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BUILDING TOMORROW'S SPACE WORKFORCE: A DESIGN-THINKING APPROACH

**Abstract**

Providing impactful learning and development opportunities for both teachers and students is critical to creating awareness of the breadth of career opportunities available and ensuring teachers are equipped to confidently lead learning opportunities in the classroom. Australia is in a comparatively new position in recognising space as an economic and workforce development industry of the future, and teachers across the nation remain relatively unaware of the potential career pathways it offers their students. Consequently, Australia now has the opportunity to upskill and empower both teachers and students simultaneously, ensuring that each group benefits from targeted enriching learning and development opportunities.

The Andy Thomas Space Foundation's Education Fund program, the Kids in Space National Program, is an Australian-first program designed to inspire the next generation of space workforce leaders. Now in its second year, the program targets teachers and students, utilising design-thinking principles to address current and future space-related challenges in Australia. Delivered by Australia-based education program providers Makers Empire, Kids in Space is co-supported by the Andy Thomas Space Foundation and Australian Space Agency.

The program offers accredited professional development for teachers, which enables them to support their students to participate in the Kids in Space program challenges and go further in the classroom. Participating schools each receive a 3D printer, along with access to a custom designed space-themed virtual challenge course, which engages students through purpose-made videos, quizzes, tutorials, and Design Thinking challenges.

Developed for primary and middle school students, in its first year the program reached around 10,000 students, hundreds of teachers and more than 70 schools in every state and territory across Australia. Building on this success, the 2024 program has already experienced a 29

This paper will outline the content and format of the Kids in Space program, and discuss the results from the initial national rollout, which showed that 96