisbane next week.

*Research Conference 2016* will consider educational research that investigates how best to improve science, technology, engineering and mathematics (STEM) learning, addressing the theme, *Improving STEM Learning: What will it take?*

ACER Senior Research Fellow Ross Turner will explain how mathematics classes provide opportunities for students to grapple with real-world situations and problems, and find ways to connect their mathematical knowledge with those problems.

“One way that students develop their numeracy and mathematical literacy is by understanding and solving problems in context. Helping them to do that depends on a conscious focus on mathematical processes: communication, modelling, devising strategies, representation, and reasoning,” Mr Turner said.

“Mathematical modelling is used in many walks of life to employ mathematical tools and knowledge to describe and analyse situations in the real world, and not only by high-powered STEM professionals.

“Many everyday applications of mathematics undertaken by all of us, every day, from revising a recipe so it can feed more people to figuring out a more efficient route to work, are instances of mathematical modelling in action.”

Also at *Research Conference 2016*:

- Lyn English, Professor of STEM in education at the Queensland University of Technology will explore curriculum-based approaches to design-based modelling to solve problems that enable students to engage with STEM and develop their STEM knowledge and skills
- Russell Tytler, Professor of Science Education at Deakin University, will report on the effectiveness of drawing and modelling to support rich learning in science, and
- Dave Tout, ACER Senior Research Fellow, will explain why a focus on problems in concrete, familiar contexts where mathematical content is explicit with little or no text encourages communication, modelling, devising strategies, representation and reasoning, which helps prepare students for mathematics in the real world.

*Research Conference 2016* takes place in Brisbane from 7 to 9 August.

Further information is available from [www.acer.edu.au/rc](http://www.acer.edu.au/rc)

\*\*\*\*\*ENDS\*\*\*\*\*

Media enquiries: Steve Holden, 03 9277 5582 or 0419 340 058 [communications@acer.edu.au](mailto:communications@acer.edu.au)