

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
LIFT OFF - PRIMARY AND SECONDARY SPACE EDUCATION (1)

Author: Ms. Kerrie Dougherty
Powerhouse Museum, Australia, kerrie.dougherty@gmail.com

Dr. Jeanette Rothapfel
New South Wales School of Space Science, Australia, jrothapfel@hunterlink.net.au

THE NEW SOUTH WALES SCHOOL OF SPACE SCIENCE: ENCOURAGING HIGH SCHOOL
SCIENCE STUDIES

Abstract

Established in 2005, the New South Wales School of Space Science is a four day residential learning experience, targeting students about to enter Year 10. Based at the University of Newcastle, Australia (in the NSW regional city of Newcastle) and organised with the collaboration of the university and local space and astronomy societies, this program provides attendees with stimulating science experiences, focussed around space science. The School aims to promote a love of science generally, and to encourage students to select science subjects as part of their senior studies in Years 11 and 12, with the ultimate goal of directing them into careers in science- and space science in particular. .

This paper will provide an overview of the NSW School of Space Science in its first five years of operation and an assessment of its results to date. It will look at the origins of the program (based in the need to endure that Australia has, in the future, an adequate supply of scientists, engineers, technical personnel and science-trained science teachers), as well as its role in providing opportunities for science experiences to students from regional and remote areas of the state, where science education facilities may be lacking or of poor quality.

The operation of the program, as a non-profit, self-funding event, supported by student fees and the volunteer services of the lecturers and staff, will be discussed, together with an outline of the educational program. While varying somewhat from year to year, depending upon the availability of lecturers, the educational experience provided by the School of Space Science includes presentations from national and international science experts (both in person and via live tele-lessons), science experiments and problem-solving activities covering topics in physics, astronomy, chemistry, biology, astrobiology and geology. For students who wish to continue their space-related studies, the School of Space Science also provides its graduates with opportunities for additional educational experiences through the other Australian space school programs with which it is associated and these will also be discussed.