

Case study

Increasing participation and achievement of Aboriginal and Torres Strait Islander students in STEM

The BHP Billiton Foundation's Indigenous STEM Education Project was conceived in partnership with CSIRO to increase the participation and improve outcomes of Aboriginal and Torres Strait Islander students in science, engineering, technology and maths (STEM). The five-year project spans all stages of education – through primary, secondary and tertiary education and into employment.

Importantly, the project also develops the confidence and capacity of teachers to incorporate Indigenous content into their class activities while still delivering curriculum requirements. Teachers are also supported to engage effectively with local elders to understand and teach the links between traditional knowledge and western science.

In just three years, the project has engaged with 159 schools, 533 teachers and 7,264 Aboriginal and Torres Strait Islander students across remote, regional and urban Australia and is starting to make a positive difference.

Sharni Cox, a winner of the 2016 Indigenous STEM Student Award, talks about the ASSETS program and the impact it has had on fostering her passion for science. 'ASSETS not only encouraged me and other Indigenous students to further explore our STEM interests, but gave me an opportunity to connect with my cultural heritage by meeting Indigenous elders and sharing their individual stories'.

The BHP Billiton Foundation's partnership with CSIRO is building a cohort of future STEM professionals and leaders, and we are proud to be involved in a project that builds the aspirations of students, their parents and their teachers.

What we do

The BHP Billiton Foundation was established in 2013 and works to address some of the most critical global sustainable development challenges facing our generation. By working in partnership with others we seek to raise the bar, find new solutions and set new standards for the future.



The project has six elements:

- Inquiry for Indigenous Science Students – targeting middle-school students in mainstream metropolitan and regional schools, the program uses hands-on inquiry-based projects to increase student engagement and achievement in science.
- PRIME Futures – targeting students up to Year 9 in mainstream metropolitan schools, the program uses the YuMi Deadly Maths approach to improve student outcomes in mathematics.
- Science Pathways for Indigenous Communities – targeting middle-school students in remote Indigenous communities, this program uses on-country projects as the context for learning science linked to Indigenous ecological knowledge.
- Aboriginal Summer School for Excellence in Technology and Science (ASSETS) – a nine-day residential program for high-achieving Year 10 Indigenous students with an ongoing leadership and support program to nurture students through Years 11 and 12.
- Bachelor of Science (Extended) – a supported pathway to complete a mainstream Bachelor of Science at the University of Melbourne for Aboriginal and Torres Strait Islander students who show potential, but may not otherwise have access to such an opportunity.
- Indigenous STEM Awards – this program recognises, rewards and celebrates the achievements of Aboriginal and Torres Strait Islander students who are studying and working in STEM, as well as the integral role schools, teachers and mentors have in supporting Aboriginal and Torres Strait Islander students in pursuing STEM education and careers.

Who we are

We are a charity funded by BHP Billiton, a leading global resources company, and through our programs we address challenges that are directly relevant to the resources sector. Our global programs focus on Natural Resource Governance, Environmental Resilience and Education Equity.

For more information, visit bhpbilliton.com/foundation.