

The Teacher Earth Science Education Programme (TESEP) Announces “The Challenging Earth”

READY, SET, GO! The Teacher Earth Science Education Programme (TESEP) is now officially up and running in four states/territories, with three other states/territories to start-up in early 2009.

The TESEP Board recently approved a staged start-up of the programme at eight centres in 2008. (Originally planned for 13 centres, the other five have been re-scheduled to start in early 2009 - assuming sufficient funding can be obtained).

The first Professional Development Workshop (PD1) ‘Round and Round with Rocks’ is about the rock cycle (from pluton & ore through weathering cycles, transportation to mineral sands and use of minerals, rock and sand). PD1 will commence on Friday 18 July in Townsville, followed by workshops in Biloela, Brisbane, Orange, Sydney, Canberra, Griffith and Adelaide.

The PD workshops are designed to better engage Year 7-10 students by assisting Science, Environmental Science and Geography teachers in improving their teaching of Earth & Environmental Science topics currently in the curriculum in all states. Teacher feedback from PD1 will be published in PESA News and other national geological newsletters in August/September 2008.

Each PD workshop will involve one to two presenters running through factual material and worksheet activities with the 20 attendee teachers. The Queensland Resource Council have developed this PD1 unit with the addition of the Rock Cycle Quiz Game designed for Earth Science Western Australia (ESWA) under the auspices of the WA Curriculum Council by Geological Society Australia (GSA) Outreach Teacher/Geologist Greg McNamara.

The eight topics requested by teachers in the TESEP ‘The Challenging Earth’ series, will draw on teaching material designed for ESWA, Minerals Council Australia (MCA), Queensland Resource Council (QRC) and well-regarded teaching units designed by prize-winning secondary school science teachers (Science Summer School, Middle School & Prime Minister’s Award winners). Additional assistance will be derived from Melbourne, Sydney, Adelaide and Flinders University staff, such as Prof. David Karoly (IPCC/University of Melbourne) who will assist and guide the development of teaching resources in the ‘Riding The Climate Roller Coaster’ topic.

It is planned that all PD workshops will each have a half-day field trip to local coal/mineral mine,

This Professional Development (PD) workshop series is designed to:

- Spark student interest in Earth and Environmental Science (EES) topics across Australia
- Motivate and educate keen science teachers and raise the profile of EES in secondary schools nationally
- Address the critical shortage of young people in trades and professions in the Energy/Minerals/Environmental Sciences industries
- Assist students in making informed choices regarding subject and trade/professional career choices in the Energy/Minerals/Environmental Sciences Industries
- Address requested topics based on a 2007 Survey of teacher needs

Features of the TESEP Programme

- A Professional Development series of eight workshops for Science Teachers who teach Years 7 to 10
- To be presented nationally at multiple centres in all eastern/central states and territories through the years 2008-2010
- Working with state Minerals/Resource Councils and with the Earth Science Western Australia (ESWA) programme
- Involving up to 500 teachers and (over the next five years) reaching tens of thousands of students
- Endorsed and supported by the Australian Science Teachers Association (ASTA)

mineral collection, fossil site, geological museum, etc. These will vary depending on what is available in the vicinity of the workshop venue.

The development of teaching resources will be overseen and guided by GSA Outreach Teacher/Geologist Greg McNamara, who is the TESEP Executive Officer. CD and print duplication of teaching material for PD1 has commenced at Australian Science Teachers Association (ASTA) office in Canberra. ASTA is also responsible for handling TESEP accounts, funds and advertising within the Science Teacher Australia network. ASTA is responsible for the accreditation of the TESEP programme, each workshop counting towards mandated annual PD hours spent by teachers out of school hours. Five State Co-ordinator Teachers (part-time paid positions) are organising the workshop bookings in their states.

All TESEP teaching resource material will be available to teachers to download from the PESA/GSA-supported Geoscience Pathways website (www.geosciencepathways.org.au).

The TESEP programme is currently funded at just under \$200,000 for 2008, with \$177,000 for each of 2009 and 2010. Most sponsors are three-year partners.

Current TESEP funding partners are:

Principal Partners (\$30k/yr) PESA, Woodside

Platinum Sponsor (\$20k/yr) Australian Institute of Geoscientists AIG

Gold Sponsors (\$10k/yr) CSIRO, Geological Society Australia, Beach Petroleum, Karoon Gas, Nexus Energy, Geodynamics

Silver (\$5k/yr) Sydney University, University of Melbourne, Australian National University, Macquarie University, PIRSA, Essential Petroleum

Bronze level (less than \$5k/yr) several individual contributors

In-kind contributions from ExxonMobil (chairperson’s time - platinum level), Queensland Resource Council (presenter’s time), University of Melbourne (staff time and workshop venue), Earth Resources Foundation/Sydney University (staff time and workshop venue), Flinders University, Hot Dry Rocks, Monash Energy and Geodynamics (staff time for workshop resource development), and SA Teachers Credit Union SATISFAC (stationery for SA workshops).

Due to the need to confirm funds for 2009 and 2010 by end October 2008, i.e. before committing to booking the 2009 PD workshops, PESA is appealing to its readers to consider becoming a two-year funding partner for the 2009-2010 period. If you can support this worthwhile initiative, or can help TESEP gain other sponsorship, please contact Jill Stevens (email jill.stevens@exxonmobil.com or telephone 03 92703907). ■