

# Indigenous STEM Education Project

The Indigenous STEM Education Project provides of six nationwide programs that cater to the diversity of students as they progress through primary, secondary and tertiary education and into employment.



22,116

Aboriginal and/Torres Strait Islander Students\*



2,141

Teachers involved\*

### Program potential

Three stand out programs demonstrate enormous potential for continued success and expansion. There is a unique opportunity for a new funding partner to explore this prospect and immediately reap the benefits of an investment in proven models that deliver impact.

\*Results are from a six year period



233

Schools participating\*

#### Project highlights

### Inquiry for Indigenous Science Students (12S2)

Targets middle-school students and uses Indigenous science concepts and contexts to engage all students through hands-on inquiry based projects.



143 schools



1,095 teachers 11,076

Aboriginal and Torres Strait Islander students

#### Science Pathways for Indigenous Communities

Targets primary and middle school students in remote Indigenous communities and uses on-country projects as the context for learning science linked to Indigenous ecological knowledge.



23 communities



277 Aboriginal education workers



13 schools



344 teachers 2,691

Aboriginal and Torres Strait Islander students

#### Aboriginal Summer School for Excellence

Provides an opportunity for Year 10 Aboriginal and Torres Strait Islander students to explore the study and career options available to them in STEM.



739 student applications



14 summer schools

499

Aboriginal and Torres Strait Islander students

### Impact\*

The Indigenous STEM Education Project has significant impact on the engagement and achievement of Aboriginal and Torres Strait Islander students.

### Aboriginal Summer School for Excellence

## 79% intend to study a STEM field at university (up from 58% before the summer school)

## 71% of ASSETS alumni progressed to University and of which 55% pursued STEM qualifications

## stated ASSETS participation had a 'life-changing' impact on their study choices and career direction

### Inquiry for Indigenous Science Students (12S2)

## showed improvement or similar engagement after participating in I2S2 inquiry

## achieved an A, B, C grade after participating in 1252 inquiry

## of students recorded an increase in academic achievements following participating in I2S2 inquiry

#### Science Pathways for Indigenous Communities



Invaluable partnerships between schools and Indigenous Ranger programs, scientists and land management organisations



Support from Aboriginal people in schools and communities in the planning of learning programs with teachers



Strong engagement in the program by teachers and students, among schools and their communities

### What they say

"The value here of engaging in Two-way Science learning on country is to reconnect our kids. If you go back to a traditional system of learning, it's our mothers, it's our auntys, it's our uncles, our fathers who teach the children."

Kado Muir, Cultural Protocol

Officer, Ngaila Heritigate Research Council Science Pathways for Indigenous Communities

"He grew up so much.
He came home with
increased self-confidence
and determination
to do well to achieve
admission to university."
Indigenous parent

1252

"CSIRO programs are an inspiring way to teach science through integration Aboriginal and Torres Strait Islander knowledges." Jess Cooper, Teacher, Birrigai Outdoor Education Centre Canberra "I've actually found the engagement has gone through the roof." Suzanne Fowler, Teacher, Leanora District High School Science Pathways for Indigenous Communities

Indigenous Leaders

Principals and Teachers

**IMPACT** 

"We understand here at Wiluna that two-way science is not only important for the students own sense of identity, not only important for their sense of academic development, but also for the future."

Adriano Truscott,
Wiluna School, Principal Science Pathways for Indigenous
Communities

Students and Parents "I have higher social confidence and a better knowledge in STEM careers. ASSETS has presented with me a better perspective of what I want to do in the future." ASSETS Student

<sup>\*</sup> From the most recent evaluation report