

BE AN AUSTRALIAN STEM VIDEO GAME CHALLENGE POWER-UP PARTNER!



OUR MISSION

The Australian STEM Video Game Challenge exists to engage Australian students with the subject areas of science, technology, engineering and mathematics (STEM) through the process of designing and building an original video game.

We challenge students to use STEM-related skills in a creative environment, engaging and empowering them to learn by constructing something interactive, stimulating and meaningful using fun, creativity and innovation.

75%

OF THE FASTEST GROWING
OCCUPATIONS REQUIRE STEM-
RELATED SKILLS AND CAPABILITIES¹

**BY CHANNELLING AND
DEVELOPING STEM
SKILLS THROUGH AN
INTRINSICALLY FUN
MEDIUM, WE INSPIRE
THE NEXT GENERATION
OF AUSTRALIANS**

**...AND STIMULATE COMMITMENT
TO STEM-RELATED DISCIPLINES
AMONGST AUSTRALIAN STUDENTS**

WHY STEM?

Science, technology, engineering and mathematics (STEM) are among the most critical disciplines required for businesses and individuals to succeed in the 21st century.

Research¹ shows that 75 per cent of the fastest growing occupations worldwide require STEM-related skills and capabilities, with the demand for these skills continuing to grow as Australia competes in the emerging global economy.

¹ Office of the Chief Scientist 2014, Science, Technology, Engineering and Mathematics: Australia's Future. Australian Government, Canberra

Australia has a long tail of underperforming students in STEM². There has been a steep decline in student performance in science and maths between Years 4 and 8, and a declining percentage of Year 12 students participating in STEM

The gap between the current level of STEM-related learning by Australian students and the level of STEM-related skills they will inevitably need to join and succeed in the workforce of the future is widening, and creates a worrying scenario for the future of the Australian economy, and our position in the global marketplace.

Measures need to be taken to bridge the gap, and to help ensure the next generation of Australians are ready for the future.

² Trends in International Mathematics and Science Study (TIMSS)

30%

OF AUSTRALIAN STUDENTS SCORE BELOW
THE LEVELS OF MINIMAL COMPETENCY
IN MATHEMATICS AND SCIENCE²

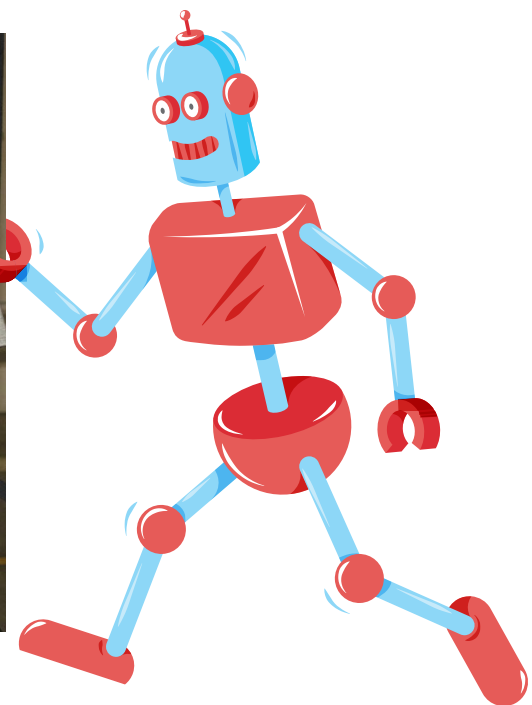
Active reform of curriculum and pedagogy with more engaging, problem/inquiry-based learning, critical and creative thinking has been undertaken in countries that, unlike Australia, are strong in STEM and STEM-related disciplines³.

We, as a country, need to teach students to approach problems critically, and to solve them with creativity; to tackle challenges from new perspectives; and to research and resource themselves along the way. But most of all, we need to engage students with problems and challenges that drive them toward these outcomes and make learning STEM skills desirable, achievable and where possible, fun.

³ Report by the Australian Council of Learned Academies for PMSEIC, June 2013



2017 STEM Video Game Challenge Awards



THE AUSTRALIAN STEM VIDEO GAME CHALLENGE...

Facilitated by the ACER Foundation, the charitable arm of The Australian Council for Educational Research, the ongoing mission of the Australian STEM Video Game Challenge is to help engage Australian students with STEM disciplines in a new and exciting way, and to facilitate inquiry-based learning that inspires and prepares the next generation of Australian students for the future.

