Social Networking, Teaching, and Learning

Jelena Jovanovic
Faculty of Organizational Sciences,
University of Belgrade, Serbia
jeljov@gmail.com

Raymond Chiong
Faculty of Higher Education,
Swinburne University of Technology, Victoria, Australia
rchiong@swin.edu.au

Thomas Weise
Nature Inspired Computation and Applications Laboratory,
University of Science and Technology of China, Anhui, China
tweise@ustc.edu.cn

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 Traditional teaching approaches favouring passive content consumption, therefore, are no longer applicable and have to be substituted, or at least complemented, with highly interactive learning processes.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 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 expect 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.

**References**


Social Networking, Teaching and Learning


Biographies

Jelena Jovanovic is with the Faculty of Organizational Sciences, University of Belgrade, Serbia. She has been lecturing in the areas of intelligent systems and software engineering at both undergraduate and postgraduate levels for a number of years now. She is also an active researcher and a practitioner in the fields of intelligent systems and educational technologies. Her primary research interests are in semantic technologies, Web technologies, technology enhanced learning and knowledge management. She is an Editor of the Interdisciplinary Journal of Information, Knowledge, and Management. To date, she has more than 70 refereed publications in books, journals and conference proceedings.

Raymond Chiong is with the Faculty of Higher Education Lilydale, Swinburne University of Technology, Australia. He has been lecturing in Computer Science/Information Systems at both undergraduate and postgraduate levels for many years. His teaching has focused on programming and databases. Besides teaching, he has been actively pursuing research in the areas of evolutionary game theory and optimisation. He is the Editor-in-Chief of the Interdisciplinary Journal of Information, Knowledge, and Management, an Editor of the journal Engineering Applications of Artificial Intelligence, and Guest Editors of a number of special issues in reputable international journals. He is also the Vice Chair of the task force “Education” of IEEE Computational Intelligence Society’s Emergent Technology Technical Committee, and one of the Founding Chairs of the IEEE Symposium on Computational Intelligence in Production and Logistics Systems. To date, he has produced over 70 refereed publications. These include 5 books and several papers in top-tier journals.
Thomas Weise is with the Nature Inspired Computation and Applications Laboratory (NICAL), School of Computer Science and Technology, University of Science and Technology of China in Hefei, Anhui, China. He has been teaching in Computer Science at both undergraduate and postgraduate levels, with topics spanning from operating systems, distributed systems and computing, to metaheuristic optimization. His major research interests include Evolutionary Computation, Genetic Programming (GP), and real-world applications of optimization algorithms. His experience ranges from applying GP to distributed systems and multi-agent systems, efficient web service composition for Service Oriented Architectures, to solving large-scale real-world vehicle routing problems for multimodal logistics and transportation. Dr. Weise is the Chair of the task force “Education” of IEEE Computational Intelligence Society’s Emergent Technology Technical Committee, and an Editor of the Interdisciplinary Journal of Information, Knowledge, and Management. To date, he has authored/co-authored over 60 refereed publications. His work is supported in part by the National Natural Science Foundation of China under Grant 61150110488, by the Chinese Academy of Sciences Fellowship for Young International Scientists CX05040000001, and by a Special Financial Grant from the China Postdoctoral Science Foundation (number 201104329).
Social networking site – Facebook, Vkontakte, Snapchat, Instagram, YouTube – contact friends. Then ask students what sites they use most frequently and explain that today you’re going to talk about YouTube and discuss how it works and how it was created.

Additional Information: According to Digital Information World, the most popular social networks are Facebook, YouTube, Instagram, Twitter and others. How YouTube was created. Every teenager knows YouTube, they watch YouTube bloggers, want to become as famous as successful as they are. Social-networking tools aren't just for flirting. The evolving world of Internet communication – blogs, podcasts, tags, file swapping – offers students radically new ways to research, create, and learn. But, too often, schools use computers as little more than glorified workbooks, and that's criminal, says Chris Lehmann, principal of Philadelphia's Science Leadership Academy. He explains why teachers should embrace networking and how they can use it to improve education. We need to teach students how to be effective collaborators in that world, how to interact with people around them, how to be engaged, informed twenty-first-century citizens. We need to teach kids the powerful ways networking can change the way they look at education, not just their social lives. Social networks provide rich opportunities to use English in a targeted and purposeful way. All social networks that exist nowadays may be used as powerful means of authentic communication in foreign language teaching. Creating such a network can be very practical in language teaching and be used as a supplementary means of guiding students in language learning with focus on multiple opportunities for communication in English and closed cooperation and interaction between teachers and their students. In view of this, the aim of the article is to ascertain the role and importance of private, closed social networks that may be used in the English language teaching as a new approach to modern language teaching methodology.