

Guest editorial for special section on teachers and learning with social network sites

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The evolving knowledge society and the emergence of information and communication technologies in our lives present complex challenges for educators and policymakers worldwide. Education requires adjustments to these changes in learning and teaching, in the shattering of boundaries, as well as in providing new meaning to emerging educational paradigms facilitated by uprising interfaces.

One of the most salient examples of the need to address unfamiliar educational scenarios is *social network sites* or *social networking sites* (SNS). Some argue that such sites are used predominantly to connect with those one already knows and less for traditional “networking” purposes (Boyd and Ellison 2007). Others prefer the term *social networking sites* and point to sites such as LinkedIn (www.linkedin.com) which are used primarily for “networking” or building one’s list of personal contacts. We use these terms interchangeably and define SNSs as Web-based communication environments through which individuals can maintain existing social ties and interactions and develop new social ties with individuals outside their network (Ellison et al. 2014).

SNS-based communication plays major roles in this change, extending the scope and settings in which teachers and students communicate beyond school boundaries in terms of time, space and definition of roles (Greenhow et al. 2015, 2009; Greenhow and Robelia 2009). In terms of teachers’ roles, the need to explore the full range of

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relationships forces researchers to explore the possibilities of communication via SNS, thereby acknowledging possible barriers between its components, e.g. “academic” and “social” (Forkosh-Baruch et al. 2015). Although it allows numerous opportunities, there are also some unavoidable risks which accompany the utilization of social network sites in the education milieu (Forkosh-Baruch and HersHKovitz 2014; Vanderhoven et al. 2015). These may affect, in turn, mutual perceptions and beliefs, thereby changing student-teacher relationships, and may be followed by an even greater change in traditional, pedagogical as well as social structures in schools, and the school milieu at large.

SNS implementation in elementary and secondary schools is only in its very early stages. Hence, teachers may perceive opportunities for utilizing SNS in education as a threat or as a challenge; hence, they might object or agree to explore new available options, respectively. This decision may be affected by numerous parameters, related to issues such as the teacher’s characteristics (personal, professional or both), educational agenda, attitudes or motivation. Furthermore, teachers who choose to use SNS might find themselves confronting some new, unexpected scenarios, in which personal or professional dilemmas arise. This requires support for teachers, not only in deciding whether to interact with their students via SNS, but also on how to use it wisely and continuously for their needs, considering today’s need for new literacies on one hand, and the changing role of teachers as a result, on the other hand.

School authorities and policymakers have been pondering about their position regarding student- teacher SNS-based communication, adopting different educational approaches, often banning teacher-student communication via SNS altogether. Public discussion on teacher-student communication via SNS reflects the complex nature of this issue, and overall demonstrates the difficulty in adapting novelties in large-scale systems and organizations. Trends in this field pose new challenges, which require evidence-based decision making.

This special issue of the *Education and Information Technologies* provides a platform for educators and researchers to achieve in-depth insights from various conceptual and empirical studies related to teaching and learning with social network sites. It presents various points of view on SNS in education, focusing on the roles and needs of teachers in elementary and secondary school in the SNS-era. The special issue addresses relevant, timely issues, which teachers, administrators and other stakeholders tackle on a day-to-day basis. It synthesizes contemporary issues concerning novel educational paradigms and will reflect new student-teacher relationships, from pedagogical, social, emotional and ethical points of view.

In their conceptual paper “Implications of Social Network Sites for Teaching and Learning: Where We Are and Where We Want to Go” Stefania Manca and Maria Ranieri provide an overview of the implications that the use of social network sites – not originally developed and conceived for learning purposes – have for schools and academic activities when they are used as tools to modify and innovate teaching and learning practices, and academic culture at large. The attention that social network tools are progressively gaining in schools and higher education practices and pedagogies requires adjustments in learning and teaching. These adjustments should be constantly considered and addressed by educators and policy makers. These environments are also presenting new and crucial opportunities for teacher training and teachers’ professional development. The purpose of this conceptualization is to reflect on some significant

challenges and opportunities offered by social network sites, and how to exploit the latter, in relation to a number of themes. These themes have been identified as those that deserve better comprehension and further research investigation: communication between students and teachers and appropriate professional behaviours; pedagogical and technological challenges related to incorporating social networking practices into teaching and academic practices; and how social networking can be exploited for teachers' professional training and development. Implications for policy and practice are discussed, thereby translating research into practice.

