

My Earth science educator story – Peter Kennett What I did, why I did it and what happened



PK in 2012. (Hugh Carson).



Fieldwork in Arctic Norway
–“Aah, my back!” 1958.

An inspirational teacher

How many of us owe our careers in Earth Science to an inspirational, if not eccentric teacher? In my own case, I had no idea what path to follow after leaving school in Croydon, England, until the opportunity to study for Advanced Level Geology was offered, taught by Bob Jones. Of the eight lucky students, six of us found satisfying careers in the geological sciences. I investigated a career in teaching by quizzing a practising teacher, but wished to see more of the world first.

Emerging starry-eyed from the film *Scott of the Antarctic*, aged nine, had led to an interest in the polar regions, later put into practice by my undergraduate mapping project in the mountains of Arctic Norway. In spite of abysmal careers guidance at school, I was accepted by University College London for a BSc course in Geology, followed by a year's MSc course in Applied Geophysics at the University of Durham.

Dr. (later Professor) Martin Bott was horrified to find that all three of his students had failed A Level Maths and set about providing remedial lessons!

First job

I was appointed to my dream post as geophysicist with the British Antarctic Survey (then called the Falkland Islands Dependencies Survey), carrying out marine magnetic and seismic surveys and landing with the gravity meter on many isolated lumps of rock in and around the Antarctic Peninsula. This was followed by a year ashore, based at Stonington Island, and surveying the Larsen Ice Shelf by dog sledge. Unsuspected by us at the time, our gravity survey has provided baseline data, on which to judge the extent of global warming, as the ice shelves thin and drift away.



Geophysics by dog sledge, Larsen Ice Shelf, 1964.

Teaching

Having arguably added to the sum total of human knowledge in a small way, I felt no inclination to remain a number cruncher and so followed up my initial calling towards teaching, by taking the PGCE course at Birmingham University. No geology course was available, so I focused on geography, with a science side-line. My first post was as teacher of geography and geology at Ashby-de-la-Zouch Boys Grammar School (no, it's not in France, but in Leicestershire), becoming Head of Department after one year. I moved to Sheffield in 1970, in order to teach geology to Advanced Level, which was not possible at Ashby. I later became Deputy Head of Post-16 education, with shared responsibility for students' applications for university.

The Earth Science Teachers' Association (ESTA)

Thanks to some undercover soliciting, I became a founder member of ESTA (then known as the Association of Teachers of Geology) in 1967, and soon learnt the immense value of shared experience,

especially as an isolated teacher of a minority subject. Attendance at the annual courses, and extramural field trips led by David Thompson at Keele, greatly enhanced my subject knowledge and teaching skills. I served for several terms on Council, and was responsible, with Chris King, for writing and editing the *Science of the Earth* series in the late 1980s, trying to provide authentic materials for teachers faced with the emerging National Curriculum in England and Wales. Having become involved with voluntary in-service training, I was let out of school in time to attend the first international conference on geoscience education in 1993, in exotic Southampton.

Overseas conferences

Sadly, I wasn't let out to go to the next meeting in Hawaii, but, having by then retired, I did make it to Australia in 2000. I travelled out via Nepal to stay with a fellow church member for a while, but I caught some horrible Nepali bug and spent the conference in stifling student accommodation in Sydney, kept alive by oranges brought by ESTA delegates! I have, however, been able to represent the Earth Science Education Unit by leading workshops for teachers at conferences in Spain, for the Association of British Schools in Chile and for a conference of the Earth Systems Science Educational Association in Charleston, South Carolina, given just 20 minutes as guest speaker!

Earth Science Education Unit (ESEU)

As I was about to retire, Chris King asked me how I intended to spend my twilight years – he had a bright idea up his sleeve, resulting in the pilot creation of the ESEU. The project soon developed into a nationwide team of experienced Earth Science educators, funded by Oil and Gas UK and ably supported by Annette Thomas.

Voluntary activities

Like many retired people, we wonder how we ever found time to work. It seems a shame not to use the skills and experience of a lifetime, especially in a "shortage"

subject. For me, this means leading investigations into weathering and stone types in churchyards for primary age children (many of whom then declare that they wish to become geologists – at least until the next visitor is an astronomer!); leading walkabouts on building stones, and the geology of the rural edge of Sheffield for the general public; teaching groups of all ages, including teacher trainees, at the Duke of Devonshire's 18th Century former copper mine at Ecton in the Peak District; helping to compile a database of geological sites in South Yorkshire, and trying to persuade the local Councils of the importance of what lies beneath their feet, before they allow it all to be built on.



Supervising engineering geology investigations at Ecton, 2015. (Hugh Rollinson).

Undoubtedly, one of the most time-consuming, yet rewarding, projects of the last seven years is being able to contribute to the website:

www.earthlearningidea.com. Another of Chris King's inspirational ideas, this involves Chris, Elizabeth Devon and myself in writing and co-editing an Earth Science activity per fortnight, which Elizabeth publishes on the internet on our behalf. Thanks to the enthusiasm of volunteers in other countries, we can now boast (and we do!), well over two million downloads of the activities, across the world, many translated into ten other languages. Not bad for three people working from their spare bedrooms, who otherwise would have been digging on the allotment!

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