ascilite 2010 sydney



Evaluating cybergogy: Early adopters of Wikis and student engagement

Lyn Collins, Elaine Huber & Dean Groom

Learning and Teaching Centre Macquarie University

This poster presentation will outline the background and current findings of an action research project which investigates the use of wikis in a Higher Education setting. The objectives of the project are to improve student engagement by providing them with well-researched and evaluated wiki-based assessment tasks. The Cybergogy instructional design model (Wang and Kang, 2006) which incorporates social, emotive and cognitive factors is used to iteratively work with three academics across business, science and humanities faculties, on six iterations of wiki-based tasks.

Keywords: Wiki, learning, model, student, Cybergogy, engagement, group, social

Introduction

The initiators of this project were twofold. Teaching evaluation feedback suggested that students wanted more opportunities for group work, and some unit convenors were looking for suggestions for an effective technology that would support such group work activities. Our current Learning Management System (LMS) is restricted in its ability to allow effective interactions between students working on group projects and so wikis were introduced as a more interactive medium in which to work. The role of an Educational Developer is to work collaboratively with colleagues throughout the university to introduce technologies that will enable academics to achieve their outcomes, to support them with the implementation, to evaluate the chosen technology(s) and redesign their application for future offerings.

Educational Developers in the Learning and Teaching Centre thought it essential to evaluate the use of wikis to see what can be learnt from their usage in order to create a more informed approach. In order to achieve the objective of improving student engagement, a workflow model was developed that was based upon the most up-to-date research, allowing continual improvement to a Wiki based task.

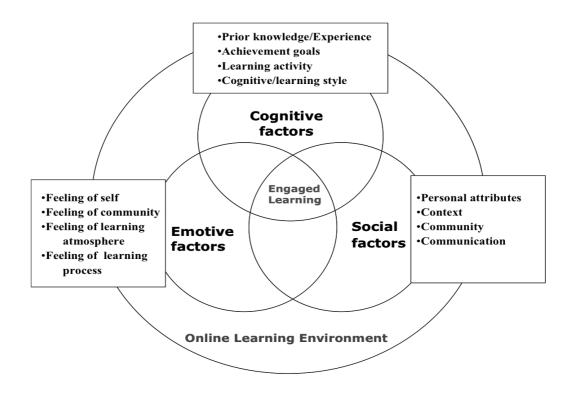


Figure 1: Cybergogy for Engaged Learning Model (Wang et al)

Wang and Kang (2006) use the term 'Cybergogy' "as a descriptive label for the strategies for creating engaged learning online." Their model (see figure 1 above) for engaged learning has three overlapping domains: Cognitive, emotive and social. Foord (2007) created an acronym to describe a process to follow in order to get better results when using a wiki: STOLEN (Specifc overall objective; Timely; Ownership; Localised objective; Engagement rules; Navigation). Student contributions to group work in terms of conceptualising, inquiring, goal-building, self-analysing, expressing, empathising, listening and sharing must also be considered – adapted from Knowles, 1975. Synthesising the 'Cybergogy' model, Foord's (2007) STOLEN tick list, Knowles' (1975) theory and other current thinking into the various wiki offerings enabled a more informed design to be produced.

Method

- The first student wiki was set up in Semester 2, 2009 it was a largely unstructured and unsupported, and did not result in much enhancement of the original group based task.
- This wiki was evaluated and it was discovered that a wiki (like any assessment tool) needs to be well planned and structured.
- Foord (2007) 'STOLEN principle' tick list was used to restructure Wiki 1b and begin wiki 2 (Semester 1, 2010). This included incorporating more support (e.g. wiki spirit, clearer instructions in the assessment task & clearer navigation structure in the wiki, more technical support etc).
- Wang and Kang (2006) 'Cybergogy for engaged learning' model also underpinned the design of wiki 1b and wiki 2.
- Currently a rubric/matrix is being constructed that will allow Semester 2, 2010 wikis (1c, 2b and 3) to be evaluated. Some of the competencies of self-directed learning from Knowles (1975) will be incorporated.
- Evaluation of Semester 2, 2010 wikis will investigate student perspectives about their own levels of engagement in coursework created by the use of a wiki.
- Lecturers will reflect on their impressions of the wiki as a tool for improving student engagement in course work.

A summary of the method employed is presented in Figure 2 below:

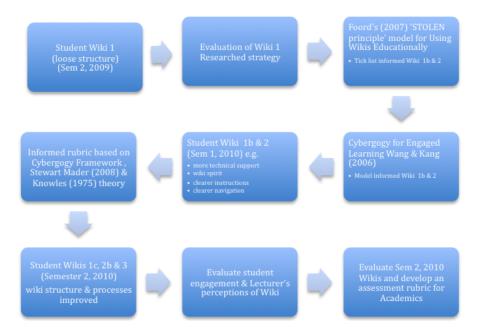


Figure 2: Evolution of Cybergogy in wiki based tasks

Preliminary findings

General comments from both Students and academics have been very positive to date in terms of improving the engagement aspects of the group-work tasks. What now needs further investigation is the supporting evidence to these comments, along with the lecturers' reflections. In terms of the three aspects of cybergogy, the wiki might not score high on cognitive value but does on the emotive and social aspects. Wikis can provide evidence of contributions but the difficulty is how to assess that input. The design of the assessment rubric will be crucial in informing the effective use of wikis for group-based learning.

References

- Foord, D. (2007). *The STOLEN Principle Tick List, A6 Training and Consultancy*. <u>http://www.a6training.co.uk/resources Social Software.php</u>
- Knowles, M. S. (1975). *Self-Directed Learning. A guide for learners and teachers*. Englewood Cliffs: Prentice Hall/Cambridge.
- Mader, S. (2007). Wiki patterns. A practical guide to improving productivity and collaboration in your organization. Indianapolis: Wiley.
- Wang, M. J. & Kang, J. (2006). Cybergogy of engaged learning through information and communication technology: A framework for creating learner engagement. In D. Hung & M. S. Khine (Eds.), *Engaged learning with emerging technologies* (pp. 225-253). New York: Springer Publishing.

```
Author contact details:
Lyn Collins <u>lyn.collins@mq.edu.au</u>
Elaine Huber <u>elaine.huber@mq.edu.au</u>
Dean Groom <u>dean.groom@mq.edu.au</u>
Learning and Teaching Centre
Macquarie University
```

Please cite as: Collins, L., Huber, E. & Groom, G. (2010). Evaluating cybergogy: Early adopters of Wikis and student engagement. In C.H. Steel, M.J. Keppell, P. Gerbic & S. Housego (Eds.), *Curriculum, technology & transformation for an unknown future. Proceedings ascilite Sydney 2010* (pp.222-225). <u>http://ascilite.org.au/conferences/sydney10/procs/Collins-poster.pdf</u>

Copyright © 2010 Lyn Collins, Elaine Huber & Dean Groom.

The author(s) assign to ascilite and educational non-profit institutions, a non-exclusive licence to use this document for personal use and in courses of instruction, provided that the article is used in full and this copyright statement is reproduced. The author(s) also grant a non-exclusive licence to ascilite to publish this document on the ascilite Web site and in other formats for the *Proceedings ascilite Sydney 2010.* Any other use is prohibited without the express permission of the author(s).