Correspondingly, Greenhow and Askari in "Learning and teaching with social network sites: A decade of research in K-12 related education" argue that the increasingly widespread use of social network sites to expand and deepen one's social connections is a relatively new but potentially important phenomenon that has implications for teaching and learning and teacher education in the twenty-first century. Taking a macro-level perspective on the field of education and information technologies, their paper surveys a decade of educational research to inquire how such technologies are perceived and used by K-12 learners and teachers with what impacts on pedagogy or students' learning. Five themes were evident in the reviewed studies ($n = 24$); the studies focused on: students' informal learning outside of school; students' formal learning in schools and classrooms; connections between in- and out-of-school learning; preservice teachers' perceptions and practices and inservice teachers' perceptions and practices. Furthermore, selected studies were summarized and categorized according to the four types of studies introduced by Roblyer (2005) as studies most needed to move the educational technology field forward. These include studies that establish the technology's effectiveness at improving student learning; investigate implementation strategies; monitor social impact; and report on common uses to shape the direction of the field. The most prevalent type of study conducted was research on common uses. The least common type of study conducted was research that established the technology's effectiveness at improving student learning. Implications for the design of future research and teacher education initiatives are discussed.

While the effectiveness of social media for improving students' learning is yet to be established, teachers themselves may be ambiguous about its mere usage. The third paper in this issue focuses on how teachers experience and deal with tensions between their personal and professional use of social media. In "The challenge to professionals of using social media: Teachers in England negotiating personal-professional identities" Alison Fox and Teresa Bird analyze evidence from interviews with 12 teachers from England about their use of social media to identify the difficulties they experience in relation to using these media as professional teachers. Teachers are increasingly called to model effective use of technology and build on what students are doing with technology in their everyday lives. This paper explores their agency in responding to this call. These tensions are not always perceived as negative and some teachers' accounts revealed a unity in their identities when using social media. The paper reflects on the implications of such teachers' identities in relation to the future of social media use in education.

Still, usage of social network sites is spreading widely, thereby requiring students and teachers to rethink its usage in educational contexts. In their article "The Impact of the use of Facebook on the High School Students' Proper Usage of Language" Hasam Karal, Mehmet Kokoc, and Ozlem Cakir examine the impact of the use of Facebook on

the high school students' proper usage of language. The study included thirty students who attend 11th grade in a high school in Trabzon, Turkey. Firstly, preliminary data about Facebook usage of students were obtained to understand the factors that motivate students to use Facebook and whether they use them for the educational purpose or not. Then, a Facebook group was created, in which a literature teacher was assigned as the guide of the group. The students' assignments such as compositions, poems, and vignettes, discussions, the teacher's views and observation, data from the interviews with participants were analyzed in this study. Results from this study indicated that that Facebook group was effective on issues such as development of writing abilities of students, communication and cooperation between teacher and students, and cooperation and communication among students. The original idea for this research was to determine that proper usage of language can be improved in social context when a Facebook group is created as a flexible online community with interactive and reflective activities, effective tool of sharing and communication. This study demonstrates how Facebook can successfully be used in an educational environment appropriately.

Blonder and Rap in "I like Facebook: Exploring Israeli High School Chemistry Teachers' TPACK and self-efficacy beliefs" also examine Facebook usage for teaching and learning. They investigate how Israeli teachers at high school level use Facebook groups to facilitate Chemistry learning. Two perspectives were used: Teachers' TPACK (Technological Pedagogical Content Knowledge) and the self-efficacy beliefs of chemistry teachers for using CLFG (chemistry learning Facebook groups). Three different case studies were chosen and qualitative and quantitative research tools were used to learn about the teachers' self-efficacy beliefs and knowledge. More specifically, a validated questionnaire for measuring teachers' self-efficacy beliefs for using Facebook and for integrating Facebook into teaching was developed. The study shows that teachers' initial beliefs (not based on a real acquaintance of Facebook) were replaced by more realistic efficacy-beliefs after the teachers started to work with the chemistry learning Facebook groups. The technological support provided to each teacher, together with their mastery experience, supported the development of strong self-efficacy beliefs regarding the use of CLFG. Teachers' TPACK was investigated by analyzing their interviews and the interactions in their chemistry learning Facebook group. We found that the notion regarding what constitutes learning in the CLFG had not changed during the experiment but rather, the teachers knew better how they can facilitate this leaning. In addition they better integrated links to videos and visualizations that supported understanding abstract chemistry concepts. Interestingly, the intervention that was conducted did not influence teachers' perceptions of learning; however, it was found to serve as an additional tool for supporting their self-efficacy beliefs by providing vicarious experience for the teachers. We therefore recommend performing a longer intervention in the future.