The process of creating a video game involves systems-based thinking, problem solving, iterative design, communication and collaboration – skills that are, and will be, increasingly required for living and working in a rapidly changing technological landscape. By channelling and developing these skills through an enjoyable and intrinsically fun medium, we are working to alter student perception of STEM subject areas and seeking to stimulate a renewed commitment to STEM-related disciplines amongst Australian students in Years 5-12.

...AND THE FUTURE

In 2018, registrations for the Australian STEM Video Game Challenge increased from 1500 students to nearly 3,000.

Our female representation was 30%, across all age groups from Year 5 to Year 12.

Students from every Australian state and territory engaged with the competition designing games addressing a theme. In 2017 the theme was *Reaction*, in 2018 *Transformation*.

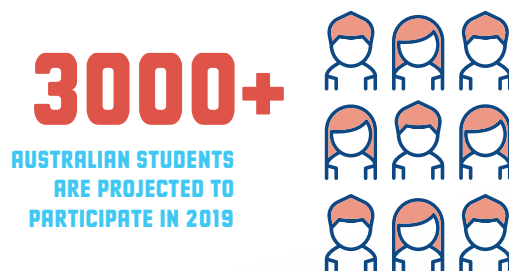
Projected growth figures indicate that 2019 will see 3500+ Australian students register to participate in the Challenge, with more than 30 per cent of the students registering being female.

In addition to our commitment to enhancing STEM learning, the Australian STEM Video Game Challenge is supportive of the philanthropic goals of the ACER Foundation, and shares its charter to address the needs of educationally disadvantaged groups. Specifically, the Australian STEM Video Game Challenge seeks to address the disparity between the representation of male and female students in STEM-related fields.

By inspiring, empowering and resourcing schools, teachers, parents and students, the Australian STEM Video Game Challenge is working to equip the next generation of Australians for the future, preparing them to innovate, create and adapt to a rapidly changing world.

INQUIRY-BASED LEARNING, CRITICAL THINKING AND PROBLEM SOLVING

...HAVE BEEN IDENTIFIED AS KEY ATTRIBUTES IN COUNTRIES THAT ARE STRONG IN STEM AND STEM-RELATED DISCIPLINES



LET'S DISCOVER MORE

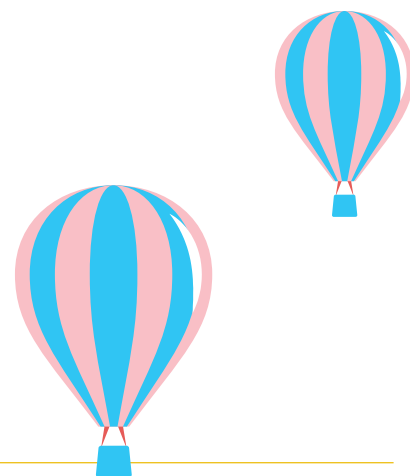
The Australian STEM Video Game Challenge is continuously working to change learning, to challenge traditional perceptions of STEM-related skills and to restimulate commitment to STEM subjects and related disciplines in Australian schools.

We're aiming to involve, engage and inspire more than 7 000 Australian students in the next three years, and to make a real difference to Australia's future.

With the aid of your insights, stakeholder networks, professional resources and financial assistance, we can accelerate and amplify our efforts - helping to further close the gap between current learning and the skills required for students to participate and succeed in the 21st century world.

BENEFITS OF PARTNERSHIP:

- As an initiative of the ACER Foundation (a registered charity), **all financial contributions to the Australian STEM Video Game Challenge are tax deductible.**
- Visibility within the education sector – the Australian STEM Video Game Challenge is actively engaging teachers, parents and students with print, email and face-to-face communication. As a partner, we invite you to share in this communication and to associate your brand with our positive contribution towards STEM education in Australia.
- Associate your organisation or brand with innovation and creativity – help facilitate a new way of learning in Australian schools, and advocate for a secure future for the next generation of Australians.
- Opportunities to engage your staff with Australian STEM Video Game Challenge projects and events – help judge games, advocate for the initiative at public-facing events, facilitate workshops and mentor students.
- Attend the Australian STEM Video Game Challenge Awards Ceremony in Melbourne, meet our winners and present them with their prizes!



We invite you to partner with us, and to play an active role in preparing the next generation of Australians to meet the challenges of the future – whatever they may be. To discuss partnership opportunities, please contact:

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