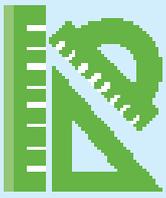


AUSTRALIAN STEM



VIDEO GAME CHALLENGE



The Australian STEM Video Game Challenge is open for registrations on 20 April 2015.

Open to upper primary and secondary school students, the Challenge represents a fantastic opportunity for Australian students to engage with science, technology, engineering and mathematics (STEM) and be noticed by members of an exciting and fast-growing game development industry.

Taking inspiration from an annual event run by the Joan Ganz-Cooney Center at Sesame Workshop and E-Line Media in the United States since 2010, the Australian STEM Video Game Challenge is designed to develop skills and engagement with STEM areas through fun, creativity, problem solving and ingenuity.

Students are encouraged to design and build an original educational video game that includes STEM content or themes. Entrants have an opportunity to earn recognition

and great prizes for themselves, as well as a significant cash prize for their school or chosen charity.

The games will be played by industry professionals as part of the judging process and the winners will be recognised at a national level.

In bringing the Australian STEM Video Game Challenge to life, the ACER Foundation (the philanthropic arm of the Australian Council for Educational Research) is seeking to encourage the participation of key groups that are traditionally underrepresented in STEM areas, particularly girls and students from low-socioeconomic areas.

So get your students, your principal and your school onboard with the Australian STEM Video Game Challenge and help students to engage with science, technology, engineering and maths in a new and challenging way.

It's completely free to enter, and links to tools are provided – all that's needed is imagination and a great idea for a game!!



WHY STEM?

Science, technology, engineering and maths (STEM) are among the most critical disciplines required for businesses to succeed in the 21st century. Unfortunately, fewer Australian students are pursuing STEM learning and as a nation we are rapidly falling behind the rest of the world.

The creation of a video game involves systems-based thinking, iterative design, collaboration with others and communication – valuable and highly desirable skills in the modern workplace. It entails taking an idea from conception through the development process to produce a finished product that can be shared and enjoyed by others.

The Australian STEM Video Game Challenge aims to use game design to increase interest and participation in science, technology, engineering and maths by all students across the nation, but particularly girls and students from low socioeconomic areas.

ENTRY CATEGORIES

The Australian STEM Video Game Challenge is open to students in Years 5-12, and is split into six separate entrance categories:

STUDENTS IN YEAR 5-8

- Playable game (groups)
- Playable game (individual)

STUDENTS IN YEAR 9-12

- Playable game (groups)
- Playable game (individual)
- Playable game (groups) – Advanced
- Playable game (individual) – Advanced

Entrants can be individual students, or teams of up to four students. Students must be Australian residents and have consent from a parent or guardian to participate.

SOFTWARE, TOOLS & RESOURCES

All software used and recognised in the Australian STEM Video Games Challenge is available either free, or free for educational purposes online. By using free and open source platforms the Challenge aims to maximise accessibility, allowing students from many different backgrounds to be involved. The Australian STEM Video

Game Challenge supports the following platforms through links housed on our website to resources and tutorials for:

- Gamestar Mechanic
- Gamemaker
- Scratch
- Stencyl
- Unity (Advanced category)

JUDGING CRITERIA

Games in each category are judged against these criteria of:

- Functionality: Does the game work?
- Visual Design: What does the game look like?
- Gameplay: How successful are the game mechanics?
- Engagement: Is it fun to play?
- Theme: Does the game have a STEM theme?
- Instruction: How good is it as a learning tool?
- STEM Engagement: Does the STEM theme make the game fun?

Each entry must also be accompanied by a Game Design Document (GDD), which provides an overview of the game and serves as an insight into the development process. The GDD will be judged on three basic criteria:

- Clarity: Does the GDD outline the project clearly?
- Detail: Can you follow the story of the game's production?
- Documentation: Does the GDD cover the different elements sourced?

HOW DO I GET INVOLVED?

Registration for the Australian STEM Video Game Challenge officially opens on **Monday 20 April 2015**. Each entrant simply needs to visit **www.stemgames.org.au** and fill in the online registration form. After that, teams can begin designing and building their games. Registrations close on 19 June and completed games are due by 21 August 2015, so get involved, get creative and have some fun!

FOR MORE INFORMATION

WWW.STEMGAMES.ORG.AU



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