



## **Design, Development and Evaluation of VirtualAlps 1.0 and 2.0: Virtual Field Guides for teaching Levels 5 and 6 Geoscience at Liverpool John Moores University, UK**

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Virtual Field Guides (VFGs) developed at Liverpool John Moores University (LJMU) have been used in teaching geosciences for around ten years. This paper briefly reviews: VirtualAlps 1.0 developed for level 5 undergraduates; and then focuses on VirtualALps 2.0, a new semantic web based VFG for level 6 teaching, developed in a partnership between an academic and a technical team as part of the Ensemble project. In VirtualAlps 2.0 students use faceted browsing tools to make selections of resources, as a result of which relationships between them are highlighted, but not explicitly labelled. The range of sources of information - some from the tutor's own research archive, some sourced from elsewhere on the internet – are used by students to prepare a report on the feasibility and environmental impact of a proposed hydroelectric power dam in a Swiss Alpine valley. This requires students to analyse visual and numeric data alongside secondary literature, but also to be aware of the underlying concepts which form the associations between the different resources. This tool is designed for students to have their first taste of preparing an 'authentic' report, and the ways in which the semantic technologies can support professional practice in geoscience subjects will be discussed.