

OUR EARTH

The wheels on the GeoBus

Jen Brooke and Amy Edgington



Geology is gradually being withdrawn from the school curriculum in the UK, and risks losing its identity as a distinct subject. GeoBus provides workshops and support for Earth science education, inspiring teachers and pupils to engage with fundamental questions in geology.

In recent years, geology has seen a substantial downturn in the number of students enrolled in the subject at school in the UK: Higher Geology was discontinued from the Scottish curriculum in 2012, and in England and Wales, the number of schools offering GCSE or A-level Geology has declined. While some aspects of geology would still be taught in geography and other sciences, we had concerns that the essence of geology as a discipline, and therefore as a viable and appealing career pathway, would be lost. Thus, [GeoBus](#) was developed to support education of Earth sciences in the UK, launching initially at the University of St Andrews in 2012, and later adopted by University College London in 2016.

The aim of GeoBus is to deliver free interactive workshops to primary-level and secondary-level students on topics from climate change to natural hazards and fossils, integrating different elements of geology with the existing curriculum. Workshops — delivered

by full-time and experienced staff familiar with the school environment — are designed to fit into a standard school lesson, and feature practical exercises to engage and educate the students. GeoBus St Andrews has also run four successful 'Field Camp' summer programmes for senior pupils looking to further their knowledge of geology and gain fieldwork experience.

Hands-on workshops are complemented by educational resources that teachers can use following visits, encouraging continued interest in the geosciences, and thereby inspiring students to pursue geology at university and beyond. GeoBus also has links with teaching organizations (for example, the [Earth Science Teachers Association](#)), which provide training opportunities for teachers, and also ensures taught materials are as relevant and up-to-date as possible.

The outreach programme has been resoundingly successful. In total, GeoBus has taught

and exposed more than 75,000 students to geoscience topics, with positive feedback contributing to an excellent reputation. While it is difficult to quantify the progression of pupils involved in GeoBus activities to a geo-related destination, anecdotal evidence (including self-declared levels of student interest) suggests that taking part in workshops increased awareness of, and enthusiasm for, geology as a discipline. Moreover, many students who took part in the St Andrews field camps went on to study a related subject at University.

While the GeoBus model is not easily replicable, many of the project successes are applicable to other forms of educational outreach. Emphasis needs to be on working with schools to determine what is most valuable to them, ensuring that teachers can justify the time away from 'normal' lessons and that follow-up materials are made available to help demonstrate the wider scope of geology as a subject. Activities and lesson plans need to be designed to focus on engaging young people by using relevant topics and relatable examples — demonstrating that geology is much more than just rocks. With geology enrolment declining at school and university level, these engagement and outreach efforts are more important than ever.

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Competing interests

The authors declare no competing interests.

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Earth Science Teachers Association: <https://earthscience.org.uk/>



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