

Improving Students' Self-Regulation of Learning at Tertiary Level

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1. INTRODUCTION

This poster describes a response to the apparent dis-joint between the expectations of some tertiary students and their achievements, as measured by the grades awarded at the end of a course as part of the Bachelor of Information and Communications Technology (BICT) delivered at CPIT. Understanding one's own thought processes is an important step in acquiring the ability to attend to one's own learning needs. Self-regulation implies having personal control of something, independent of external control. Self-regulated learning requires knowing a lot about oneself – specifically, with regard to the amount and quality of control one can exert over one's ability to acquire and process knowledge. Starting with a plan, one needs to monitor and track progress and finally evaluate what derives from it. (Bercher, 2012) Benefits to the student have been discussed in terms of developing improved abilities to regulate their learning and also enhanced motivation to learn, both desirable outcomes for institutions, their staff and students alike.

At the end of their BICT learning programme students complete their degree course by presenting their capstone projects for assessment. At the presentation, they are asked whether or not they regard themselves to be “self-directed learners.” It is an important question and the response is eagerly anticipated. One or two of the assessors have also taught the student and hope to hear a positive response; a convincing case indicates the student has reached a certain level of intellectual maturity. The teachers want to believe they contributed to the process as this often promotes their sense of job satisfaction. Evidence is therefore sought from the student to support the claims made; the strength of the evidence is believed to partly determine the student's level of self-regulated learning.

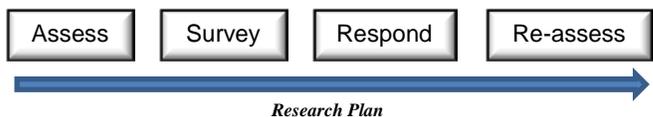
2. TERMS IN USE

The terms “self-regulated learning”, “self-directed learning”, and even “self-regulation” and “metacognition” are sometimes used interchangeably, leading to some confusion when examining the questions raised by this subject. The first task then, was to clarify what was actually required in order to make meaning of the topic, and, as importantly, what was actually being discussed in the literature. As an understanding of the landscape emerged and appropriate pigeon holes were created, the problem was framed more succinctly. Literature abounds on the subject of self-awareness of student learning levels and processes; perhaps first described around 1890, metacognition became significant in a contemporary context following work by Flavell, published in the

1970s. (Dinsmore et al, 2008)

3. RESEARCH PLAN

A learner analysis survey is planned, in order to gauge the level of self-regulation in a cohort of students. An established and apparently well-respected survey tool has been identified, due to Pintrich and De Groot (Pintrich & De Groot, 1990) and will be used as a measure of self-regulation and motivation during a course of study. Some changes to the approach, methods, tools and or techniques used to deliver the course will then be made and the survey conducted again. Meaningful results are not expected from individual course assessments; however it is hoped that by extending the survey to a large number of courses both within the institution and also other institutions, some meaningful conclusions can be derived, leading to happier, more motivated students who are better able to regulate their learning.



REFERENCES

- [1] Bercher, D. A. (2012). Self-monitoring tools and student academic success: When perception matches reality. *Journal of College Science Teaching*, 41(5), 26-32.
- [2] Dinsmore, D. L., Alexander, P. A., & Loughlin, S. M. (2008). Focusing the Conceptual Lens on Metacognition, Self-regulation, and Self-regulated Learning. *Educational Psychology Review*, 391-409.
- [3] Pintrich, P.R. & De Groot, E.V.(1990). Motivational and Self-Regulated Learning Components of Classroom Academic Performance. *Journal of Educational Psychology* 82:1 (1990),33-40.
- [4] Schraw, G. M. (1995). Metacognitive Theories. *Educational Psychology Review* 7:4 (1995), 351–371. Retrieved August 30, 2012, from <http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1040&context=edpsychpapers>.