



Peer Assisted Experiential Learning (PAEL) in extending fieldwork practice in the Earth Sciences

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Traditional approaches to developing students practical (applied) skills (most especially, but not exclusively, fieldwork) make significant demands on resources, particularly staff time. Extending opportunities for experiential learning through independent (student centred) work is acknowledged, therefore, as being vital to the successful spiralling of Kolb's experiential learning cycle. This project outlines e-learning support as a means of assisting student peer groups in extending the experiential learning cycle for fieldwork.

We have developed mobile support for independent fieldwork in a small, accessible and safe area north of Kingsand village, Cornwall, UK. The area is ideal for reinforcing skills in recording basic geological observations and in formulating a simple geological history based on these observations. Independent fieldwork can be undertaken throughout the academic year by small student groups (which can comprise mixed year groups). equipped with PDA's and integrated GPS units. Students are prepared for fieldwork through a dedicated website, linked to support materials in the University's unique Labplus facility. PDA's, running MSCAPE, provide automatic prompts to locations where key observations can be made and detail the nature of the activities that should be carried out at each location. The e-guide takes students from 1st principles of observation and measurement, through recording methodology and eventually links to packages for analysis and interpretation (again using support provided through Labplus). There is no limit to the number of times any particular student can carry out the fieldwork, provided they are organised into groups of three or more. The work is not assessed but links into several components of the field skills training that are formally assessed, including independent geological mapping.