

## What do we do?

*The Science and Engineering Challenge (SEC)* provides a pathway of memorable and fun activities for young people during their years at school. This pathway continues through University and into the Science, Technology, Engineering and Mathematics (STEM) workforce. We also recognise the critical importance of parents and teachers. Parents and the broader community are involved in many of the programs. The SEC closes the loop by providing training and resources for current K-12 teachers, and by encouraging young people to become future STEM teachers.

## Vision

Our vision is to inspire every Australian school student to create a future in science and engineering.

## Mission

Through the provision of meaningful, hands-on experiences we aim to inspire more young people to *make a difference in the world* by choosing a career in science and engineering.

## Core values

*People:* we value safety, inclusiveness and teamwork. We respect individuals and are committed to empowerment and equity issues

*Integrity:* we value fairness, honesty, respect and transparency.

*Involvement:* we value broad community involvement including families, schools, charities, community groups, educational institutions, professional organisations, businesses, industries and governments

*Innovation:* we value creative and imaginative solutions.

*Excellence:* we value professional, high quality service and are committed to continuous improvement. We aim to be a leader in our field.

The SEC changes the paradigm: we work holistically in cooperation, not competition, with other STEM program providers.

## What have we achieved?

Around 500,000 people have participated in one of more SEC events since its humble beginnings in the year 2000. Each year around 19,000 high school students compete in *Challenge Days* and 10,000 primary students experience science and engineering in our *Discovery Days*. Another 20,000 were involved in *the SMART program*. These events involve over a 1,000 schools, 3,000 volunteers and dozens of businesses, universities, community and professional groups each year.

## What would we like?

A range of sponsorship packages exist from local to national level. The SEC would like to partner with like-minded organisation(s), ideally over a rolling for a 3 year period. Note that all packages are negotiable in consideration of existing sponsors.

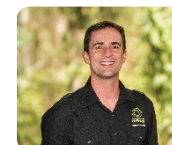
It is also possible to make a tax deductible donation.

## What can we offer?

- Direct access and brand exposure to around 50,000 people nationwide, with a secondary audience of about half a million, and a media audience of more than 2,000,000 every year;
- A clear role in preparing the next generation of professional and STEM employees, regardless of background or geographic location;
- Grass-roots involvement in local communities around Australia;
- Access to professional development, internship and work experience programs; and
- Association with a positive, innovative, proven, internationally recognised STEM outreach program.

## Are we a good match?

The SEC is looking to partner with likeminded organisations that share our commitment to quality and service delivery, along with a proven track record of innovation and success.



SMART science shows & workshops  
K-year 7 students

Discovery Days  
year 5-6 students

Build a Future Day  
year 7-8 on University campuses

Challenge Days  
year 9-10 students

Teacher internships  
Work experience

PD & resources  
Teachers



### The Science and Engineering Challenge is:

- An opportunity to change a young person's life for the better.
- Focused on encouraging young people into science and engineering careers.
- Effective! This claim is backed up by research.
- Involved in local communities and businesses.
- A truly national, all-Australian program and a world leader in the field!
- An exemplar of the 'national framework - local action' model of science communication.

#### TEACHER FEEDBACK

*"Students get a sense of their scientific skills being valued."*

*"Students understand more about the application of science and engineering."*

*"The students were fully engaged in activities which aren't available at school!!"*

*"In short this challenge is one of the best activities that we have involved our students in!"*

*"The Science and Engineering Challenge is now permanently fixed on our yearly calendar."*

### Immediate Impact

Directly reaches over 24,500 students nationwide each year with a media audience of over 3,000,000 people!

### Medium Term Impact - Senior High School Subject Selection

The Challenge is committed to measuring the impact on Year 11 subject selection. Research is conducted one year after students compete in the program. A survey of past student participants revealed that:

- ➔ 96% of students found the Challenge rewarding;
- ➔ 89% of students found the Challenge informative about relevant potential courses and careers;
- ➔ 38% of students studying **Mathematics** were influenced by the Challenge to choose this subject;
- ➔ 40% of students studying **Chemistry** were influenced by the Challenge to choose this subject;
- ➔ 45% of students studying **Physics** were influenced by the Challenge to choose this subject.

### Long-term Impact – Career Pathways

**Undergraduate students** studying science or engineering related degrees at the University of Newcastle were surveyed to determine whether The Challenge impacted their decision to study their chosen degree. Our most recent survey results show that:

The Challenge had a positive influence on them:

Pursuing a University degree	42%
Attending the University of Newcastle	30%
Pursuing their particular current degree	32%

In addition, we discovered that outreach programs on the whole increase students self confidence, their interest in science and engineering, and their awareness of science and engineering careers.



science and engineering  
**challenge**

**The Science and Engineering Challenge**  
The University of Newcastle

Phone: (02) 4921 7319

Email: [challenge@newcastle.edu.au](mailto:challenge@newcastle.edu.au)

Web: [newcastle.edu.au/challenge](http://newcastle.edu.au/challenge)

Facebook: [facebook.com/scienceandengineeringchallenge](https://facebook.com/scienceandengineeringchallenge)

YouTube: [youtube.com/sciengchallenge](https://youtube.com/sciengchallenge)

Instagram: [instagram.com/sciengchallenge](https://instagram.com/sciengchallenge)