Bridge busting: At Flinders University, students watch intently to see if the next load will finally break the little balsa bridge

FIRST OF ALL
Thank you and congratulations to everyone for making 2014 such a fantastic year for the Science and Engineering Challenge. Over 1800 students across the state joined in! The schools assembled amazing teams to take part in the Challenge and, behind the scenes, the volunteers put in a lot of time to make it all look effortless. They were there the day before events to welcome the crew from the University of Newcastle and help get the gear set up, and they were there the next day to guide proceedings and, best of all, encourage the students.

WHAT IT IS
The Science and Engineering Challenge is a competition developed by the University of Newcastle with just these aims in mind; to show students that science is both fascinating and useful and to encourage them to continue studying science and maths. This can lead to careers in a wide range of STEM-related areas such as aerospace engineering, water management, energy, biotechnology and other areas our future depends on. Many students don’t believe they can do maths and science until the Challenge shows them that it’s really not that scary.

South Australia has been taking part in the Challenge now for 13 years.

WHAT WE DID
10 DAYS OF CHALLENGE
Over 1800 year 9 and 10 students from 70 schools took part in South Australia’s Science and Engineering Challenge this year. They gathered in venues across the State to find out that science is not just all in the mind. It solves practical problems, it’s rewarding... and it’s fun.

The students formed teams to deal with eight different challenges. In some cases two small schools were able to work together as one team. Instant teamwork - that’s impressive. Teams were scored on their efforts. These scores gave us eight winners who went on to compete in the Super Challenge in Adelaide on September 24. It was an exciting finish as Loxton High and Prince Alfred College raced for the win, but it was Cummins Area School which won the day.

Loxton High, Prince Alfred College, and Cummins Area all won through to the National Finals in Adelaide on October 29th.
WHAT WE DID NEXT
THE NATIONAL FINAL CHALLENGE
29 October 2014 saw South Australia host the National Final for the first time ever! With eight teams from around Australia converging on the Adelaide Arena, Findon, to compete it was a terrific and exciting day. The students put on a great performance despite having been out the night before having a load of fun at The BeachHouse down at Glenelg.

The Outcome of the National Final:
1 Matthew Flinders Anglican College - Qld
2 James Ruse Agriculture High School - NSW
3 Prince Alfred College - SA
4 Loxton High School - SA
5 Ballarat Grammar School - Vic
6 Cummins Area School - SA
7 James Sheahan Catholic High School - NSW
8 Mount Carmel College - Tas

Well done everyone, and special congratulations to Queensland’s Matthew Flinders Anglican College.

WHAT WE NEED NOW
2014 was a great year for us, but it came close to being the final year of the S&E Challenge. The Challenge is a great success at achieving its aims. Its primary aim is simply to encourage students to study maths and science in their senior years. This it does through the challenges which show students that they do have the ability, and that these subjects are fun and useful. Secondly, through its guest speakers and its sponsors, the Challenge shows the students that there are many careers to choose from when they follow these subjects, from mining to astronomy, from submarines to skyscrapers, from the earth to the stars and all the environment in between.

After 13 years of the Challenge, we even have speakers who once took part in it themselves and were influenced by it.

However, the Federal Government has now withdrawn all its funding, completely, from the Challenge. The University of Newcastle no longer gets any Federal Government support for this project.

As a result, the University of Newcastle is intending to charge each school $440 each year to compete.

Unfortunately, not all schools can afford this. For some, just travelling to the Challenge centres is a challenge; South Australia is a big place.

What we would like to do is raise enough money so that no school has to pay the extra money.

So, if you know of someone who can help out, let us know. If you would like to make a donation yourself, let us know.

If you just want to help as a volunteer, let us know. Volunteers are very important. Our volunteers help set up the Challenge days and oversee the events, and generally manage to have fun on the day. You can get in touch through our inestimable event manager Ruth Conry, or through your Rotary Club.

Even just spreading the word about us helps, so find us on Facebook and share our posts, add some of your own, or talk about us on Twitter and other media like Pinterest. Write to your local paper or local member. Keep the conversation going. The S&E Challenge is an important and valuable activity with a big impact.
ATSE SCIENCE TEACHER’S AWARD

Teachers are inspirational. We are very pleased to announce that the winner of the Academy of Technological Sciences and Engineering, ATSE, Science Teacher’s award for 2014 is Jeremy LeCornu of Brighton Secondary School. Congratulations to Jeremy and to Brighton. This award is for outstanding teaching in the areas of Science, Technology, Engineering and Maths. This esteemed Academy will award a trophy and $2,000 cash to the science department at Brighton Secondary School which makes it all the more something to be proud of.

