

My Earth science educator story – Gordon Neighbour What I did, why I did it and what happened



Gordon Neighbour – first year of teaching at TGGS. (*Andrew Walker (TGGS)*).

Beginnings...

I cannot really put a start date on when I first became enthused about Geology – I am sure it stemmed from my wonderful parents and a grandmother who believed in taking me outdoors as much as possible. I was forever loading them up with interesting stones and rocks that we picked up on walks on Dartmoor, on the beach at Dawlish and during our holidays in the New Forest.

I do know that the belief that I was able to study to a high level was through the confidence instilled in me by a fantastic chemistry teacher during my early secondary years, by the name of John Winfield. Suffice to say that I was not a model student at school, lacking the focus and ambition that has come to be a hallmark in later life. I left school with some mediocre grades and drifted between jobs, finally obtaining a job as a technician at my old school. Within a few weeks, John was encouraging me to “fulfil my potential” which I was able to do via the Open University.

Studying again

I started studying with the Open University in 1991, not sure whether to pursue chemistry or geography, as I had enjoyed both of these subjects when at school. Then at the first of the summer schools, I attended a truly inspirational lecture, delivered by Hazel Rymer, who caused a change in direction – it was to be Geology! I spent the next seven years holding down a job and pursuing a degree in Geology. During this time, I joined the Open University Geological Society and eventually took on the role of Branch Organiser for the South West Branch (<http://ougs.org>). On completing my degree, I was fortunate enough to be offered a Graduate Teacher Programme placement at the school.

Starting to teach Geology

I enjoyed the start to my teaching career, but was keen to teach the subject that I had a real passion for. I approached my then head teacher, Isobel Bryce and asked if I could start offering Geology as a subject. I do not think she ever imagined that her simple reply of, “... if you are able to raise the money, then yes...” would have the impact that it did. I approached English Nature and through an application to the “Aggregate Levy Sustainability Fund” I was able to gain the funding to set up a geology department and to set up a “geological garden and sensory pathway” at the school. This was important to me as we had the “Trematon Unit” at the school, dealing with students with moderate to severe learning difficulties and I was keen that they should be able to access the geology.

This simple project was the main starting point for me into the world of geoscience education. In 2006, I was able to show off the work at the international GeoSciEd V conference in Bayreuth, Germany, where I was able to deliver a presentation about the project.



Finally there! Students making use of the Geological Garden and Sensory Pathway at Saltash.net Community School. (*David Garland*).

I followed this up with another project with English Heritage and Aggregate Industries, working at Moorcroft Quarry in Plymouth, combining archaeology and geology together as we worked with some students from local primary schools to look at the impact of quarrying on the archaeology of sites. I was able to follow this up with an outreach project “The Cornubian Dinosaur Project” working with local primary schools to teach a variety of science and mathematical topics using fossils (and specifically dinosaurs)!



Outreach work at Sir Robert Geffery School in Landrake as part of the Cornubian Dinosaur Project. (*Gordon Neighbour*).

Moving on... ..with a little help from my friends

I had become a member of the Earth Science Teachers Association and have really benefitted from the help and support I have received – so much so that I have

been the conference liaison officer for the last five years.

I then took a promotion to head of ICT at Torquay Girls’ Grammar School (TGGS) and was still able to pursue my interests in geoscience education. My first foray was a project with the local quarries and the local primary schools, called “The Rocks Around Us” which allowed students to study geology through the rocks in the local built environment.

This involved students from the school preparing materials and working with primary school teachers to help to deliver the materials for the project.



Students take part in a quarry visit preparing for the “Rocks Around Us” project. (*Gordon Neighbour*).

The next stages

So where am I now? Still working enthusiastically with the Earth Science Teachers Association, serving on the Education Committee of the Geological Society of London and a member of the Panel of Experts on Education for the European Federation of Geologists.

Recently I have just completed an EU funded Erasmus+ project working with schools in the UK, France and Italy, developing a cheap, portable seismometer utilising Raspberry Pi computers.

In addition, I have recently started up a GCSE Geology course at Torquay Girls’ Grammar School, which is in its first year. The subject is taught in twilight sessions

and there are 20 very enthusiastic young ladies giving up 1½ hours each week after school to pursue their interest in the subject.



TGGS field trip to Widemouth Bay, North Cornwall – something must have made sense!
(Gordon Neighbour).

I have been able to set-up challenge days in the school where the focus has been on geology and I have been able to take students on a number of different visits including fieldwork in North Cornwall and a visit to the Holman's Test Mine at the Camborne School of Mines. This has allowed students who are not studying the course, to find out how geoscience impacts on their daily lives.

And what of the future? Well at the moment I am working with a team of students so that there is a UK representative at the International Earth Science Olympiad in Nice and Valbonne in France during August, 2017.



TGGS students take part in a several initiatives – the entrants for the 2015 Geological Society Schools Geology Competition at Plymouth University. (Gordon Neighbour).



TGGS students at the Holman's Test Mine – Camborne School of Mines. (Gordon Neighbour).

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