

ENHANCING STUDENT ENGAGEMENT IN SCIENCE AND INFORMATION TECHNOLOGY: A COLLABORATIVE APPROACH

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BACKGROUND

Improving student engagement and retention is a sector-wide enterprise and commitment. At Victoria University, a collaborative project between discipline-based Colleges and central areas, in particular, Academic Support & Development has been established to improve student engagement and success. A key driver of this initiative has been the creation of 'First Year Champion' roles in different disciplines and the development and implementation of specific and targeted strategies for first year Higher Education (HE) students.

AIMS

The main aim of this project is to increase engagement and retention of first year Science and Information Technology (IT) students through a suite of targeted strategies. A further aim is to address curriculum issues and the quality of teaching, through the establishment of a Community of Practice (CoP) involving teaching and other academic support staff.

This paper will report on the specific strategies and preliminary findings from the project for the disciplines of Science and IT.

DESCRIPTION OF INTERVENTION

A situational analysis, including a 'Commencement Questionnaire' was conducted to determine the scope of the project and inform the specific strategies. The questionnaire revealed that many students work more than 10 hours/week and are studying subjects such as Biology, Chemistry or Computer Programming for the first time. The strategies were designed to identify the specific learning requirements of students and embed appropriate support, as well as to improve teaching approaches and the curriculum, where possible.

For example, in Science, a review of assessment tasks, submission dates and relative weightings have provided a platform for discussions regarding targeted academic support, prevention of assessment fatigue and early identification of 'at risk' students. In IT, a Bridging Program conducted a week before the start of semester, addressed the gap in knowledge and skills of students articulating from Vocational Education into HE sector.

RESULTS

Establishment of the CoPs was seen to have a positive effect towards increasing staff engagement in teaching and learning issues. Assessment tasks in first year Science were re-distributed to provide a manageable workload for both students and staff, as preliminary work on assessment patterns revealed an uneven distribution across semester with little opportunity for effective or timely feedback. Anecdotal evidence from the bridging program for IT indicated that it prepared articulating students for HE, as attendees displayed increased confidence and enthusiasm for their academic work. Furthermore, a 'meet-and-greet' event for female students helped to welcome and support female students who are under-presented in the cohort.

Many of the other strategies are ongoing; the outcomes of which will be discussed at the presentation.

CONCLUSIONS

The collaborative approach towards enhancing student engagement in Science and IT has thus far been positive. Preliminary feedback from students indicated their appreciation for the additional support provided through new strategies that were implemented. In addition, through initiatives, such as the CoPs, staff members have been able to address the specific learning needs of students in a collaborative and effective manner.

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