



## **Program 5 – The Andy Thomas Space Foundation Schools Challenge**

**South Australian schools (from all education sectors)** are invited to participate in the **Andy Thomas Space Foundation Challenge**. Students in Years 7, 8 and 9 will be competing for nine prizes of \$5,000 each: (3 for metropolitan schools, 3 for rural schools and 3 for low socio-economic schools).

**The nine schools will use the prizes to implement their Challenge Proposals. This will involve developing and implementing a project that describes how space science or space systems can be utilised to address one or more of the United Nations Sustainable Development Goals.**

**Schools are encouraged to choose topics relevant to their local communities (for example - distance learning, telemedicine, water salinity, drought, fisheries, agriculture, plant disease, bushfire prevention) and to analyse and imagine novel solutions that would be useful in addressing or solving the challenges and problems identified.**

The nine projects will be announced in early June 2021 and the three winners of each school category will receive their awards at the 12<sup>th</sup> Australian Space Forum in Adelaide on 15 September 2021.

### **Overview**

The Andy Thomas Space Foundation is committed to promoting and supporting the highest quality space activities in Australia to drive progress in education, research and innovation, to ensure that the space sector is a key contributor to Australia's economic transformation. Education systems increasingly recognise the importance of developing students' skills and knowledge for tomorrow's innovative world.

Space touches the lives of all citizens and young people are especially fascinated by space. There is strong evidence that space has an unusual power to inspire. People who have pursued space and science-related careers have often cited specific forms of inspiration from learning about astronomy, cosmology and human space endeavours.

Space represents hope for the future - it will help our country to transition to a knowledge economy and will provide exciting long-term secure career opportunities for our young people.

The Andy Thomas Space Foundation Challenge aims to enhance student and teacher engagement and stimulate students from Years 7, 8 and 9 to choose STEM subjects in their curriculum by:

- encouraging the alignment of curriculum with one or more of the 17 UN Sustainable Goals and Space Technology
- applying analytical skills to developing novel solutions for local challenges (e.g. environmental, economic or social)

- allowing students and teachers to improve their STEM engagement and literacy and to connect space science and technologies with their everyday lives.

As a main outcome, all students and teachers involved with the Challenge will have a greater understanding of:

- The 17 UN Sustainable Goals
- South Australia's Priority Growth Areas
- Career opportunities in the space and other high technology sectors in Australia
- The Australian Space Agency's Civil Space Priorities
- How STEM subjects within the Australian Curriculum link to 'real life' space technology systems and applications
- The importance of motivating students to continue studying and enrolling in senior STEM subjects through being inspired by career possibilities in the space and related high-tech sectors

## Specific Requirements

Proposals must address the following topics in an application document outlining:

1. The name of the Challenge Project
2. Year level and number of students
3. How the project will be conducted (in teams, by class or in some other mode)
4. Names of lead and supporting teachers
5. Principal's endorsement
6. Outline of the Challenge Project (maximum 1,200 words) in relation to:
  - The UN Sustainable Development Goal(s) to be addressed
  - How the project aligns with one of more of the Australian Curriculum Subject Areas
  - Outline of the project budget including temporary relief teacher fees, travel/excursion costs to the Australia Space Discovery Centre, equipment and material resources and other costs<sup>1</sup>
  - How the Challenge project will be conducted during Term 3 (up to 8 weeks in Term 3 including a final recorded presentation and written report to be submitted to the Foundation).

**Proposals must be received no later than midnight SA time on Thursday 27 May 2021**

**Download the Application Form in PDF format [here](#)**

**OR complete the Application on-line [here](#)**

**The completed form can be uploaded [here](#)**

**OR send the completed form as an email attachment to: [educationfund@andythomas.foundation](mailto:educationfund@andythomas.foundation)**

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<sup>1</sup> Special consideration will be given to applications for additional financial support for the project costs of low-socio-economic schools. Please include such requests in your Proposal.

## Timeline

Date (2021)	Term:Week	Description
Wednesday 31/03/2021	Term1: Wk11	11th Space Forum, Adelaide Convention Centre – Announcement of Challenge
Thursday 27/05/21	Term2: Wk5	Deadline for proposals  (Limit of one application per school)
Monday 7/6/21 to Thursday 17/6/21	Term2:Wk6-8	Shortlisting of proposals and final judging by selection panel from the Foundation Education Advisory Committee
Friday 18/06/20	Term2: Week 8	Announcement of 9 finalist schools  (3 Metropolitan, 3 Rural and 3 Low Socioeconomic*)
Monday 05/07/2021 to Friday 16/07/2021	Term 2 Holidays	50% of prize is paid to the finalist schools
Monday 19/07/21 to Friday 10/9/2021	Term3:Wk1-8	The 9 finalist schools: <ul style="list-style-type: none"> <li>- receive a visit with a presentation from the Foundation and discussions about the project</li> <li>- initiate the proposed projects (school defines timeline)</li> <li>- have access to an expert adviser arranged by the Foundation for one hour of virtual or in person advice and feedback</li> <li>- visit the Australian Space Agency Discovery Centre</li> <li>- prepare a final presentation for the Foundation (using on-line tools, video and/or Powerpoint) and a final written report (further guidelines to be provided during Term 3)</li> </ul>
Monday 13/09/21 to Friday 17/9/21	Term3: Wk9	Final presentation by the 9 finalist schools for selection of winner in each school category  50% of prize is paid to the 9 finalist schools
End of September/Early October – 12 <sup>th</sup> Space Forum	TBA	Winners in each school category are announced at the 12 <sup>th</sup> Australian Space Forum

