

# Teacher Earth Science Education Programme



## Professional Development Workshop Series in Earth and Environmental Sciences

### TESEP PRESENTS: Professional Development WORKSHOP 1

#### *PD1: Round and Round with Rocks*

Date: Friday 4th August 2017

Time: 9am – 12.15pm

Venue: Geoscience Australia (Education Centre), Symonston ACT

**Presenter: Philip Sansom** – Tasmanian TESEP Coordinator, retired science teacher and a former geologist in the coal and petroleum exploration industry. Philip maintains an active interest in all areas of earth science and has acknowledged expertise in Tasmanian palaeontology.

#### **Programme:**

*This workshop examines the rock cycle and places it in the context of plate tectonics, geological time and dynamic earth processes, including climate change. Exploration of minerals, ores and mining are put in context.*

*At the completion of this workshop teachers will be equipped with the background information and resources, including some practical activities, to assist them with teaching the requirements of the Australian Curriculum: Science, particularly at the Year 8 and Senior EES levels.*

#### **Links to the Australian Curriculum:**

There are many links, some of which are listed below

#### **Science Curriculum, Science Understanding:**

##### **Earth and space science**

8 – Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales

9 – The theory of plate tectonics explains global patterns of geological activity and continental movement

##### **Senior Earth and Environmental Science**

Unit 1 – Introduction to Earth Systems

#### **Australian Professional Standards for Teachers:**

6.2.2 Participate in learning to update knowledge and practice, targeted to professional needs and school and/or system priorities

7.4.2 Participate in professional and community networks and forums to broaden knowledge and improve practice

#### **FOR ACT Teachers:**

This workshop can be counted towards Teacher Identified hours for TQI accreditation.

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

Registration Fee: \$33 per half day workshop, or \$55 if attending the full day. Those teachers also attending the 3D Visualisation Workshop will receive a lunch voucher.

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

#### **See [tesep.org.au](http://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*

#### **A non-refundable\* registration fee applies: \$33 (half day) or \$55 (full day).**

\*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](mailto:registration@tesep.org.au) or for further details contact the TESEP ACT Coordinator Rebecca Cashmere- [ACT\\_coord@tesep.org.au](mailto:ACT_coord@tesep.org.au)

[tesep.org.au](http://tesep.org.au)  
[asta.edu.au](http://asta.edu.au)  
[pesa.com.au](http://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

### TESEP PRESENTS: 3D VISUALISATIONS WORKSHOP

#### **NEW! –3D Visualisations**

**Date:** Friday 4th August 2017

**Time:** 12.45pm – 4.00pm

**Venue:** Geoscience Australia (Education Centre), Symonston ACT

**Presenter:** **Philip Sansom** – Tasmanian TESEP Coordinator, retired science teacher and a former geologist in the coal and petroleum exploration industry. Philip maintains an active interest in all areas of earth science and has acknowledged expertise in Tasmanian palaeontology.

#### **Programme:**

*3D visualisation is a technology that enables teachers and students to access 3D imagery of geological features. Virtual field trips around Australia and viewing high standard specimens are now possible! Workshop participants will be shown how to view and manipulate the imagery to see outcrops, rocks, mineral and fossils in 3D. Participants will learn how to teach their students the process of collecting data from the imagery and how to label images to demonstrate their geological understanding. Classroom ready worksheets will also be available for participants.*

#### **Links to the Australian Curriculum:**

There are many links, some of which are listed below

#### **Science Curriculum, Science Understanding:**

##### **Earth and space science**

7 – Some of Earth's resources are renewable, but others are non-renewable

8 – Sedimentary, igneous and metamorphic rocks contain minerals and are formed by processes that occur within Earth over a variety of timescales

9 – The theory of plate tectonics explains global patterns of geological activity and continental movement

10 – Global systems, including the carbon cycle, rely on interactions involving the biosphere, lithosphere, hydrosphere and atmosphere

##### **Senior Earth and Environmental Science**

All units

##### **Geography Curriculum:**

8 – Landforms and landscapes

10 – Environmental change and management

##### **Senior Geography:**

All units

##### **Australian Professional Standards for Teachers:**

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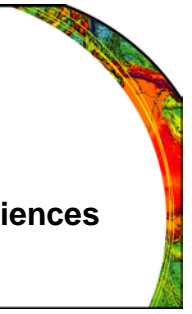
\*The fee is transferable to another PD workshop or for another teacher to substitute.

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

Register through [registration@tesep.org.au](mailto:registration@tesep.org.au) or for further details contact the TESEP ACT Coordinator Rebecca Cashmere– [ACT\\_coord@tesep.org.au](mailto:ACT_coord@tesep.org.au)

[tesep.org.au](http://tesep.org.au)  
[asta.edu.au](http://asta.edu.au)  
[pesa.com.au](http://pesa.com.au)

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# Teacher Earth Science Education Programme

Professional Development Workshop Series in Earth and Environmental Sciences

## PD workshop registration form

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

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!

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](mailto: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](mailto: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](mailto:registration@tesep.org.au)

[www.astesep.org.au](http://www.astesep.org.au) [www.astesa.edu.au](http://www.astesa.edu.au)

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