Taken together, these papers pose a theoretical, academic and practical overview of issues of concern regarding social network sites and their application in educational settings, from teachers' and students' point of view. The opportunities as well as the dilemmas presented in this special issue may be used by educators engaging in social network sites as a means to challenge the somewhat traditional teaching and learning, as well as general conduct between teachers and their students. The studies selected for this issue of the journal allow the readers to identify means of promoting and supporting the utilization of SNS both for academic (in science and in humanistic

subject matters) and for social purposes, as teachers are expected to see their students in a holistic manner. Teachers and students use SNS in their personal lives extensively; this assortment of studies, which will hopefully facilitate further research, allows us to further use these environments in the educational context, influencing several aspects of the school milieu, e.g., teaching and learning, as well as the general well-being of students.

Advantages presented by social media in education milieu is yet to be further established, as the papers mostly discuss possibilities, in terms of modes of learning, as well as teacher-student interaction. However, this assortment of papers teachers to make evidence-based informed decisions about utilizing SNS in their professional everyday conduct. Results of the studies also emphasize the need for teacher professional development, as mentioned explicitly in one of the papers. The stellar cases researched in this special issue are not sufficient to create widespread educational change.

There is need for further research in this area of SNS in education, which may in turn enable policymakers to encourage the usage and utilization of SNS in educational settings; more extensive usage of SNS may facilitate in turn more research and thus improve SNS utilization in education.

We applaud the ground-breaking work in this emerging field of social media and learning represented by the authors of the articles in this special issue. We would also like to thank Dr. Arthur Tatnall and the staff at Springer for their help with the creation and editing of this issue.

References

- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230.
- Ellison, N. B., Vitak, J., Gray, R., & Lampe, C. (2014). Cultivating social resources on social network sites: Facebook relationship maintenance behaviors and their role in social capital processes. *Journal of Computer-Mediated Communication*, 19(4), 855–870.
- Forkosh-Baruch, A., & Hershkovitz, A. (2014). Teacher-student relationship in the Facebook-era. In P. Isaías, P. Kommers, & T. Issa (Eds.), *The evolution of the internet in the business sector: web 1.0 to web 3.0* (pp. 145–172). Hershey: IGI Global.
- Forkosh-Baruch, A., Hershkovitz, A., & Ang, R. P. (2015). Teacher-student relationship and SNS-mediated communication: perceptions of both role-players. *Interdisciplinary Journal of e-Skills and Lifelong Learning*, 11, 273–289.
- Greenhow, C., & Robelia, E. (2009). Old communication, new literacies: social network sites as social learning resources. *Journal of Computer-Mediated Communication*, 14, 1130–1161.
- Greenhow, C., Robelia, E., & Hughes, J. (2009). Web 2.0 and classroom research: what path should we take now? *Educational Researcher*, 38(4), 246–259.
- Greenhow, C., Menzer, M., & Gibbins, T. (2015). Re-thinking scientific literacy: arguing science issues in a niche facebook application. *Computers & Human Behavior*, 53, 593–560.
- Roblyer, M. D. (2005). Educational technology research that makes a difference: Series introduction. *Contemporary Issues in Technology and Teacher Education*, 5(2), 192–201.
- Vanderhoven, E., Schellens, T., Vanderlinde, R., & Valcke, M. (2015). Developing educational materials about risks on social network sites: a design based research approach. *Educational Technology Research and Development*, 1–22. doi:10.1007/s11423-015-9415-4.