

Social Networking, Teaching, and Learning

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Today's students and educators live in the world of Facebook, Twitter, Wikipedia and YouTube. These and many other social networking and social media applications are part of the so-called *Social Web* (i.e., Web 2.0), best characterised by the notions of social interaction, content sharing, and collective intelligence. In addition, today's students, often referred to as digital natives (Prensky, 2001), have spent most of their time on computers, game consoles, digital music players, video cameras, cell phones, as well as the Web itself. Being used to constant engagement and multitasking in their day-to-day activities, students need a high level of social and creative engagement in learning. Traditional teaching approaches favouring passive content consumption, therefore, are no longer applicable and have to be substituted, or at least complemented, with highly interactive learning processes.

The importance of interactivity in learning is emphasised in modern learning theories (Muirhead & Juwah, 2004). For example, *Connectivism* recognises that the digital and networked nature of our daily lives requires learning which occurs through interaction with various sources of knowledge and participation in communities of common interest, social networks, and group tasks (Siemens, 2005). This learning theory also emphasises the important role that the technology plays in the learning process and the connection of individuals with technology as well as with other individuals through technology.

Numerous studies have demonstrated the benefits of online social interaction in the learning process. Positive aspects of online interaction with teachers and peers include (but are not restricted to) the following: access to peer and expert knowledge, ability to receive feedback from

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teachers and peers, and an opportunity to reflect on the exchanged messages (Ellis, 2001). By expressing their thoughts, discussing and challenging the ideas of others, and working together towards a group solution to a given problem, students develop critical thinking skills as well as skills of self-reflection and co-construction of knowledge and meaning (Brindley, Walti, & Blaschke, 2009). However, researchers

and practitioners alike have found that interactions cannot be easily established in a learning environment. This often comes as a result of an inappropriate course design (Brindley et al., 2009) and/or the students' lack of collaboration skills, such as decision-making, consensus building, and dealing with conflict (Finegold & Cooke, 2006). Therefore, in order to yield the expected educational benefits, the technology in general and social networking tools in particular have to be accompanied with a sound pedagogical approach.

In current learning practices, the acceptance of social networking tools (and the broader category of social software tools) is still primarily led by education enthusiasts who, trying to make their classes more engaging for students, turn to these popular online tools and make them part of their teaching practices. However, evidence is still lacking as to whether and to what extent these tools are beneficial for education. A growing number of researchers (e.g., Ala-Mutka et al., 2009; Minocha, 2009) and research projects (e.g., iCamp <http://www.icamp.eu/> and Horizon Project <http://www.nmc.org/horizon>) in technology-enhanced learning have explored the potentials of these tools and reported benefits but also drawbacks and challenges for their applications in educational settings. While some authors even consider that further development of social networking tools and Social Web in general would eventually lead to *disruptive innovations* in education (see Christensen, Johnson, & Horn, 2008), there are also authors who are sceptical about these tools and their educational potentials (e.g., Bugeja, 2006).

This special section on *Social Networking, Teaching and Learning*, therefore, aims to provide some additional insights into the educational potential of social networking, which despite some observed disadvantages is expected to be increasingly present in educational practices. The three papers included in this special section were among the invited submissions from the Informing Science and Information Technology Education 2012 Conference (InSITE 2012) jointly organised by Informing Science Institute and the John Molson School of Business, Concordia University in Montreal, Canada. Each of these papers was initially reviewed by four to five reviewers. Subsequently, the papers were revised and extended based on the reviewers' feedback and checked by the editors over two rounds of rigorous review cycles. Together, the three papers show the benefits and drawbacks of social networks and media at different levels of integration into the overall teaching framework.

The first paper by Gafni and Deri, entitled *Costs and Benefits of Facebook for Undergraduate Students*, assesses the advantages and disadvantages of Facebook, the leading social networking platform, for undergraduate students in technology-oriented subjects. The authors evaluated the answers given by more than 100 students to their questionnaire and analysed several academic Facebook pages. The survey suggests that first year students use Facebook not only for socialising but also for academic purposes, whereas senior students use it almost exclusively for leisure or social activities. Only a small portion of the students significantly and successfully used Facebook to get assistance for their studies or to save time in finding learning resources. Department-run Facebook pages tended to be rather inactive, whereas the analysed student-run page was very active. According to the study, Facebook as is has little tangible positive impact on studying. The survey, however, showed that the first year students in particular perceived that Facebook enlarges their social circle and valued it as a place to express feelings and opinions. The main cost of Facebook appears to lie in the waste of time – a valuable resource for students. Most of the students spent at least one to three hours per day in the social network plus needed additional time thereafter until being able to concentrate on studying again. In conclusion, we can learn from this paper that Facebook may have a positive effect on studying, but that its potential is not yet fully utilised.

In the second paper of this special section, *Social Networking in Undergraduate Education*, Buzzetto-More analysed the efficacy of social networking systems in the context of when they are explicitly introduced as part of the organisational framework of courses. Her study focused on

undergraduate management students in a minority-serving university, in which courses were offered either fully online or in a hybrid format with both face-to-face meetings and online presentations. Here, the Blackboard Learning Management System was used as the primary tool for distributing the course material, supplemented by a Facebook group for each course. The questions of whether such an integrated use of social networking can help building learning communities or relationships therein and whether it can engage students were investigated via a questionnaire as well as content analysis on the Facebook posts. The results show that the students actively used course-specific Facebook walls to post questions about course-related topics, and that the fraction of original posts made by students (as opposed to posts initiated by the supervisor) increased over the duration of the courses. According to the questionnaire results, most students spent significant time on Facebook. More than half of them agreed that it enhances the sense of community within the learning environment, the learning process, and class discussions, makes the classes more interesting, and – as a learning tool – engages students. However, they did not want to see traditional course management systems such as Blackboard replaced by Facebook. In summary, compared to the results of the stand-alone utility of Facebook presented in the first paper, Facebook has been found to be more beneficial as part of the course organisation and content distribution framework.

The last paper by Hordemann and Chao, *Design and Implementation Challenges to an Interactive Social Media Based Learning Environment*, goes one step further in terms of combining social networks and education by complementing teaching with online social interaction concepts. In their paper, Hordemann and Chao reported on their experience with the new social media based learning environment *Quizbox*. This system allows students in the classroom to use, for example, a touchpad or laptop to directly follow the lecture, to ask questions in an anonymous way, to chat, or to take notes on the slides. A reward mechanism, similar to those used in common (online) games, has been introduced to motivate students' engagement in learning. During a lecture, the teacher can navigate through the slides, supervise the activities within the system, and start and evaluate quizzes. A user survey showed that the option to anonymously ask questions is especially appreciated by students. Other successful features include the live feedback in quizzes and the ability to take notes. On the negative side, the chat feature may sometimes be distracting and the reward mechanism did not really take off, as the awards were not perceived as desirable by the majority of the students. The authors concluded the paper by proposing solutions for the problems discovered and indicating enhancements planned for the next stage of their project.

To end, we would like to thank the authors for their contributions to this special section. We also wish to acknowledge the reviewers involved for their expertise and time, in particular those who have provided constructive comments and suggestions. Finally, we hope the readers will enjoy reading the papers in this special section as much as we have enjoyed putting them together.

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