## My Earth science educator story – Isabel Markham What I did, why I did it and what happened



### Why I did it

It all began because my home was on an outcrop of Jurassic Portland limestone and I could cycle around the quarries and collect large ammonites together with casts and moulds of molluscs. This was followed by holidays on the beach in Cornwall where we searched for pebbles of mineral ores. Later walking over a dolerite and waiting for buses by a wall of Silurian limestone full of Rhynconellid brachiopod shells meant I was conscious of my geological environment.

All this was separate from schoolwork until a chance remark by a teacher made me aware of Geology as a subject which could be studied seriously. She casually remarked, "Geologists tell us that some amoeba-like creatures secreted calcareous shells which were laid down to form chalk" – and this comment fired my interest.

#### University

In 1946 I chose to study geology at the University of Reading, where we were inspired by the lectures of Professor H.L. Hawkins. These were often more poetry than science, for example, the processes of coastal erosion were described by his experience of a violent storm on the small islands of Skomer and Skokholm off the Pembrokeshire coast. During our final year, Frank Hodson introduced a more scientific approach and gave us photocopied pages from journals so that we were aware of the research into plate tectonics.

#### Why teaching?

It was difficult in the immediate post-war years for school leavers to enter Universities, as many entrants were leaving the Armed Forces, but some places were allocated for those who intended to teach, and were given generous grants to do so. So, I entered the Education Department in Reading and left with a certificate to teach and a diploma in education, although neither of these gave me any help in teaching geology to school children.

I was offered a post in a grammar school to teach sciences generally but mainly to assist with a sixth form programme of local studies, including the geology of the area. Schools with geology as an examination subject were few and far between so I accepted the post, but within a year I was allowed to start teaching A-level geology (to 16-18 year olds).

After I returned to teaching after having children, there was a time with no geology teaching, but again fortune smiled on me. I began a new role as Deputy Head in a small school which was to enlarge and become fully comprehensive. The Science department was fully staffed and so I was given a small laboratory and a generous grant to start A and O level geology courses (to 16-18 and 14-16 year olds). At this stage I discovered the Earth Science Teachers' Association and our local ESTA group received much help from the Sir John Cass College in S.E. London.

After almost 20 years, during which I acted as teacher moderator for one of the examination boards and later moderated the fieldwork books and tried my hand at writing examination questions, I retired and began one of the most enjoyable teaching experiences of my career.

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# Geology with the University of the Third Age (U3A)

I started leading geology groups for the University of the Third Age (see http://www.u3a.org.uk/) which focusses on the retired and semi-retired. I soon became the subject advisor for groups who wanted advice about geology.

Now it was possible to really enjoy teaching with no curriculum, no boxes to tick and students with time to read around the subject and able to spend time on field trips. We regularly visited the Yorkshire Dales Field Centre in Giggleswick, where we tried simple mapping exercises and investigations of the till as well as studying the normal limestone features. I organised three day courses at the Summer Schools held in Universities around the country. Further afield, we went to Malta and Jersey and whilst on a visit to New Zealand organised by the Natural History Museum (in London:

http://www.u3a.org.uk/), I spent an evening with the Auckland U3A group discussing the geology groups in the UK.



Researching a trail for bus pass geology.

I cannot think of a more delightful conclusion to a career as an educator.

Isabel Markham, aged 87, Eltham, London, UK, January 2016.

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