USING A VIRTUAL FIELD TRIP TO TEACH QUANTITATIVE METHODS TO FIRST-YEAR BIOLOGY STUDENTS

Gerry Rayner & Gordon Sanson
School of Biological Sciences
Monash University, Australia
gerry.rayner@sci.monash.edu.au
gordon.sanson@sci.monash.edu.au

Abstract
A computer-simulated learning module has been developed for the teaching of experimental design, the sampling of populations of organisms, and data analysis and presentation, concepts that students from both science and non-science backgrounds often find difficult. Furthermore, traditional pedagogical methods for these concepts are often logistically difficult and therefore expensive, or restrictive, uninteresting and irrelevant to students. This interactive module incorporates text, video, audio, graphics and shockwave multimedia to simulate experimental design and sampling, and is coupled to Excel for data analysis and graphical presentation of derived parameters. The project was funded by a SIF grant, and has been successfully implemented in two First Year Biology units in the School of Biological Sciences, Monash University.