

# The Use of the Web in University Science Teaching in Australia

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In Australia, as yet only a small number of academics have got past the initial stage of simply putting up lecture notes and class handouts on a web page, and of those who have done more, it is useful to classify the uses of the web in mainline university teaching into six categories.

## The teacher as client

Many web sites which are specifically designed to be a repository of information about, and sometimes suppliers of, teaching materials. These are designed to be consulted by *teachers*, not students. UniServe Science's web site is an example of these (<http://science.uniserve.edu.au/>).

## The student as client: Informal use

The simplest thing that many academics do when they first discover the web, is to "put up" their lecture notes, *PowerPoint* slides and course handouts for students to consult if they want to. In time these can develop into very rich collections of teaching materials. See for example the "Virtual Resources Room" for first year students, run by Biological Sciences at The University of Sydney ([http://fybio.bio.usyd.edu.au/sobsfyb/fyb\\_StuRes.html](http://fybio.bio.usyd.edu.au/sobsfyb/fyb_StuRes.html)).

## The student as client: Formal teaching via the web: (1) Delivery of material to be learned

A step beyond the last category is where the web is used as the prime means by which the course (or some part of the course) is taught. Here there is some sort of compulsion for the students to consult the web. A useful example is the entry web site for students enrolled in Engineering Computing 1, a course which is completely "on-line", at Murdoch University ([http://www.murdoch.edu.au/online/units/units\\_fr.html](http://www.murdoch.edu.au/online/units/units_fr.html)).

## The student as client: Formal teaching via the web: (2) Student/teacher interaction

There are many schemes which seek to replace the interaction between teacher and student with an asynchronous mode of communication, most often email. A good example of this is the discussion group page for students enrolled in Engineering Physics 1 at the University of Technology, Sydney. Contact the author, David Green, at [David.Green@uts.edu.au](mailto:David.Green@uts.edu.au)

## The student as client: Formal teaching via the web: (3) Formative assessment and feedback

This is an area where much more work has been done. It combines the three main advantages that the web offers: flexible access, immediate feedback and platform independence. See for example the computer assessment system *WebMCQ*, developed by James Dalziel at The University of Sydney (<http://www.webmcq.com/>).

## The student as client: Formal teaching via the web: (4) Summative assessment examinations

No department in Australia known to us attempts to carry out *all* final assessment for a whole course through the web, mainly because of inflexibility of question format and security issues. One example is the NEST system, which is used by The University of Melbourne. Contact Craig Burton at [c.burton@eng.unimelb.edu.au](mailto:c.burton@eng.unimelb.edu.au)