SUPPORTING STUDENT LEARNING AND RETENTION IN PHYSICS, CHEMISTRY, MATHEMATICS AND COMPUTING – AN EVALUATION OF CURTIN UNIVERSITY'S SCIENCE CLINICS PROGRAM

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ABSTRACT

The clinics were originally designed for students of physics, chemistry, mathematics and computing to enhance student learning and retention, particularly in their first year, and to identify students at risk early. An evaluation of the clinics was instigated in 2009. A survey was designed around issues raised by observations, in informal conversations with tutors (usually senior students) and with students who attended the clinics. The survey was administered to students attending clinics in all four disciplines- 49 students had responded by the end of April 2010. In addition, tutors and clinics coordinators were formally interviewed. Overall the results of the evaluation are positive: whilst clinics do not identify struggling students - since these students rarely attend, student feedback indicates that clinics have significantly improved student learning for those experiencing difficulties and who might otherwise have dropped out in the past due to a perceived lack of support and success. The clinics' efficacy is evidenced through students' tendency to attend clinics more than once and through positive student feedback on both clinics and tutors. The process of careful selection of tutors – based on tutoring skills rather than content knowledge – was identified as a crucial ingredient of the clinics' success.