Chapter III
Collaborative E-Learning Using Wikis: A Case Report

Charlotte Brack
Monash University, Australia

ABSTRACT

Within the notion of Web 2.0, social software has characteristics that make it particularly relevant to E-Learning, aligning well with a social constructivist approach to learning encompassing peer production and review of curriculum content. In this chapter examples of the use of social software are described and ways in which they draw on these characteristics are discussed. An intensive three week program of study online has been developed for students who have not completed year 12 biology and who are entering first year medical studies. The program incorporates individual self-directed learning and collaborative projects. The latter include a debate and competition between groups involving the creation of a Wiki. Social software, the Wiki, enabled peer learning activities including peer support, and the shared peer production and review of learning materials. The social software also provided mechanisms for developing generic skills and contributed to transition issues for new students. Incorporation of social bookmarking into the project may extend the potential for connected knowledge with a broader concept of peers and peer assessment.

INTRODUCTION

Students entering the undergraduate medical course at Monash University are not required to have completed year 12 Biology. While this may allow students to have a broad background it can put those who have not studied biology at a disadvantage in their first year of studying medicine at university. Evaluation data in the medical school revealed that these students reported feeling out
of their depth and bewildered by terminology and biological concepts with which other students appeared to be familiar. To support this group of students a bridging program covering relevant parts of year 12 Biology was developed.

The timetable for students in first semester does not allow for scheduling of the bridging program during semester so an intensive program was designed for students prior to commencement of their medical studies. The time between acceptance of offers and the start of semester one is in the order of four weeks so the duration of the bridging program had to be limited to this period. Many students are committed to paid employment or personal activities which make access to the university campus prior to the start of semester difficult. Students may also be overseas at this time as is the case for many international students. The program therefore had to be not only intensive and prior to first semester but had to be offered online.

The recent expansion of Web 2.0 technologies and social software presented an opportunity to design an engaging online learning environment for students. The design needed to take into account that a large majority of the students taking the program were in transition to university and had not yet had experience of university life, nor had they had an opportunity to meet each other. Issues of transition to higher education for first year students are of concern to higher education institutions. Students often struggle with large classes and feelings of anonymity (Peel, 2000; Krause, Hartley, James & McInnis, 2005). At an institutional level strategies to address this include orientation courses and clubs focused on leisure and academic pursuits. Within courses transition camps are effective, and incorporation of group work both formally in course units of study and through encouraging and facilitating informal study groups are also valuable strategies. Through the use of the social software of Web 2.0 technologies the bridging program offered an opportunity to contribute to resolving transition issues for students, from both academic and social perspectives. The software allows students to work collaboratively in groups as it integrates communication with creation of content by students.

Web 2.0 as a term is nebulous. In coining the term O'Reilly (2005) describes it as a “gravitational core”, visualising “… a set of principles and practices that tie together a veritable solar system of sites that demonstrate some or all of those principles, at a varying distance from that core.” In order to deal with the lack of clarity the term ‘affordances’ is often used in relation to Web 2.0 technologies to describe functionality. Among the principles and practices of affordances are those categorised as social software because they provide opportunities for online communication and collaboration. While opportunities for communication and collaboration via the internet have been available for decades new technologies go far beyond email and web pages. Social software includes blogs, wikis, podcasting, vodcasting (video podcasting), and social networking tools such as MySpace and Facebook. It revolves around enabling users to modify content. Within the possibilities of the Web 2.0 sphere, social software facilitates collaborative research and synthesis of ideas in the way in which ‘web pages’ (with content) are constructed and integrated with communication. A trail of interactions is recorded including interactions between people (in our case, students), with media and with content. This allows teachers to observe and assess the collaborative process as well as the product being developed thereby opening up avenues for assessment of collaborative group work.

In this chapter a case study of an E-Learning program incorporating a collaborative project using social software for first year students is described. The affordances of the software are discussed in terms of learning at multiple levels, assessment and peer support, including transition issues.