



**Crookwell
Academy of
STEM
Excellence**



Issue 2 – Term 3

Hi All,

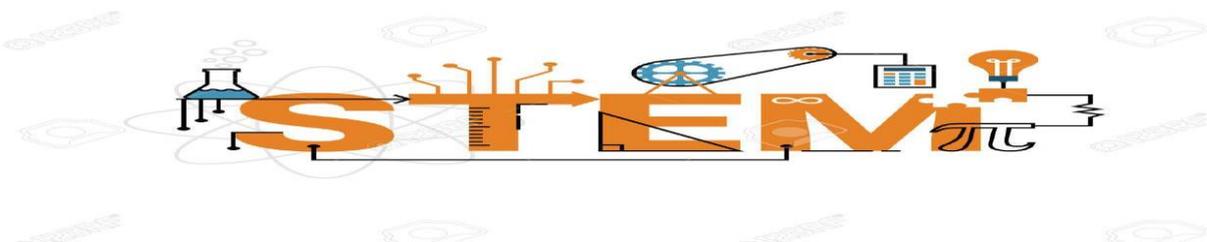
Welcome to our second e-newsletter for 2020. We are very excited that restrictions have lifted enough to allow incursions and some limited excursion experiences - let's hope that with folk continuing to do the right thing that we can increase our presence in your schools.

This week, we launched the Crookwell Resource Centre which now allows our SISP schools to access the Lending Library based at Crookwell High. We are very excited to be able to offer this to our schools and it's fantastic to see some schools already reserving some of the STEM equipment on offer – the drones seem to be the most popular so far!

We wish you all the best for the new term.

Kind Regards,

Ingrid, Louise and Camilla



School News

Crookwell Wind Power Showcase

During the last week of Term 2, Stage 3 at Crookwell Public School presented their brilliant wind turbines that they have been working on throughout term. Students created wind turbines inspired by 'The Boy Who Harnessed the Wind', using STELR wind turbine kits from the CASE Lending Library.

The turbines were able to power buzzers, lights and a range of other small items.

Awards were handed out to students based on the 4Cs; Collaboration, Creativity, Critical Thinking and Communication. Isabel Nelson from Gullen Range Wind Farm also presented an Industry Award to the group that showed great persistence in "going back to the drawing board" when things didn't quite go to plan.

We loved seeing the students' poster boards and working models, huge congratulations to the students and their amazing STEM teacher, Ms Kemp.



Virtual visit with Astrophysicist, Brad Tucker

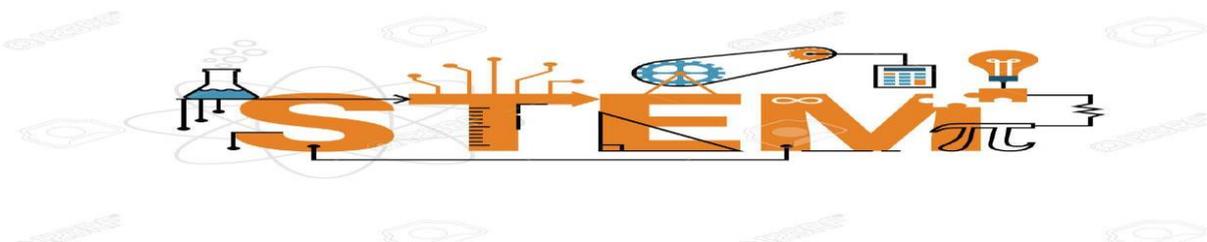
Dr Brad Tucker is an Astrophysicist and Cosmologist and a Research Fellow at the Research School of Astronomy and Astrophysics, Mt. Stromlo Observatory at the Australian National University. Brad is passionate about STEM education and outreach. He frequently gives talks to school groups and the general public about Astronomy and has regular segments on various radio stations talking about Astronomy news and events.

We are grateful to have Brad supporting SISF in the Southern Inland. For schools with an Earth and Space focus for Term 3 or 4, please get in touch with camilla@rdasi.org.au if you would like her to organise a virtual visit with Brad. In the meantime, check out one of his [youtube videos here](#).

INTERNET OF THINGS (IoT) TPL

We are very excited to start this course! And even more excited to tell you that there are **10** more places available! Please email Ingrid directly if you would like to be involved. Best of all, there is no charge to you - and 5 hrs registered NESA hours.

This is a  sponsored opportunity.





