

8 July 2010

Teen enthusiasm drives EES education revolution

A greater interest in topics such as climate change and sustainability is helping to drive teen enthusiasm for the relatively new subject of Earth and Environmental Science (EES) but it's already facing an old issue – the supply of qualified teachers.

In recent years NSW and WA have introduced modern EES courses with other states still offering older courses in environmental science and geology that are less attractive to students.

Dr Leah Moore, a geologist and science teacher educator at the University of Canberra, said a study into EES in Western Australia has shown more than a 10-fold increase in students choosing the subject since it was introduced into schools in 2007.

“Data recently released by Earth Science WA shows that between 2001 and 2006 there were up to five WA schools teaching geology with less than 50 students in total doing the course,” she explained. “Since the introduction of a new EES course, up to 30 schools and almost 700 students have taken up the option each year.”

Speaking at the Australian Earth Science Convention in Canberra, Dr Moore said the combination of earth and environmental science was a win-win situation.

“EES combines the issues of environmental science, such as nuclear waste management and climate change, with the scientific rigour of earth science resulting in a topical course underpinned by science,” she added.

Dr Moore said school teachers with qualifications in the earth and environmental sciences tended to be the champions of the course but a number were being lured back into industry jobs because of the lucrative salaries currently on offer.

Of the teachers surveyed in WA, approximately only 50 per cent have training in either earth sciences or environmental science and only two per cent have training in both disciplines.

“The proposed national curriculum rolling out in 2014 for senior years, is a fabulous opportunity for further interest in EES as it will give EES equal weighting with the more traditional sciences such as chemistry,” said Dr Moore. “Unfortunately we’re already struggling to meet the demand for EES qualified teachers.”

“If we want EES to be a serious option, we need to get serious about encouraging more teachers with an EES background into schools while providing exciting and creative professional development for science teachers with a non-EES background,” she added. “

Dr Moore said the broader EES community – academics, researchers, scientists and industry partners – could do more to support teachers and students alike, develop resources to support these courses and value EES teaching as a career option.

Mr Greg McNamara, education and outreach consultant for the Geological Society of Australia (GSA) said the organisation has a strong focus on education and has taken an active role in supporting EES teachers with a variety of resources.

“There’s a range of fact sheets, online resources such as quizzes, and EarthCaching which is a GPS interactive game that gets people out and about looking for Earth’s treasures in the environment,” he explained.

Teachers can access the GSA's educational resources at www.gsa.org.au/resources/education.html

Ends

Issued on behalf of the Geological Society of Australia by Connection Communications. For further information or to arrange an interview with Dr Leah Moore or Mr Greg McNamara, please call Maria Padua on 0419 200 935.