\*Rural and Metropolitan schools defined according to SA Department for Education 2020 classifications

\* Low Socioeconomic Schools categorised by ACARA My School website ([Home | My School](#)) and an Index of Community Socio-Educational Advantage (ICSEA value) ([\(guide-to-understanding-icsea-values.pdf \(myschool.edu.au\)\)](#)) of less than 1000 in 2019.

## **Selection process**

A selection committee will select the nine successful schools. The selection committee will consist of representatives of the Foundation's Education Advisory Committee and the Advanced Technology Program of the SA Department for Education.

## **Publicity**

The Foundation reserves the right to publish information about the winning schools and proposals.

## **Background Information on the Project**

Please read the Background Information on the next page

## **More Information**

If you have further particular questions about the Challenge, please email:

[educationfund@andythomas.foundation](mailto:educationfund@andythomas.foundation)

## BACKGROUND INFORMATION

Title	Description	Link
United Nations 17 Sustainable Goals	Originally conceived by the United Nations, “as a blueprint to achieve a better and more sustainable future for all”. The SDGs address the interconnected global challenges we face and are designed to leave no one behind.	<a href="#">17 Sustainable Development Goals</a>
National Australian Curriculum	<p><b>Overview</b></p> <p>The Australian Curriculum is designed to help all young Australians to become successful learners, confident and creative individuals, and active and informed citizens. Presented as a developmental sequence of learning from Foundation to Year 10, the Australian Curriculum describes to teachers, parents, students and others in the wider community what is to be taught and the quality of learning expected of young people as they progress through school.</p> <p>The three-dimensional design of the Foundation – Year 10 Australian Curriculum recognises the importance of disciplinary knowledge, skills and understanding alongside general capabilities and cross-curriculum priorities.</p> <p>Disciplinary knowledge, skills and understanding are described in the eight learning areas of the Australian Curriculum: English, Mathematics, Science, Health and Physical Education, Humanities and Social Sciences, The Arts, Technologies and Languages.</p>	<a href="#">Home   The Australian Curriculum</a>
Australian Curriculum Units (Department for Education Intranet access only)	<p>As part of our school improvement model, we’ve created resources that translate the Australian Curriculum into relevant, localised content for the classroom.</p> <p>These resources include:</p> <ul style="list-style-type: none"> <li>• scope and sequence documents</li> <li>• units of work</li> <li>• whole school curriculum planning resources.</li> </ul>	<a href="#">Curriculum resources overview (edi.sa.edu.au)</a>  <a href="#">Login required</a>
9 SA Priority Growth Sectors	<p>Following extensive industry consultation and collaboration, the SA Government has launched the following nine Growth State priority industry sector strategies to 2030. They are:</p> <ul style="list-style-type: none"> <li>• Tourism</li> <li>• International education</li> <li>• Defence industry</li> <li>• Food, wine and agribusiness</li> <li>• <b>Hi-Tech</b></li> <li>• Health and medical industries</li> <li>• Energy and mining</li> <li>• <b>Space industry</b></li> <li>• Creative industries</li> </ul>	<a href="#">Sectors   Growth State</a>
Advancing Space: Australian Civil Space Strategy	<p>The Australian Civil Space Strategy outlines the Government’s plan to transform and grow our space industry over 10 years. It envisions an industry that lifts the broader economy, inspires and improves the lives of Australians.</p> <p>To achieve this, the strategy outlines actions to:</p> <ul style="list-style-type: none"> <li>• open doors internationally</li> <li>• increase national capability</li> <li>• promote responsible regulation, risk management and culture</li> <li>• inspire and build a future workforce</li> </ul>	<a href="https://publications.industry.gov.au/publications/advancing-space-australian-civil-space-strategy-2019-2028.pdf">https://publications.industry.gov.au/publications/advancing-space-australian-civil-space-strategy-2019-2028.pdf</a>

If you need further information or have particular questions, please contact the Foundation at [educationfund@andythomas.Foundation](mailto:educationfund@andythomas.Foundation)