ACELL: IMPROVING STUDENT LEARNING IN THE LABORATORY ENVIRONMENT

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The Australasian Chemistry Enhanced Laboratory Learning (ACELL) project is a successful international project designed with the aim of improving the quality of learning in undergraduate laboratories. It is vital that the substantial amount of time students spend engaged in laboratory activities is productive, developing their understanding of chemistry as well as their technical skills. ACELL is helping to ensure quality laboratory learning by building a database of educationally sound, student-tested experiments from all areas of chemistry; these experiments, including all materials needed to introduce them into a new laboratory, are made freely available via the internet. Experiments submitted to ACELL for evaluation are tested in a third party laboratory (often this is done at an ACELL workshop), evaluated by students, and all materials are peer reviewed prior to publication. By bringing together both staff and students at workshops, and including both in the peer reviewing process, ACELL maintains its student focus whilst also drawing on evidence from the literature regarding student learning. The most recent workshop ran in February, 2006 and was attended by 33 academic staff and 31 students, representing 27 universities from Australia and New Zealand; over the three days of the workshop, the delegates evaluated 33 different undergraduate experiments. This presentation will describe the ACELL approach to improving the quality of undergraduate laboratory learning, and will discuss the achievements of the project.