A GIFT from the European Geosciences Union

■ Julie Boyle

The European Geosciences Union is dedicated to the pursuit of excellence in the geosciences and the planetary and space sciences for the benefit of humanity. Every year they run a Geosciences Information for Teachers (GIFT) workshop as part of their General Assembly, with the aim of providing a forum for teachers and researchers to discuss innovative and effective means of educating the future generation of engineers and geoscientists. The event is sponsored by several science organisations, with the intention of allowing teachers to use the new GIFT information and science didactics in their daily teaching and to provide them with inspiration for new ways to teach science to students in their schools.

In 2010, the theme was 'Energy and Sustainable Development' and I was lucky enough to be one of only two British teachers out of the ninety who attended.

The speakers outlined how energy is one of the great challenges for our society and explained the advantages and drawbacks of the various forms. The session began with the classical means of energy production (coal, oil and nuclear energy) and their future evolutions, and moved on to renewable energy sources (wind, solar and geothermal energies) and ideas for teaching renewable energy and sustainable development.

I found it particularly interesting to talk to people from France who had been working on an innovative project called the 'o3e' or the European Educational Observatory for Environment. This programme created a school network in Alpine and Mediterranean areas equipped with environmental sensors. Data on ground motion (seismometers), temperature and precipitation (weather stations) and the flow of rivers (hydrogeology) were recorded in schools and processed by students. The data were then collected on dedicated servers and made available through the Internet to the entire community.

The event was also an amazing opportunity to meet interesting and

committed teachers from around the world. Many are now in the process of exchanging resources with the contacts they made. I myself am about to commence an e-twinning project on science with one of the teachers I met on the course. The free resources I received were highly relevant to the Eco Schools project run within our school.

Education for Sustainable Development (ESD) is commonly accepted as being very valuable in strengthening the capacity of students to make judgements and choices in favour of a safer, healthier and more prosperous world, thereby improving the quality of life in general. Since ESD is the motto of the UN Decade 2005 - 2014, I have already seen plenty of material around this topic. However, I found this course to be particularly helpful and appreciated being shown specific ideas on how to teach it successfully by Dr. Annegret Schwarz from the Ministry of Education in Germany and Dr. Phil Smith (phil.smith@bbsrc.ac.uk) from the Teacher Scientist Network in the UK (see www.tsn.org.uk). All their ideas were both cross curricular in nature and underpinned by sound science.

This year, the organising committee included a poster session so that teachers could deliver presentations of their own work to one another.

To mark the end of the workshop, we visited the United Nations Office for Outer Space Affairs (UNOOSA), which is responsible for developing space science and technology for the benefit of humanity. To help achieve this, they organise training courses and other activities to increase awareness of space benefits and strengthen the capacity of developing countries in space applications in areas such as remote sensing and space law.

I found this course to be very stimulating and felt that the fact that it included scientists, government officials, teachers and business people meant that it set the science in context and enabled



the teachers to illustrate to their pupils how important it is.

My journey home was a bit of an adventure, due to the Eyjafjallajökull volcanic eruption. An ash cloud was looming over Scotland and I was told that my connecting flight to Glasgow was cancelled. I could not help but feel that this was a somewhat ironic twist. It certainly tied in with the geoscience theme and seemed to further stress the importance of science in our daily lives!

To celebrate 200 years since the birth of Charles Darwin and 150 years after the publication of 'The Origin of Species', the 2011 GIFT Workshop will be based on 'Evolution and Biodiversity'. Further details and instructions on how to apply can be found on the EGU webpage at www.egu.eu/home/gift-2011-workshop-evolution-and-biodiversity.html

Useful websites

http://gift.egu.eu
http://egu.eu/media-outreach/giftsymposia.html
www.teachernet.gov.uk/sustainableschools
http://www.metlink.org/weather-climateresources-teachers/key-stages-weatherclimate/key-stage-4-weather/goceworkscheme-2.html

http://www.bgs.ac.uk/schoolseismology/ http://www.ecoschoolsscotland.org/ http://o3e.geoazur.eu/

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