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# Fostering Self-Regulation and Deep Approaches to Learning: End-User Computing Courses in Higher Education

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# Abstract

This thesis examines student approaches to learning and self-regulation within a higher education computing environment. Traditional end-user computing teaching methods emphasise a skills approach that does not encourage effective use of information technology as it evolves and does not consider how students approach their learning. This research was designed to promote student use of self-regulated learning to see if it would encourage deep approaches to learning.

The revised two-factor Study Process Questionnaire (R-SPQ-2F) was used to measure approaches to learning, at the beginning and end of a semester, to see if students' learning had shifted towards a deeper approach. The sample was taken from two end-user computing classes in a diploma programme. The teaching of strategies to foster self-regulatory practices was introduced. Focus group discussions were held at the beginning, middle and end of the study to record student perceptions of learning. Academic journals, recording student reflection, were collected.

The results from the R-SPQ-2F questionnaire showed no shift had occurred. The participants began the semester with a tendency toward a deeper learning approach, leaving little room for change. There was no difference found between approaches to learning of ethnic groupings. Qualitative results revealed deep and surface learning approaches are not necessarily mutually exclusive and may overlap, suggesting a combined approach. The course grades suggested that the adoption of teaching strategies fostering self-regulation helped student learning in the researched classes. A link was suggested between strategy use and student approaches to learning.

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I would like to dedicate this thesis to Ronald James Burton who was here for the beginning of this project, but sadly not at the end.

To a father who would have been so proud.

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