NSW kids are stars of STEM

By EXCLUSIVE Eilidh Sproul-Mellis

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Tick for science curriculum

EXCLUSIVE Eilidh Sproul-Mellis

NSW should export its science curriculum to the rest of the country, one of Sydney's leading educators has declared, with the majority of Australia's brightest young scientific minds born and bred in the Harbour City.

The Australian Science and Engineering Fair (AUSSEF) has revealed its team of 10 school and university students – some as young as 15 – selected to compete on the world stage at the International Science and Engineering Fair in the US city of Columbus, Ohio, next month.

The 2025 finalists, whose groundbreaking projects have the potential to revolutionise what we know about everything from animal conserva-

tion to volcanoes on Mars, include two Kiwi students and one South Australian teen, while the remaining seven are being educated in Sydney.

AUSSEF co-ordinator and science teacher at Redeemer Baptist School Stuart Garth said the introduction of two new HSC subjects in 2018 were game-changers for science, technology, engineering, and mathematics (STEM) education, and saw the number of entries to the AUSSEF increase sixfold in a single year.

The "Investigating Science" subject focuses on developing the skills of scientific inquiry, while "Science Extension" gets students to produce a peer-reviewed project and report over the course of a full year.

"Overnight, NSW's performance shot up," Mr Garth said of the impact of the new subjects. "When these students go to university, they're steps ahead of everybody else."

Former classmates Anubhav Ammangi and Yemi Olaitan, both 18 years old and studying science at university after graduating from Redeemer last year, cited NSW's Science Extension subject as "essential" in designing the projects they would be presenting in the US in May.

"I think it's a really great course, in that it makes you go out and do something by yourself ... you really just get to explore the whole world of science," Mr Ammangi said.

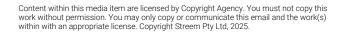
Mr Garth is lobbying the Australian Curriculum, Assessment and Reporting Authority (ACARA) to make similar courses available nationwide.

PLC Croydon student Lily Rofail, sponsored by energy infrastructure company Zinfra, will also be among the crew travelling to Ohio, taking with her a sharkskin-inspired pitch to slash heavy vehicle emissions by reducing aerodynamic resistance.

"Sharks, across their skin, have microscopic denticles which are an adaptation that allows them to move faster in water by reducing their fluid resistance," Ms Rofail explained. "I decided if I was able to apply these on to a model truck, I would find out if it would actually be able to reduce drag."

The IG-year-old urged other kids who are passionate about making a difference to "follow their curiosities" with STEM.

"Science is like your voice in action," she said.







PLC Croydon high school student Lily Rofail, 16, is heading to the US to compete in the International Science and Engineering Fair. Picture: Tim Hunter