

## Industry Engagement

Teachers are encouraged to consider what forms of industry engagement they would like to take advantage of during the 2012.

Industry engagement can take several forms, from the Ask An Expert function on the C2C website through to industry tours.

Engagement could also occur through a representative from an industry partner visiting a school and working with teachers or students. This could involve assisting a teacher with project design or providing technical advice and helping students utilise STEM principles in their projects.

For more information and to arrange industry tours, speakers or student workshops contact Wendy on 0417 816 951.

## APPEA Careers Workshop

The Australian Petroleum Production & Exploration Association are offering 2 free Student Industry & Career Awareness Workshops on the oil and gas industry for C2C students. The workshops are part of APPEA's national conference to be staged in Adelaide in May.

In addition to the workshop, students will participate in a guided tour of the Exhibition and have the opportunity to talk with representatives from some of the 150 oil and gas companies at the event.

Students can attend on **EITHER** 15 or 16 May. For more information contact Emma on 8260 8903.

## C2C Aligning with STEM

March 2012

In September 2011, the South Australian Government launched its Science, Technology, Engineering and Mathematics (STEM) Skills Strategy, aimed at increasing the supply of people taking up STEM occupations to meet the growing needs of our local industries, including mining and defence.

Demand is set to increase in South Australia over the next ten years for people in STEM occupations such as engineering, environmental scientists and ICT systems analysts. Demand for allied trades such as electricians, toolmakers, and metals casting trades workers is also likely to increase significantly.

Concept2Creation is aligning with the STEM Skills Strategy to help meet this growing demand and to provide C2C students with the best possible experiences and skills to embark on the relevant career pathways.

For more information on the Stem Skills Strategy visit [www.dfeest.sa.gov.au](http://www.dfeest.sa.gov.au)

## The C2C+ Program

The C2C+ component of the C2C suite of programs continues to grow in popularity and success. This component provides small teams of students - generally year 11 - with a range of concept briefs that have been developed by industry partners. These projects are the more senior level of the C2C program and provide students the opportunity to refine and demonstrate the skills learnt in junior projects. Using project design and management skills, plus training, mentorship and appraisal that is offered through our industry and tertiary education partners, teams take their concept to creation.

Visit the C2C website for more information on the C2C+ projects. Challenge specifications from 2011 can be found in the Teacher's section of the website and will be updated to coincide with the Teacher Induction morning scheduled for Friday, 11 May at UniSA Mawson Lakes.

- The lead C2C+ project in 2012 will be the **Suburban Wetlands Acquisition and Telemetry (SWAT)** project.

BAE Systems and the City of Salisbury have once again partnered with NAMIG to lead this project. The aim of this project is to create a vehicle which can be directed to a specific location, conduct water sampling and map and log the data for further analysis to monitor the health of the Salisbury wetlands. This provides the opportunity for a combination of mechanical, electronic and chemical engineering experiences or for teams to undertake specific aspects of the challenge.

- RAAF and Lockheed Martin Australia will work with teams of students from C2C schools on the **Genesis Uninhabited Air Vehicle (UAV) Challenge**. The UAV Challenge is designed to promote aircraft trades, engineering and science through project-based learning.

Teams are required to transform a remote controlled aircraft into a UAV by developing a drop mechanism, plus electronic and video communications systems.

- Following the successful launch of the **Holden Cruze Challenge**, which focussed on developing quality and efficiency in the assembly process, the introduction of the **Holden Volt Eco Challenge** in 2012 will shift the focus from process to product. In this senior challenge, teams will be required to maximise the efficiency of the vehicle through a range of enhancements. NAMIG is indebted to SAGE Automation for their development of a metre that will measure energy consumption. Other contributing partners have included GM Holden, Baker Pattern Making, Sonnex Engineering and Southern Model Supplies.



As an introduction to the above projects, younger students can develop the necessary skills and be introduced to Advanced Manufacturing through participation in the C program which includes Engineers Without Borders in Schools (EWBiS), C2C In Cars, C2C In Space, Power & Sustainability and Intro to UAV.

## Coming Events

Mon 30 April 9.00-12.00  
Introduction to "C"  
Projects, UniSA Mawson  
Lakes, Room GP2-333.