*Details for 2015’s ATSE Award will be sent to schools in term 1 2015.

FROM THE CHAIR

The South Australian section of the 2014 Science & Engineering Challenge was a marvellous success! We saw students this year, as much as ever, achieving high scores, teamwork, sharing, and a lot of fun.

The events ticked all the boxes, in particular encouraging students to continue studying the STEM subjects and making them aware of the rewards, in terms of satisfaction and dollars, available via careers in the many branches of science and engineering.

We are also extremely pleased that we pulled off the national Final with a terrific dinner to thank the sponsors, a fun excursion of the visiting students to the BeachHouse and a smooth day at the Challenge Final. Congratulations to the winner, Matthew Flinders Anglican College from Queensland, and also to the stellar performance of the SA representatives, Loxton (second year running that they have been in the National Final), Prince Alfred College, and Cummins Area School.

Like most events, the costs rise each year and we are extremely grateful to the generous contributions of the SA Government, the ASC, Australian Gas Networks, SA Power Networks, and all three Universities, local business enterprises, ATSE, and the SA Community, especially Rotary. 20 Volunteers per day over 10 days requires 200 “Volunteer Days”!

We are delighted that the National Challenge was held in Adelaide in 2014, and the support of the SA Government ensured a successful event. So, after 14 years of the Challenge, and SA has participated in all but the first, it continues to grow and inspire more and more students to follow careers in the disciplines that are, arguably, the most important for the future of Australia.

My sincere thanks to the Committee and the scores of people who make the SA “challenge” the success it is across the State.

Ollie Clark, AM Chairman, SA Organising Committee

Thank you to 2014’s:

MAJOR CONTRIBUTORS:
ASC
Flinders University
The University of Adelaide
The University of South Australia
SA Power Networks
Australian Gas Networks
The Adelaide Arena

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SPONSORS:
Arrium Mining
ATSE: Australian Academy of Technological Sciences and Engineering
BHP Billiton
City of Mount Gambier
City of Whyalla
Grant District Council
Hood Sweeney
Motorola
Muradel
OneSteel Whyalla
Regional Development Australia
Whyalla & Eyre Peninsula
Santos
Timberlink

VOLUNTEERS:
Rotary Clubs of Adelaide
Mount Gambier
Mount Gambier Lakes
Mount Gambier West
Port Pirie
Millicent
Whyalla

2014’s MAJOR CONTRIBUTORS
Thank you and Congratulations to all our wonderful participating schools

*Winners

Mount Gambier, 22 July
- Allendale Area School
- Bordertown High School *
- Grant High School
- Millicent High School
- Mount Gambier High School
- Naracoorte High School
- Penola High School
- Tenison Woods College

Adelaide, 30 July
- Birdwood High School
- Emmaus Christian College
- Golden Grove High School
- Kildare College
- Loxton High School *
- Para Hills High School
- Tyndale Christian School
- Underdale High School

Adelaide South, 24 July
- Christies Beach High School
- Hamilton Secondary College
- Prescott Southern
- Prince Alfred College *
- Reynella East Schools
- Scotch College Adelaide
- Sunrise Christian School

Adelaide, 31 July
- Craigmore Christian School
- Gleeson College
- Henley High School
- Immanuel College *
- St Columba College
- Trinity College, Gawler River

Adelaide South, 25 July
- Blackwood High School
- Hallett Cove School
- Heathfield High School
- Mitcham Girls High School
- Mount Barker High School
- Sacred Heart College Middle School *
- Southern Vales Christian School
- St Dominics Priory College

Adelaide, 1 August
- Faith Lutheran School
- Heritage College
- Le Fevre High School
- Pedare Christian College
- Roma Mitchell Secondary College
- Seaton High School
- St Peter’s College *
- Unley High School

Port Pirie, 5 August
- Gladstone High School
- Jamestown Community School *
- John Pirie Secondary School
- Kadina Memorial School
- Mid North Christian College
- St Marks College

Adelaide, 28 July
- Pembroke School *
- Portside Christian College
- Salisbury High School
- Waikerie High School

Adelaide, 29 July
- Christian Brothers College
- Endeavour College *
- Nazareth Catholic College
- Sacred Heart College Senior
- Salisbury East High School
- St Ignatius College
- St Michael’s College
- Temple Christian College

Streaky Bay & Wudinna Area Schools

Stuart High School

Adelaide, 29 July
- Ceduna Area School
- Cummins Area School *
- Navigator College
- Port Lincoln High School
- Samaritan College

Whyalla, 5 August
- St Marks College
- Temple Christian College