

Introduction

Current trends (National Curriculum) denote creativity as essential capability.

- Need to develop pedagogy - process-oriented approaches
- teach both hemispheres of the brain – all intelligences
 - prepare students as proficient & creative lifelong learners
 - teach for engagement, relevance and context for boys.
 - process driven curriculum over content.

Digital technologies (a wiki) may promote a more engaged, fun & creative learning environment...a place where creativity is first struck or born.

Data Collection

Qualitative data

- field notes,
- student feedback verbal (class debrief sessions, one to one, small group)
- student feedback via questionnaire and input on wiki.
- assessment rubric with 'awards' badges, student created tasks.

Data Analysis

Questionnaire

- extracted key terms/phrases
- gave numerical frequency of occurrences of terms/phrases.
- compared student number value with teacher value ratings.

Comments from interviews/ discussion data sets

- paired with headings from questionnaire
- 'chunked' data under appropriate headings

Field notes/Observations

- aligned teacher notes with same questions boys answered.
- ample time for boys to share their voice.

Award badges analyses



- each level given a numeric value
- simple tabulation awarded per project to analyse peer response to creativity.
- used with assessment rubric



"... process of creating, being creative, & sharing is about increasing the collision rate of 'hunches'. It is through this process we see students being more creative."

Conclusion

Wikis (social media) can foster creativity

- pedagogy must align with process approach to learning
- collaboration & shared ideas – ideal classroom culture
- wikis foster open approach, encourage collision of hunches
- Digital technologies support interactive, boy-centred learning

Implications of Study on Practice

Integrate various social media across curriculum = platform for boys to: explore & share - muse & imagine - challenge & innovate

Encourage process oriented pedagogy

Promote action research as school based reflective practice

- develop Teacher's Professional Learning Pathway



RESEARCH QUESTION

How can the use of a class wiki enrich how boys' collaborate, create and communicate, and in turn foster creativity within a design process model of teaching and learning?



Research Context & Participants

- teaching surveying – dry topic taught in dry way.
- creative ideas overshadowed by predictive responses.
- re-think how we challenge boys to problem-solve & design, be creative.
- creating conditions for creative learning.
- Design Education class of 14 Year 10 boys.
- 4 x 40 minute periods/week over 4 week period.

Research Action

Intervention - class wiki augmented by a 4 phase design process model:

- become the expert, brainstorm, interrogate task, research, analyse.
- refine/compress knowledge, synthesise, decide best possible solution
- ignite idea, exercise, realise, produce, create
- release solution, present, evaluate, analyse



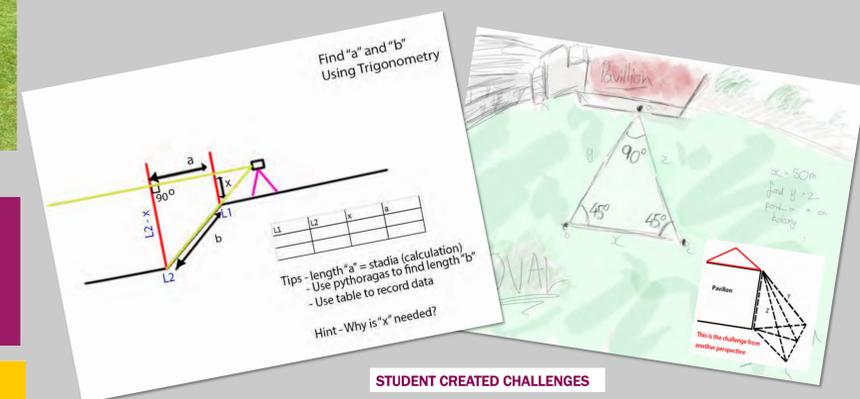
Individual challenges, group work and student created tasks.

Evidence from the Boys

"The team work that we gained throughout these challenges helped use to gain collaborative skills. Whilst creating things such as team challenges for other groups, we worked together and ideas were collaborated to create a better and more creative challenge. The communication through the wiki for our group was good and was successful in working together to get the most out of the equipment and technology."

"The wiki was a more fun and innovative way of learning. The form of interactive learning is good because it attracts those students who would otherwise be distracted during traditional learning techniques. Being able to do our own research was good because it allowed us to control our own learning. Students who were interested in the topic succeeded more because their research from the beginning was more extensive. The choice of using online wikis was good because our work was saved and were able to access all of our information easily; in the field, at home and at school."

"the wiki was a good and innovative way of learning in this lesson and it allowed me to learn from other people's work as well."



STUDENT CREATED CHALLENGES

Key Readings

- Churches, A. (2012). Bloom's Digital Taxonomy. [wiki]. Retrieved from <http://edorigami.wikispaces.com/Bloom%27s+Digital+Taxonomy>.
- Johnson, S. (2010, September). Steven Johnson: Where good ideas come from. [video file]. Retrieved from <https://www.youtube.com/watch?v=0af00UcTO-c>
- Norfleet James, A. (2007). Teaching the male brain: How boys think, feel, and learn in school. [3rd edn.]. San Francisco: Corwin.
- Richardson, W. (2006). Blogs, wikis, podcasts, and other powerful web tools for classrooms. San Francisco: Corwin.
- Stephenson, E. (2012). The reflective practitioner. Melbourne: Pearson.
- Wheeler, S, Yeomans, P. & Wheeler, D. (2008). The good, the bad and the wiki: Evaluating student-generated content for collaborative learning. British Journal of Educational Technology, 39(6), 987-995

Further Information

The full report of this project and an online copy of this poster are available at <http://www.theibsc.org/>. Researcher's email: kmo@hutchins.tas.edu.au