National award for innovative teaching solutions in science

Dr Noel Meyers and his team from Queensland University of Technology have won the 2002 Pearson Education UniServe Science Teaching Award for their innovative learning environment that motivates and challenges students. The team consisted of Dr Meyers, Dr Bernard Cooke, Dr Duncan Nulty and Dr John Rigby.

The learning environment centred on a fictitious tropical island around which students engaged with web-based learning resources, lectures, practical activities and paper-based resources (such as study guides and handouts). The structure and sequencing of these varied resources required students to engage with, and think critically about all of the materials and exercises they had to complete. The team designed the unit to mimic the problem solving skills required of our future scientists. The alignment between curriculum design, learning processes and learning outcomes was what made the approach highly successful. The judges recognized that this aspect alone represented an innovation in science teaching. However, the use of a fictitious case study to help with the manipulation of student’s learning strategies was what really enriched the student’s enjoyment of the tasks and their learning experiences. Using the island case study allowed the team to create an environment with a whole range of plant, animal and geological features that do not co-exist in the real world. This provided a single case study, free from distracting peripheral details, which could be used to illustrate interactions between the components. The students found the island totally realistic, were highly motivated and approached the related activities and assessments with enthusiasm. This highly successful project is an example of how online resources, together with a carefully designed curriculum can, and do, provide a stimulating learning environment and produce high-quality student learning outcomes.

The project will be the subject of a keynote presentation at the UniServe Science annual national symposium to be held at The University of Sydney on 3rd October 2003.
About the Award

The Award is a joint initiative of UniServe Science and Pearson Education Australia. The Award is designed to recognise and reward those who make an outstanding contribution to student learning outcomes through the innovative and integrated use of information and communication technologies in university science teaching. UniServe Science is the national clearinghouse for information about the use of technology in science teaching and learning. UniServe Science is sponsored by The University of Sydney.

Pearson Education Australia is Australia’s leading educational publisher and supports UniServe Science’s aim to promote the use of technology in science teaching and learning.

About the Judges

This well-regarded award attracted judges such as Professor Shirley Alexander, Director of the Institute of Interactive Media and Learning, University of Technology Sydney, and Professor Richard Gunstone from the Faculty of Education, Monash University. Professor Gunstone is one of Australia’s leading researchers in the field of science education. The panel was chaired by Associate Professor Robert Hewitt from UniServe Science and the School of Physics, The University of Sydney.

For more information regarding this award please contact:

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For information about the Pearson Education UniServe Science Teaching Award, use of technology in science teaching. http://science.uniserve.edu.au

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