

My Earth science educator story – Elizabeth Devon What I did, why I did it and what happened



Elizabeth Devon. (*Martin Devon*).

Despite pressure at school to study the biological sciences, I enjoyed physical geography; topics like continental drift, the origin of rocks and the evolution of landscapes - and I had an inspirational teacher. Studying geology did not occur to me until I took it as an ancillary subject to geography at University (King's College, London). Thoroughly enjoying it, and winning the Sambrooke Exhibition in geology, confirmed that this was the subject for me and I have never regretted that decision.

After my degree, I became a teacher and have taught for more years than I care to remember, part-time and full-time in local secondary schools, technical colleges and finally at the University of Bath. I was able to introduce geology into the curriculum in two secondary schools and it was wonderful to be able to enthuse youngsters in a subject I feel so passionate about. I love the way the subject easily incorporates aspects of chemistry, physics, biology and geography and it certainly puts man's place in the world into perspective. It really is a fundamental science which everyone should understand. Can you think of anything that does not ultimately come from the Earth?

Over the years, I have led many field trips including amazing visits to places of geological interest in this country and overseas.



Fumerole, Iceland, 1991. (*Martin Devon*).

During this time as well as being a Fellow of The Geological Society and member of the Geologists' Association, I also became very involved with the Bath Geological Society for which I joined the committee, became secretary and later chairman. I was pleased to be awarded the Geologists' Association Halstead Medal in 2010 for work done with this Society. I also became chairman of the Wiltshire Geology Group and this involved some conservation work of geological sites in need of protection and recording. For many years I have enjoyed the annual conferences of the Earth Science Teachers' Association and was a member of the secondary committee.



Clearance of site of Forest Marble, 2004.
(Member of Wiltshire Geology Group).

When retirement was a few years away, while I was teaching in a secondary school, I encouraged senior management to appoint another geologist to the science staff so geology would not be lost when I left. They did this and the plan was successful but I had forgotten that the new teacher would want to teach some of my geology lessons and that would leave gaps in my timetable. I was asked to teach some biology and some ICT (Information and Communication Technology). After a short time, unforeseen circumstances meant that I was appointed Head of ICT, as well as being Head of Geology, and now I was asked to teach ICT at GCSE level. Little did I know that all the time I spent teaching myself to write HTML would be useful later when writing and maintaining websites, one of which is Earthlearningidea!

Within a week of retiring from the school, I was asked to become the part-time Earth Science tutor for the PGCE department at the University of Bath. With Chris King's substantial help and support, I took this on and thoroughly enjoyed the next 10 years.

Just before I finished at school, I joined the Earth Science Education Unit's facilitator team and have been running both secondary, and later primary, workshops ever since. I really enjoy these, especially as new teachers are so grateful to receive such good, free resources. The young people are great fun particularly when they are trying out messy activities. I am very sad that the Unit closed in December 2015 and really hope it can be reincarnated soon. I have made many very good friends through ESEU meetings; it is enriching to be with like-minded people - people who also spend their time talking about rock exposures and the latest plate tectonic activity.

In 2007, Chris King had a good idea and asked Peter Kennett and myself if we would agree to help develop it. We were delighted to do so and from this the Earthlearningidea initiative was born. We were committed to a year of writing and publishing a simple Earth science activity

every week. The original aim was to write hands-on, innovative activities for the developing world and all equipment was kept to a minimum. Well, I think most of you reading this will know what happened. We are still writing activities and publishing one every two weeks. We have introduced both ELI+ and ELI Early years and more than 50,000 activities are being downloaded each month.

I give geological talks for many local societies and lead a variety of field trips, mostly within the local area, for both adults and children. I also help with Science weeks and Science days in local museums and lead trips for Rockwatch (Geologists' Association). As well as running the Earthlearningidea website and blog, I also started the Geology in the West Country blog, became webmaster for Bath Geological Society and wrote a website for a local middle Jurassic site of importance; Brown's Folly Geological trail.



Fossil hunting at Tedbury Camp, Somerset.
(Rebecca Yeo).

Because I care a great deal about the quality of science teaching in this country, I was asked to join the Oxford Sparks Teachers' panel in 2011. The activities are used to enrich teachers' lessons and are based on the research work being carried out at the University of Oxford. I am pleased to say that Earth science has equal status with physics, chemistry and biology.

Box Rock Circus was built in 2012. I thought it would be wonderful to somehow

obtain some large blocks of rock and put them somewhere in the village where everyone could enjoy them. The idea 'snowballed' and once I had agreement and enthusiasm from the Parish Council and all the local village groups, I started fund-raising and developing the idea. All local rock types, some fossils and minerals are displayed plus plate tectonic movement, the evolution of life (round the edge of the circle) and even some dinosaur footprints to tell a story and work out height and gait of the animals. Please visit if you can.



Official opening of Box Rock Circus, May 2012, with Prof. Iain Stewart. (Bob Mustow).

My most recent new activity has been setting Earthcaches, an idea initiated by Gary Lewis, whose Earth Science Educator Story was published on 14th January 2016. These are similar to geocaches but instead of having to find something, people are asked to find the location and then answer some questions about what they can see; it can be anything from a rock exposure to a view. I have set eleven so far, including one at the Rock Circus. It is great fun reading the answers and comments from people who have located them, especially as most are non-geologists and are invariably amazed by what they have discovered.

Our Earth is one of billions of planets orbiting stars in the visible Universe. If you imagine a star as a fine grain of sand, you would need a box of sand a mile long, a mile high and a mile wide, just for the stars. There are many, many more planets of which we are one. Until we can colonise another one, we must look after the one we have got. To do that properly we need to understand it and that is why I do what I do!

Elizabeth Devon, aged 71, Box, Wiltshire, England, elizabeth@earthlearningidea.com

References:

- Earthlearningidea - <http://www.eathlearningidea.com>
- Box Rock Circus - <http://boxrockcircus.org.uk>
- Brown's Folly Geological Trail - <http://www.brownsfolly.org.uk>
- Geology in the West Country blog - <http://geologywestcountry.blogspot.com>
- Oxford Sparks - <http://www.oxfordsparks.ox.ac.uk>
- Rockwatch - <http://www.rockwatch.org.uk>