



ASISTM Project: Skills Shortages in Science, Engineering and Technology

Project Overview

ASISTM Project 2007 – Targeting Skills Shortage in Science, Engineering & Technology (SET)

Project Overview

Participating Organisations:

- Canberra Institute of Technology (CIT)
- Minerals Council of Australia (MCA)
- Engineers Australia – Guy Beaubois, Vesna Strika, Emily Buchanan
- Academy of Science – Nola Shoring

Participating Schools:

- Alfred Deakin High School - ACT
- Boorowa Central School - NSW
- Caroline Chisholm High - ACT
- Erindale College - ACT
- Lanyon High School - ACT
- Melrose High School - ACT
- Monaro High School - NSW
- Stromlo High School - ACT

Project Coordinator: Noel Hamey - Canberra Institute of Technology

Deputy Project Coordinator: Dianne Stuart – Minerals Council of Australia

Objective:

The project seeks to:

- Provide secondary students and their teachers with greater awareness of the range of science, engineering and technology related career opportunities and the entry pathways to associated education and training; and
- Increase the number of secondary students choosing to continuing with science, mathematics and technology through years 11 and 12.

Project Size and Duration:

Eight school – six in the ACT and two in regional NSW have agreed to participate. The project will be working with science teachers and careers advisers from these schools, plus a up to 30 nominated students from each of the schools. These will be year 10 students with the exception being Erindale College – (year 11 students).

Proposed Activities

A series of no more than three one-day professional development workshops with the nominated teacher/ career advisers from each of the eight schools.

Identification of a range of Science, Engineering and Technology based careers to be explored and promoted.

Development of a series of stimulating, technology rich, hands-on experiences to be undertaken both at CIT and within each school.

Personnel from CIT, MCA, Engineers Australia and the Academy of Science (associate teachers) will be engaged in supporting teachers to develop strategies and resource materials that will demonstrate these careers and the entry pathways to them.

The partnerships formed during this pilot project will provide a conduit for teachers to engage and initiate further learning activities and events beyond 2007.

The outcomes will be disseminated through the ACT Career Education network, the Science Educators Association and through the communication channels of the ACT Education System and regional education and careers adviser networks.

Timeframe:

Start: February 2007

Finish: December 2007

February

- ASISTM Briefing Meeting. Attendees - CIT, MCA, Engineers Australia, Academy of Science and project leaders of the eight schools

March

- Planning meeting
- Project responsibilities identified and documented

April

- One day briefing for teachers and associates
- Establish and set tasks for activities

May

- Engineers Australia to visit two schools – Classroom workshops
- Schools to visit CIT
- Teacher preparation of teaching/learning materials and activities – MCA and Academy of Science

June

- Engineers Australia to visit two NSW schools – Classroom workshops
- Schools to visit CIT
- Teacher preparation of teaching/learning materials and activities—
MCA and Academy of Science

July

- One day workshop - 2 ACT schools, 2 NSW schools Reporting on in-school activities by the four schools that undertook activities in May and June
- Administration
- Evaluation of classroom activities conducted in May June
- Mid-project report

August

- Engineers Australia to visit two schools – Classroom workshops
- Schools to visit CIT
- Teacher preparation of teaching/learning materials and activities –
MCA and Academy of Science

September

- Engineers Australia to visit two schools – Classroom workshops
- Schools to visit CIT
- Teacher preparation of teaching/learning materials and activities –
MCA and Academy of Science

October

- Teacher Workshop (one day)
- Feedback and evaluation
- Evaluation - conduct of survey with participating schools
- Teacher Associates complete working with schools
- Student centred activities collaborative development completed

November

- Evaluation and Reporting

December

- Financial and Final Project Report
- Project ends
- Final report