

Editorial by Alan Poulter
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This issue contains a strong theme of problem-based learning. Cox, Levy, Stordy and Webber report upon the use of inquiry-based learning to enhance a First Year module on information management. Students were given a group task in which they picked an information management topic and investigated the research on that topic. A special laboratory and intensive staff support were provided. The students thrived in this environment but there were disappointments. Reflection seemed less popular via the blogs provided than had been assumed and students still remained very task focussed and did not take up all the opportunities on hand to explore.

Gordon and Brayshaw also explore the virtues of inquiry based learning and argues that it would be relevant for the computer science curriculum, despite the seeming structured and procedural nature of the discipline. The paper also raises larger questions of how teaching and research might complement or compete with one another in the current higher education environment.

Two papers exemplify this proposition that problem-solving as a teaching style works well in computer science. Turner and Hill write about teaching programming in Java, using robots and simulations of robots (Mindstorm and Microsoft Robotics Studio) to make physical and explicit in robot actions the operation of algorithms implemented in Java. Not surprisingly, students really enjoyed learning basic programming skills this way. McDermott, Eccleston and Brindley also provide a different avenue to follow to teach introductory programming as they used Alice, a programming environment which creates a 3D world in which objects and their actions can be programmed. Because the approach is visual and enables students to see the outcomes of their programs, it develops coding skills faster. Also Alice tries to prevent syntax errors, another source of potential confusion for beginners to programming. Their informal evaluation rates this change as a success.

Carter, Efford, Jamieson, Jenkins, and White address the issue of challenging and motivating more experienced programmers on introductory programming classes through the medium of an inter-institutional programming competition between at four UK institutions. By designing a competitive activity within the context of an existing curriculum, the participants ensured that the students met the learning objectives

A secondary theme for this issue is the application of technology in teaching. Beaumont, Owens, Barrett-Baxendale and Norton look at rejuvenating an information technology module used on an access course at a location at a distance from the university. Technologies like a VLE, video conferencing, email etc were intended to reduce face to face contact time while the content and assessment were re-styled to involve the students working in groups

more, tackling set problems. Albeit with minor issues, the re-design was successful: students were more motivated, the level of results was maintained and lecturer travelling time was reduced. Unfortunately the module was subsequently dropped due to re-structuring at the university.

Cox, Tapril, Stordy and Whittaker investigated patterns of Internet use of students and staff as preparation for an information management module on organisational communications. While it found a distinct generational difference – email, web 1.0 for staff, IM and Web 2.0 for students – there were also qualifications to these stereotypes. For example, students were overwhelmingly readers of, not contributors to, of Web 2.0 resources. Also outside of their ‘comfort zone’ technologies, their knowledge of Internet use and resources was very limited.

Finally in this theme on technology in teaching, Dennett and Traxler offer a short paper with an original big idea. Distributing information and course materials to students can be done a number of ways, none of them ideal. Their new approach uses Bluetooth, a communications protocol supported now by most mobile devices (phones, PDAs and laptops) which students will own. They set up a server that used Bluetooth to distribute the gamut of course materials, from notices of room changes to videos of lectures. This seems a really neat solution which combines easy access for student’s own devices with simplicity of operation and cost benefits.