Thur 3 May 3.45-5.00  
C2C Teachers Meeting  
(Northern Schools) at  
Tindo Solar, 6 Second  
Avenue, Technology Park,  
Mawson Lakes.

Thur 10 May 3.45-5.00  
C2C Teachers Meeting  
(Southern & Western  
Schools), Seeley  
International, Lonsdale.

Fri 11 May 1.30-3.30  
Introduction to C2C+  
Projects, UniSA Mawson  
Lakes, Room P1-11.

Tue 15 or Wed 16 May  
APPEA Careers Workshop  
(refer front page)

Thur 7 June 7.30-10.00  
NAMIG Board Meeting,  
Polaris Centre, Innovation  
House East, Mawson  
Lakes

## Welcome Tindo Solar

NAMIG welcomes this Mawson Lakes manufacturer of solar panels as a program partner. This relationship will be greatly valued by schools pursuing projects with a renewable energy focus. Teachers will gain an initial appreciation of the operation and its potential to enhance student learning at a site meeting in May.

Tindo Solar have kindly agreed to host the C2C Teachers Meeting (Northern) on Thursday 3 May 2012.

## NAMIG

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## Lincoln Wood Announced as a Salisbury Living Legend

The Living Legends program recognises the achievements of individuals and gives the City of Salisbury a chance to say 'thank you' for their work within the Salisbury community.

Lincoln Wood is a recipient of a Living Legend Award in 2012 for his efforts in the establishment and ongoing operation of NAMIG.

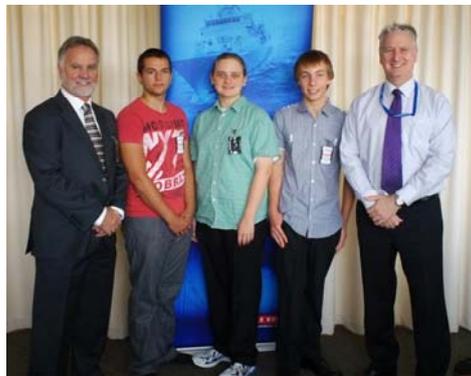
Lincoln has been involved in C2C since its inception in 2003 and was instrumental in the formation of NAMIG. He was one of a small group of representatives from local industry that identified the need to assist schools and local communities in meeting the emerging workforce development requirements of industries in northern Adelaide.

Lincoln is a past Chair of NAMIG and continues in his support of C2C as an observer on the NAMIG Board.



Lincoln Wood accepting his award from Mayor Gillian Aldridge.

## BAE Systems / C2C Scholarships 2012



The BAE Systems / C2C scholarship program is available to C2C students enrolling in science, maths or technology courses which are relevant to the Defence Industry. Courses can be at university or TAFE, providing opportunities for professional, trade and technical pathways.

The scholarship program is in its fourth year, with a total of 9 recipients currently participating across various tertiary institutions.

The successful applicants for 2012 were awarded with their scholarships in a presentation ceremony at BAE Systems.

**Dylan Hoskin - Salisbury High School** Accepted to undertake a Bachelor of Engineering (Electrical & Mechatronics) at the University of South Australia.

**Athena Dawe - The Heights School** Accepted into a Bachelor of Mechatronic Engineering at Adelaide University.

**Steven Spiller - Valley View Secondary School** Accepted into Bachelor of Mechanical Engineering at the University of South Australia.

Congratulations also go to Stephen Harris, a 2011 scholarship recipient from The Heights School, who has been awarded the First Year Mathematics Prize from the School of Mathematics at Adelaide University.

## Lean & Quality Manufacturing Simulation

On 20 March a group of teachers from various C2C schools participated in a full-day workshop at GM Holden.

This PD had teachers working in a simulated manufacturing environment. The teachers worked in teams and by the end of the day had identified and implemented improvements to the manufacturing process and increased the quality and output of the production line.

A great example of teamwork, communication and continuous improvement, all of which are invaluable in project based learning.



**HOLDEN**

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**Government of South Australia**  
Department of Further Education,  
Employment, Science and Technology