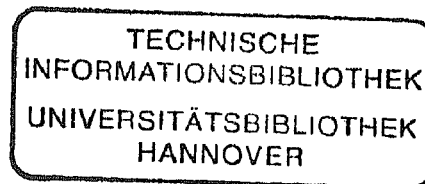


Web 2.0–Based E–Learning: Applying Social Informatics for Tertiary Teaching

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<i>Nada Dabbagh, George Mason University, USA</i>	
<i>Rick Reo, George Mason University, USA</i>	

This chapter describes the evolution of social software and related pedagogical constructs from pre- and early Internet networked learning environments to current Web 2.0 applications, as well as examining the theoretical underpinnings of social learning environments and the pedagogical implications and affordances of social software in e-learning contexts. The authors also offer a framework to guide and inform the use of social software to facilitate customized and personalized e-learning experiences in higher education.

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<i>Tony Bates, Tony Bates Associates, Canada</i>	

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This chapter looks at how scholarship and pedagogy are being challenged and redefined in the Web 2.0 era, and the accompanying need for students to develop new skills and competencies to prepare them for work and lifelong learning in the changing societal and economic landscape. The authors propose a pedagogical framework, “Pedagogy 2.0,” which addresses the three P’s of participation in networked communities, personalization of the learning experience, and productivity through active knowledge creation. They discuss how emerging social practices, ethos, and modes of communication influence the roles of teachers and learners.

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This chapter introduces the concept of learner-generated contexts (LGCs) and offers it as a potential framework for encouraging and supporting more effective use of technology for learning, particularly in light of the emergence and growth in popularity of Web 2.0 and social software. The focus of the chapter is on the theoretical grounding for consideration of LGCs as a context-based model and an organizing principle for designing learning. The authors also consider how institutional factors that act as enablers or barriers to development of LGCs for effective learning can be identified and addressed.

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Kairit Tammets, Tallinn University, Estonia

This chapter considers the notions of personal learning environments (PLEs) and distributed learning environments (DLEs) as examples of approaches that place students at the center of the learning process, drawing upon and developing their ability to organize and configure their own learning environment(s). It reports on a study in which an experimental course design supported by Web 2.0 tools and social media applications was evaluated by applying an ecological approach to affordances, and distills from the findings a number of key issues relevant to practitioners.

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Maria Chiara Pettenati, University of Florence, Italy

Palitha Edirisingha, University of Leicester, UK

This chapter addresses the issue of personal knowledge management (PKM) skills and their importance in a Web 2.0-based e-learning environment in tertiary education. A classification of PKM skills consisting of basic competencies and higher-order skills is presented, including examples, along with a learning design model for activities aimed at developing students' PKM skills.

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Mark Frydenberg, Bentley University, USA

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Shailey Minocha, The Open University, UK

Lucinda Kerawalla, The Open University, UK

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This chapter explores how a combination of Web 2.0 and mobile technologies can be used to support and enhance learning and teaching. It draws on data from interviews with six experienced tertiary practitioners to describe and analyze a number of examples that are representative of the power and potential of "Mobile 2.0" to blur the boundary between formal and informal learning, examining the benefits and challenges from both a theoretical and practical perspective.

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This chapter introduces the use of wikis and written and voice web applications as supporting tools for collaborative writing in the foreign language learning domain. In particular, the authors report on a study in which advanced Spanish foreign language learners' used these tools to complete a group writing assignment. Empirical evidence collected from students' essays, wiki drafts, chat transcripts, and questionnaire responses attest to the outcomes and effectiveness of the authors' recommendations.

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<i>Catherine McLoughlin, Australian Catholic University, Australia</i>	
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This chapter focuses on the use of podcasting in tertiary-level distance education contexts. It reviews the rationale behind the use of podcasting and digital audio for distance teaching and learning, critically examining the unique and distinguishing features of the technology. A number of international exemplars involving the use of podcasting in distance e-learning and blended learning are showcased and discussed with respect to a number of common themes.

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Lisa Cluett, The University of Western Australia, Australia
Judy Skene, The University of Western Australia, Australia

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Henk Huijser, University of Southern Queensland, Australia
Michael Sankey, University of Southern Queensland, Australia

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Peter Duffy, The Hong Kong Polytechnic University, Hong Kong

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Thomas Ryberg, Aalborg University, Denmark

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Chris Jones, The Open University, UK

This chapter reviews literature and evidence questioning the validity of claims relating to the existence of a “digital native” generation of students, while lending support to the assertion that today’s students need to be equipped with new digital and information literacy skills and competencies. It features a case involving the use of Web 2.0 and social software tools with supposedly digital native students, the outcomes and findings of which reflect the need for educators to be wary of making assumptions about their students’ familiarity with technology, including Web 2.0 tools, and more importantly their ability to apply the technology for academic purposes.

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Denise Whitelock, The Open University, UK

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Academy, Australia

This chapter discusses the epistemological shifts that are occurring in the Web 2.0 era, and the resulting consequences for learning, teaching, and research, as well as for the ways in which tertiary teachers and their students approach the creation, distribution, and evaluation of knowledge. A number of strategies for critical engagement with new, “postmodernist” epistemic learning spaces are recommended, before putting forward a series of questions to be contemplated by researchers and practitioners.

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Belinda Tynan, University of New England, Australia

Cameron Barnes, University of New England, Australia

This chapter considers the implications of Web 2.0 for academic staff development. With the aid of fictional accounts, the authors portray the shortcomings of currently predominant institutional approaches to the training of tertiary teaching staff. They offer suggestions on how these need to change in order for the transformative potential of Web 2.0 for online learning to be realized, and for truly student-centered, constructivist learning experiences to be achieved.

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Matt Crosslin, The University of Texas at Arlington, USA

This chapter contains the author's predictions of what lies ahead for the World Wide Web over the next decade, taking into consideration recent and emerging developments, and the likely impact on tertiary education. It provides coverage of "Web 3.0" concepts such as cloud computing, the Semantic Web, and the three-dimensional (3-D) Web. A possible future online learning scenario is described and analyzed as a means of helping readers visualize the educational possibilities afforded.

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Gráinne Conole, The Open University, UK

This chapter revisits the fundamental characteristics of Web 2.0 and attempts to place into perspective the implications for learners, teachers, and institutions, following the discussion in the preceding chapters. The author shares two approaches for understanding and leveraging the power of the new technologies. The first of these is an example of applying Web 2.0 practices to catalyze dialogue and the sharing of learning and teaching ideas, and the second advocates greater use of metaphors as a mechanism for meaning making with regard to the use of the new technologies for learning.

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