Rock Around the University - transplanted rock exposures for on-campus geoscience field skills training

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Rock Around the University (RAU) is a teaching resource made up of 16 large (~2.5m) blocks of “local” Scottish rock which have been transplanted and orientated into carefully planned locations and elevations between the buildings of the University of Glasgow to look like natural exposures. RAU mimics a real-life fieldwork experience, on-campus, with the aim of enhancing the learning experience of undergraduate geoscience students.

RAU allows progressive, reflective, and effective on-campus outdoor training of a wide-range of geological field skills and concepts, including: the description, analysis and measurements of rock features and structures; geological mapping; the use of structure contours to predict geological boundaries in terrains lacking abundant exposures; construction of cross-sections; and, the interpretation and reconstruction of 3D structure and geological history. Students visit the RAU exposures both during timetabled supervised ‘lab’ sessions and in their own time, providing an authentic fieldwork experience in a controlled location where key geological skills can be developed at the optimal rate for individual students. Being located on the campus means that there are no travel or expenses for students, fewer timetabling issues, and fewer general logistical complications and natural complexities than in remote fieldwork locations. In addition, students benefit from receiving ‘instant’ on-site feedback from staff on the challenges, problems and pedagogic issues that they encounter.

RAU allows us to introduce rigorous field-based teaching at an early stage in geoscience courses and to stimulate and encourage reflective learning. Students locate, analyse and synthesise information in the field to provide effective solutions to problems and use RAU as a self-directed learning experience where they build confidence while working independently in a familiar environment. Hence the students reinforce their field skills before experiencing independent work in remote areas. In effect RAU uses the campus as a sustainable geoscience teaching resource.

Experiences with all levels of undergraduate students over the eight years since RAU was established at the University of Glasgow have demonstrated that this on-campus resource is an ideal complement to the traditional programme of fieldwork classes. Students are much better prepared for their first major residential fieldwork having completed the RAU programme, and are much more confident in their field skills. RAU has allowed us to address more effectively the disconnect between laboratory and fieldwork skills, and remote fieldwork classes are now more
focussed on the application, rather than the development, of field skills. RAU has also had the effect of enhancing the awareness of geoscience among the entire University community, due to the presence of students carrying out fieldwork on campus.

Rock around the University is also used in recruitment and outreach, and is open to schools, amateur geoscientists, and anyone interested in Earth history. Printed leaflets are available and more information is available at https://www.gla.ac.uk/schools/ges/community/rockaround/.