

Teacher Earth Science Education Programme



Professional Development Workshop Series in Earth and Environmental Sciences

TESEP PRESENTS: Professional Development WORKSHOP 2

PD2: Riding the Climate Roller Coaster

Date: Wednesday 30th August 2017

Time: 9.30am to 4.00pm

Venue: Melbourne Girls' College, Yarra Blvd, Richmond, VIC 3121

Presenter: Philip Sansom – Tasmanian TESEP Coordinator, former teacher and geologist in the coal and petroleum exploration industry. Philip maintains an active interest in all areas of earth science and also presents and develops workshops for TESEP.

Programme:

Riding the Climate Rollercoaster takes participants back over the last 4.6 billion years to find the drivers of climate change throughout geological time. In this workshop participants will learn about and discuss the impact climate fluctuations have had in the past as revealed by the rock record. This PD also examines the additional impact human activity is thought to have and the geological evidence for it. The PD provides guidance on how teachers and students can access raw data to evaluate the results for themselves.

At the completion of this workshop teachers and laboratory technicians will be equipped with background information and resources, including practical activities, to assist them. Aspects of the Victorian Curriculum for years 7-10 and VCE Environmental Science will be addressed.

Links to the Victorian Curriculum:

- Some of Earth's resources are renewable, but others are non-renewable (VCSSU100)
- Water is an important resource that cycles through the environment (VCSSU101)
- Global systems, including the carbon cycle, rely on interactions involving the atmosphere, biosphere, hydrosphere and lithosphere (VCSSU128)
- Scientific knowledge and understanding of the world changes as new evidence becomes available; science knowledge can develop through collaboration and connecting ideas across the disciplines and practice of science (VCSSU089)
- Scientific understanding, including models and theories, is contestable and is refined over time through a process of review by the scientific community (VCSSU114)
- Communicate ideas and processes using evidence to develop explanations of events and phenomena and to identify simple cause-and-effect relationships (VCSIS088)

This professional development session is 1 part of 3. The others include:

PD 7: *Our Place in Space*, 31st August at Melbourne Girls' College, Richmond and Scienceworks, Spotswood

PD 9: *Plate Tectonics*, 1st September at Melbourne Girls' College, Richmond

Teachers will receive all posters, CDs, DVDs etc. free of charge [after paying the \$55 registration fee] BUT only if they attend the PDs. They also receive an ASTA Certificate of Attendance that they can use for proof of PD if needed.

What TESEP offers teachers and laboratory technicians

- Limited CRT is available on request (contact the TESEP coordinator)
- PD hours will be noted on a certificate of attendance issued by ASTA
- run-through the topic, with experiments, demonstrations and activities
- lunch, morning and afternoon tea
- DVD, posters and class exercise material from the PD
- talks with industry geologists and half-day field trips
- two nights accommodation for a three-day combined PD workshops (conditions apply)
- one nights accommodation for a two-day individual PD workshop (conditions apply)
- travel supported by \$100 petrol allowance (conditions apply)
- access to trained presenters and geology professionals
- introduction to and guidance in Earth and Environmental Sciences

A non-refundable* \$55 registration fee applies.

*The fee is transferable to another PD workshop or for another teacher to substitute.

Approval by your school principal, prior to registration is recommended.

Register through: registration@tesep.org.au

Please CC VIC_coord@tesep.org.au for confirmation.

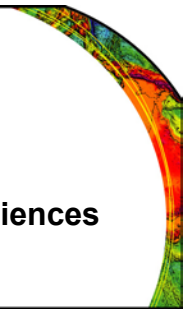
For further details or a copy of the registration form contact TESEP's Victorian coordinator Emily Rochette at VIC_coord@tesep.org.au or 0420 598 272.

See tesep.org.au for topics in this series:

Riding the Climate Roller Coaster
Round and Round with Rocks
Our Place in Space
Fossil Sunlight
Powerful Stuff
Greening Coal
Wet Rocks
Hot Rocks
Plate Tectonics

tesep.org.au
asta.edu.au
pesa.com.au

Workshops are cancelled 5 working days prior if insufficient registrations are received. Late registrations may be accepted if the workshop is running. Always contact us and ask!



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Professional Development Workshop Series in Earth and Environmental Sciences
PD workshop registration form

Workshops run from 9am to 4pm (unless otherwise indicated).

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PLEASE PRINT CLEARLY

Workshop name:	Date:
Venue:	State:

Name:		
School:		
Teaching area:		
Phone (school):	(home):	(mobile):
Email:	Fax:	
Home postal address:		
Special dietary and other requirements:		

Registration Fee: \$55 per day applies for all registrants, except for Casual/Temporary Relief Teachers, Student Teachers, unemployed and under-employed teachers, where a maximum of \$55 for one or two day workshop and associated field day will apply. To claim the discount please tick the box and state your reason for the claim:

Yes I would like to claim the discount because I am

Email or fax form to ASTA (office manager – Michelle Lollback). Send the non-refundable* registration fee (includes GST) to Australian Science Teachers Association (ABN 87 902 882 824)

Payment can be made by direct bank transfer or cheque/money order

Include your name and workshop details with payment (e.g. TESEP PD9 WA July 16 J. Citizen)

*The fee is transferable to another PD workshop or for another teacher to substitute

Fax: 02 6282 9477

Email: officemanager@asta.edu.au

Address: TESEP
 c/o ASTA
 PO Box 334
 Deakin West ACT 2600

Account details: Australian Science Teachers Association (ASTA)
 BSB: 082 902
 Account No: 556 705 700

Please tick if you require an invoice **and provide the correct address for invoicing if different to your home address:**

Please also email a copy of your completed form to TESEP registration: registration@tesep.org.au

A certificate will be issued by ASTA which states the number of PD attendance hours.

For registration inquiries contact registration@tesep.org.au

www.astesep.org.au www.astesa.edu.au

Please Note: Payment of subsidies and issuing of a certificate are conditional on workshop payment.