

GeoBus: River in a box

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This outreach grant provided funds to support the purchase of an EMRiver flume tank, to be used to deliver geomorphology workshops to schools in the greater London area as part of the GeoBus project (<https://www.geobus.org.uk/>). The EMRiver flume is a fully functioning portable flume which allows the modelling of a range of fluvial processes including meander formation and cutoff, delta progradation and knickpoint retreat.

This type of flume is an incredibly valuable resource for teaching students at a range of different levels, with a primary school workshop linked with the Key Stage 2 curriculum which uses the flume to teach basic elements of rivers, the water cycle, land use and map skills. And a secondary workshop targeted at Key Stages 3 and 4 which makes use of the flume tank to teach how human and physical processes interact to influence and change landscapes and how human activity relies on the effective functioning of natural systems.

An example of the impact that this type of outreach resource has had comes from the flume tank's use at a number of science festivals across the UK, most notably at the 2018 Cheltenham Science Festival, where it was installed for a week and used to engage primary and secondary school groups, adults and families. Over the course of the week, we engaged with over 2000 people, raising the profile of geomorphology and the society within communities which may not otherwise have been engaged in the geosciences.

Without the financial support of the society, this work, and the level of engagement we achieved would not have been possible. In supporting the purchase of this equipment, the BSG has created a sustained legacy, where the flume tank is still being used in the GeoBus project to engage and inspire both in schools and at public events, and will continue to do so for many years to come.



Figure 1: The GeoBus team at the Cheltenham Science Festival in 2018