Chapter 3.26
Facilitating E-Learning with Social Software:
Attitudes and Usage from the Student's Point of View

Reinhard Bernsteiner
University for Health Sciences, Medical Informatics and Technology, Austria

Herwig Ostermann
University for Health Sciences, Medical Informatics and Technology, Austria

Roland Staudinger
University for Health Sciences, Medical Informatics and Technology, Austria

ABSTRACT

This article explores how social software tools can offer support for innovative learning methods and instructional design in general, and those related to self-organized learning in an academic context in particular. In the first section, the theoretical basis for the integration of wikis, discussion forums, and Weblogs in the context of learning are discussed. The second part presents the results of an empirical survey conducted by the authors and explores the usage of typical social software tools that support learning from a student's perspective. The article concludes that social software tools have the potential to be a fitting technology in a teaching and learning environment.

INTRODUCTION

One major task of higher education is to train students for the requirements of their future work by applying and adapting their knowledge to specific workplace-related requirements and settings. Due to the ongoing pressure on enterprises to cut costs, the periods of vocational adjustment in a company will become shorter and shorter.

On the one hand, the rising pressure of innovation and fast-paced development in the economy results in increased demand for continuous employee training. On the other, growing global competition forces enterprises to use available resources very economically so that employee training is considered to be necessary and desired even though it is conducted under considerable time and cost pressure (Köllinger, 2002).

According to these goals, the settings of the education must be changed adequately: "While most of higher education still ascribes to traditional models of instruction and learning, the workplace is characterized by rapid changes and emergent demands that require individuals to learn and adapt in situ and on the job without the guidance of educational authorities" (Sharma & Fiedler, 2004, p. 543).

In the field of higher education, it has become an important goal to develop "digital literacy" and educate learners as competent users and participants in a knowledge-based society (Kerres, 2007), but it can be assumed that there is a new generation of students, the "digital natives," who are accustomed to digital and Internet technology (Prensky, 2001a, 2001b).

Oblinger and Oblinger (2005) characterize next-generation students (called "n-gen," for Net generation) as digitally literate, highly Internet savvy, connected via networked media, used to immediate responses, preferring experiential learning, highly social, preferring to work in teams, craving interactivity in image-rich environments, and having a preference for structure rather than ambiguity.

According to a study conducted by Lenhart and Madden (2005), half of all teens in the USA may be considered "content creators" by using applications that provide easy-to-use templates to create personal Web spaces.

Classical face-to-face learning is seen as rigid and synchronous, and it promotes one-way (teacher-to-student) communication. Thus, it is not surprising that more and more students are opting for Web-based education as a more flexible and asynchronous mode (Aggarwal & Legon, 2006).

The higher education system should provide answers to this new generation of students who enter the system with different backgrounds and skills. They are highly influenced by social networking experiences and are able to create and publish on the Internet (Resnick, 2002).

Educators and teachers therefore have to consider the implications of these developments for the future design of their courses and lectures.

In 2002, a new term, "social software," entered the stage to refer to a new generation of Internet applications. One focus of this new generation is the collaboration of people in sharing information in new ways such as through social networking sites, wikis, communication tools, and folksonomies (Richter & Koch, 2007).

Wikis, Weblogs, and discussion forums will play a central role in the new context, so the areas of application and possibilities will enlarge enormously. It can be assumed that this will also have considerable influence on learning and the usage of these instruments as learning tools.

This article presents the results of an empirical survey in order to highlight the benefits of the above-mentioned Web-based social software tools from the student's point of view; 268 first-semester students, all in the first term of their studies at Austrian universities from different study programs, took part in this survey. The students were asked to use one or more of these tools as a learning tool. Participation in this survey was voluntary.

The presentation of the results of this survey is divided into three parts: first, the use of the tools by the students (before they started their studies); second, the experiences the students had made with the tools during the study; and third, the potential future usage.

The article concludes with a discussion of the results of this survey in contrast with other empirical studies already published. Also, the

Related Content

Mobile Phone: Repurposed Assistive Technology for Individuals with Disabilities
Emily C. Bouck, Andrea Jasper, Laura Bassetteand Jordan Shurr (2015). *Encyclopedia of Mobile Phone Behavior (pp. 1442-1455).*
www.irma-international.org/chapter/mobile-phone-repurposed-assistive-technology-for-individuals-with-disabilities/130247

Health Workforce Talent Management in a Post-COVID-19 Digital Age
Divya Aggarwal, Vijit Chaturvediand Anandhi Ramachandran (2022). *Multidisciplinary Perspectives Towards Building a Digitally Competent Society (pp. 189-207).*
www.irma-international.org/chapter/health-workforce-talent-management-in-a-post-covid-19-digital-age/310773

Emotional Digitalization as Technology of the Postmodern: A Reflexive Examination from the View of the Industry
Claus Hohmann (2007). *International Journal of Technology and Human Interaction (pp. 17-29).*
www.irma-international.org/article/emotional-digitalization-technology-postmodern/2894

Machine Learning Techniques to Diagnose and Treat Cancer Disease
Mercedes Barrachinaand Laura Valenzuela (2022). *Artificial Intelligence for Societal Development and Global Well-Being (pp. 163-182).*
www.irma-international.org/chapter/machine-learning-techniques-to-diagnose-and-treat-cancer-disease/309194

Multifaceted Applications of Data Mining, Business Intelligence, and Knowledge Management
Kijpokin Kasemsap (2016). *International Journal of Social and Organizational Dynamics in IT (pp. 57-69).*
www.irma-international.org/article/multifaceted-applications-of-data-mining-business-intelligence-and-knowledge-management/157293