This is the author's version of a work that was submitted/accepted for publication in the following source:

Cook, Roger
(2013)
CoWs, Google and online possibilities : creating digital posters to enhance student engagement. In
Ragupathi, Kiruthika & Soong, Alan (Eds.)

This file was downloaded from: https://eprints.qut.edu.au/79118/

© Copyright 2013 [Please consult the Author]

Notice: Changes introduced as a result of publishing processes such as copy-editing and formatting may not be reflected in this document. For a definitive version of this work, please refer to the published source:
CoWs, Google and online possibilities: Creating digital posters to enhance student engagement
Roger Cook | roger.cook@qut.edu.au
Queensland University of Technology | Brisbane, Australia

Introduction
A new Bachelor of Science (BSc) course was introduced at Queensland University of Technology (QUT) in 2013 and focused on inquiry-based, collaborative and active learning. Two of the first year units required that students carry out a group poster assessment task. This poster provides a preliminary evaluation from an academic staff perspective of the assessment approach used, whereby students created digital posters to utilise the affordances of new learning spaces.

The digital posters approach was first introduced to a group of academic staff from the Science and Engineering Faculty (SEF) in 2012 during a professional development program to explicitly develop skills and shared understandings of teaching in collaborative learning spaces (Steel & Andrews, 2012). Considerations were given to the pedagogical requirements of a poster assessment task, the affordances of the learning space and an identification of possible benefits of using Google Sites to create digital posters. Positive feedback from this group (as highlighted in the quotes shown) and subsequent approval from unit coordinators for two of the new first year BSc units meant that the approach was adopted for Semester 1, 2013 with approximately 360 students in each unit.

Blended learning considerations
Adopting a digital approach for poster creation has a number of benefits. Firstly, creating a printed poster in a way outlined by O’Hall and Jennings (2012) results in a time-consuming focus on desktop publishing skills to produce paper-based drafts and a static final product. In contrast, better student engagement can be achieved by developing digital literacy skills. Evidence suggests that students who engage in using digital technologies are more effective in their study and thus more employable. There is also the opportunity for students to contribute to the digital literacy development of their peers and in the reverse mentoring of staff (USC, 2012). Furthermore, digital posters offer specific advantages. Hai-Jew (2012), who details possible uses for virtual conferences, states that posters can reach a wider audience (e.g. before, during and after a poster presentation session); they can include dynamic multimedia content and they can facilitate interaction between the author(s) and audience through synchronous and asynchronous communication channels. A final benefit is that digital posters can be more easily shared with authentic audiences, which can motivate students to produce work of a higher quality (Buck Institute of Education, 2013).

The new collaborative learning spaces at QUT have Computers on Wheels (CoW) with touch screens, portable whiteboards, and moveable tables and chairs on wheels. Typically, a space consists of nine CoWs, Google and collaborative apps and it would be useful to further develop usage skills; and students could edit the poster synchronously and asynchronously. Staff attended a digital posters training session prior to the start of the semester and both staff and students referred to the same poster creation guide when and as needed.

Evaluation
In one of the BSc units 84 students provided consent for their team’s poster to be viewed and analysed, of which 50 students voluntarily completed a survey about their experiences of creating a digital poster. Four staff members completed a similar survey and the team leader was interviewed to provide additional clarification.

Findings
The main benefits identified were that it provided flexibility for students to create and present. It gave students the freedom to be creative and include a range of media (e.g. images, text, videos). It was an attractive way to present information and it allowed for engagement across groups. Challenges noted were that most students had to learn how to use Google Sites, some students were more concerned with the poster design rather than the quality of the content and the science underpinning it (which could probably also occur when producing a printed poster). It was easy to directly copy text from sources rather than paraphrase; and there may have been too much scope for creativity. The academic staff also raised three more general issues about digital posters:

- Scientific posters are evolving and so a web-based approach with multiple pages and links to external websites can create a more effective and richer interactive experience.
- Digital posters are the way of the future and should be integrated into modern curricula.
- Students engaged better with the poster assessment task when they realised that what they were creating was a shared website. This gave much better opportunities for full group participation and the online space to be ‘critical’.

The high levels of engagement from students during the poster presentation session in the collaborative learning spaces was unexpected but very rewarding to be a part of.

QUT
Queensland University of Technology
Brisbane Australia

"It really got me thinking about how new technologies could be useful rather than faddish."