

Teacher Earth Science Education Programme



Professional Development Workshop Series in Earth and Environmental Sciences

TESEP PRESENTS: Professional Development WORKSHOP 9

PD9: Plate Tectonics

Date: Friday 15th September 2017

Session Time: 9.00am to 4.00pm

Venue: Earth Sciences Building, University of Tasmania – Sandy Bay campus

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:

This PD explains how the theory of Plate Tectonics was developed and how this relatively new paradigm not only explains why the Earth is so dynamic but also how it can be used to reconstruct the past appearance of the planet, predict the most likely locations of mineral and hydrocarbon deposits and explain the distribution patterns of fossil and extant animals and plants.

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 9 level.

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

Biological sciences

10 – The theory of evolution by natural selection explains the diversity of living things and is supported by a range of scientific evidence

Geography Curriculum:

8 – Landforms and landscapes

10 – Environmental change and management

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 relief 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 night 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 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* \$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 or for further details

contact the TESEP TAS Coordinator Philip Sansom –

TAS_coord@tesep.org.au or 0427 391 422

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!