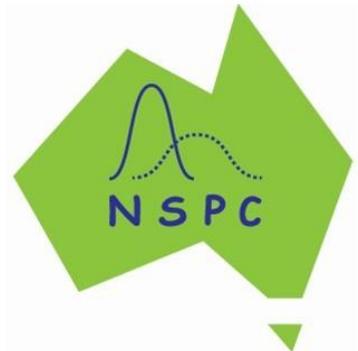
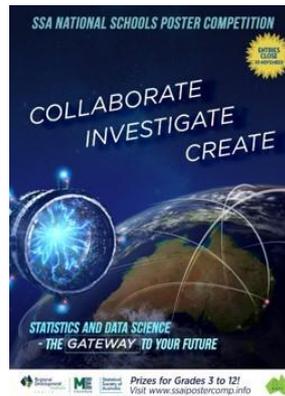
In great news, we have secured the Mawson’s Hut Antarctic bus to visit our region during Term 3. Ingrid will be contacting SISP schools about potential dates – don’t miss out on this very cool opportunity! Watch this informative video by clicking [here](#) or you can check out the amazing work done by Mawson’s Hut plus the free resources [here](#).

Google Education Grants

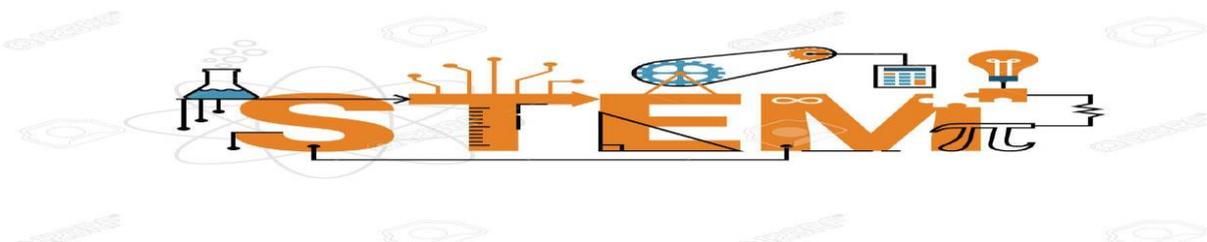


The Crookwell Academy of STEM Excellence has again been the beneficiary of a Google Education Grant and we will be looking to run a number of twilight and full day professional learning opportunities for our teachers. We have not confirmed the PL topics at this stage as we are after suggestions from our schools. **Please forward suggestions to Louise or Ingrid.** Suggestions so far include how to produce quality cross-curricula programs, Google Education Tools & Tinker Time.

COOL COMPETITIONS



The National Schools Poster Competition is in its sixth year and is open to students from Stages 2-6. The competition has gained increasing popularity for fostering critical thinking, collaboration, creativity and communication of statistics supporting national curriculum learning outcomes. These features make it an easy selling point for teachers and their students relishing the opportunity for more autonomous learning beyond traditional bookwork. A 2017 survey showed that taking part in the competition increased students’ enjoyment of statistics and data by 90 per cent. “The National Schools Poster Competition is a fun, project-based learning activity that encourages primary and secondary students to develop, implement and creatively report on an investigation on any topic of interest to them,” said Competition Coordinator, Professor Peter Howley from The University of Newcastle.



The Cool Controller Competition

This competition aims to encourage and support Stage 3 and 4 students to use a design thinking approach to develop an improved 'smart' control unit for the Cooler Classroom air conditioning and fresh air ventilation units. Students will be encouraged to think like entrepreneurs and completely redesign the current system in terms of connectivity, data capture and visual appearance. The design solution they come up with must focus on sustainable practices for:

- Improved thermal comfort - temperature, humidity and airflow
- Improved indoor air quality - CO2

To register: <https://education.nsw.gov.au/public-schools/cool-controller-competition/all-the-details>

COOL RESOURCES

GROK LEARNING

The new curriculum requires all students from Years 3-8 to learn coding. In order to be effective, students must adapt to a new way of thinking.

[Grok resources](#) will guide your students to develop practical computational thinking skills. If you are not too confident with coding yourself, they have solutions and step by step walkthroughs for each problem and a variety of professional development opportunities available.

As a bonus, all content is **free** for teachers to evaluate, use for professional development, or to follow along with students.



The Easiest Way to Teach Coding!

All the curriculum, intuitive tools, and resources you need to run a successful CS program. Try their free courses today or explore our coding curriculum [here](#).

