Chapter 15. The Association and the International scene

As early as 1972, Professor T. Neville George demonstrated the importance of comparing the British system of education with that of other countries in his Presidential Address to the ATG, titled *The teaching of geology: International comparisons* (George, 1972). He provided a broad brush survey of much of the developed world and showed that some were worse off than we were in the amount of time and effort devoted to geology in schools, whilst others were devising innovative schemes, involving practical investigations. He stressed that geology was often given its proper place as a science, and not merely as an offshoot of geography which was then very common in British schools. Although it is not an independent state (yet!), I was intrigued to see Professor George’s comment that, “In Scotland there is virtually no school geology – a comment on retarded history – except in the occasional school where the adventurous teacher departs from the limited and incidental geological content of the syllabus in geography and gives time-scale and a dynamic to landscape and its evolution”.

It is perhaps just as well that his Chair was at the University of Glasgow! (In spite of the glories of Scottish geology and the stature of its geologists over the centuries, there remains very little geology in Scottish schools, which will be even less as the ‘Curriculum for Excellence’ takes hold).

The first sign that the international geological community was prepared to pull together to improve the teaching of the Earth sciences across the world came in the same year, when the 24th International Geological Congress included a section on geological education at its Montreal meeting. Rather more contributions related to school level teaching than to the university sector, and both were represented by ATG members Pat Wilson (school level) and Chris Wilson (university level).

Over the years, ATG/ESTA has been represented at a number of overseas conferences, where expertise is shared and ideas brought back to influence developments in the U.K. Prominent among the travellers was, of course, David Thompson, in his role as Education Lecturer at Keele University.

Perhaps the most significant initiative came in 1990 with the formation of the International Union of Geological Sciences (IUGS) Commission on Geoscience Education and Training (COGEOED). This resulted in the first International Conference on Geoscience Education and Training, held at Southampton in 1993 and attended by a number of ESTA members. I remember demonstrating the chocolate box model of mountain building (as seen in the Houses of Parliament!), only to hear a rich Canadian voice from the back row call out, “Oh, boy - the Rocky Mountains in 10 seconds flat!”

Nir Orion (from Israel), David Thompson, Chris King and others met in a small café in Hawaii during the second GeoSciEd conference in 1997 to discuss the development of an international association, from which later emerged the International Geoscience Education Organisation (IGEO), with Chris King as its first Chairman, in 2000. The IGEO has now held five further conferences, at three or four year intervals, in Hawaii, Sydney, Calgary, Bayreuth and Johannesburg, with representatives from ESTA at all of these, contributing lectures, posters and seminars and generally networking with other nations. On several occasions, lessons learned from other countries have been ploughed back into submissions made to our own Government, as they consider modifications to the National Curriculum here.

My own modest contribution has included running Earth Science Education Unit workshops in Spain for the Spanish equivalent of ESTA (acronym

![Figure 1](image-url)
AEPECT) and similar workshops in Chile for the Association of British Schools in Chile.

I was asked to visit the Chilean Ministry of Education to tell them about the English National Curriculum and to encourage them to carry out more practical work in their schools. I have no Spanish, so conversations were carried out through an interpreter. Costs were met by the hosts, although I did pop over to the Falkland Islands at my own expense for a week’s holiday and had an interview with the Director of Education in Stanley about promoting Earth science in this potentially oil-rich country!

I also presented a twenty minute seminar at a conference of the Earth System Science Educational Association in Charleston, South Carolina, again at the expense of the host. Less successful was my attendance at GeoSciEd III at the University of New South Wales in 2000, where several ESTA members were generously assisted by the Dennis Curry Charitable Trust. I had acquired a violent bug on the way down and spent five days in an unhygienic student room at the university before being routed home early, half a stone lighter!

However, in contrast to my own efforts, the contacts made by the well-travelled David Thompson and Chris King and other ESTA members over the years have proved most fruitful. Among other countries, good relationships have been made with the geoscience education community in Argentina, Australia, Bangladesh, Brazil, Botswana, Canada, Chile, China, Germany, Israel, Italy, Japan, Korea, New Zealand, Nigeria, Norway, the Philippines, Portugal, South Africa, Spain, Taiwan, Thailand, USA.

**Earth Learning Idea (ELI)**

Coinciding with some of these international developments, UNESCO announced that the year 2008 (with bits of 2007 and 2009 thrown in!) would be the International Year of Planet Earth. Chris King put forward a bid for funding to provide hands-on workshops for teachers and student teachers in three countries where he felt there was a need and which would be receptive, namely the Philippines, South Africa and Trinidad. It soon became apparent that the anticipated funds were not to be made available, but having laid plans, Chris then turned to another idea, which in the event has had far reaching consequences. He invited Elizabeth Devon and myself to join him in developing a wide range of Earth science activities, targeted initially at developing countries. Aware of the rarity of computers in such schools, the activities were (and are) aimed primarily at institutions of teacher education and at consortia of teachers where access to a computer might be expected. Most activities were to be covered in one side of A4, with back-up material occupying another side. Elizabeth, with the help of family members, set up an initial wiki and blog site, which soon became a full website, kindly hosted by the Geophysics Department at Keele University. ([www.earthlearningidea.com](http://www.earthlearningidea.com))

At first, we posted one activity per month, but as the demand grew, in 2008, we racked up the rate to one activity per week. This proved difficult to sustain, and the production rate has now settled down to one activity per fortnight.

Although aimed at the developing world, we were surprised to find that the greatest uptake was in the UK and North America, so we have written many activities which refer to some of the more likely schemes of work in those areas, and which may require rather more equipment than the simple empty drinks bottles and piles of sand that we envisaged would be available almost anywhere. Many of the activities are based on existing ideas, rewritten in the ELI format, and we owe a lot to the Earth Science Education Unit for permission to rework some of its material and to ESTA members for suggestions or for articles in back numbers of *Teaching Earth Sciences*.

To keep us on the straight and narrow, we are assisted by willing academics, who somehow manage to find the time to check the accuracy of our work and to make constructive comments for improvement.

All this is entirely voluntary and we were surprised to find how much could be done at very little cost (we have no funds), from three people’s spare bedrooms!
The uptake of Earthlearningidea has been quite astounding. At the time of writing, (Autumn 2014), downloads (not just ‘hits’) across the world are running at the rate of 45000 per month and there is regular feedback via the blog regarding the use of the activities. Since we started counting, in November 2008, up to 30th September 2014 there have been over one and a half million downloads of the activities have been made, potentially influencing the education of several million children worldwide. Personal contact made through the International Geoscience Education Organisation has resulted in volunteers from other countries translating the activities into their own languages, which now stand at nine languages in addition to the English in which Chris, Elizabeth and I write the originals. Translations into Polish and Japanese will shortly be added.

Much fuller descriptions of the development of ELI are given in the School Science Review of December 2012 (Kennett, 2012), and in the Journal of Geoscience Education (King, et al, 2013).