### Chapter 3.6

# E-Learning with Wikis, Weblogs and Discussion Forums: An Empirical Survey about the Past, the Presence and the Future

#### **Reinhard Bernsteiner**

University for Health Sciences, Austria

#### **Herwig Ostermann**

University for Health Sciences, Austria

#### **Roland Staudinger**

University for Health Sciences, Austria

#### **ABSTRACT**

This chapter 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 which support learning from a student's perspective. The chapter concludes that social software tools have the potential to be a fitting technology in a teaching and learning environment.

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#### INTRODUCTION

One major task of higher education is to train students for the requirements of their future work in order to apply and adapt 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 the 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 the digital and internet technology (Prenksy, 2001).

Oblinger and Oblinger (2005) characterise 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 as "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 background and skills. They are highly influenced by social networking experiences and 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 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.

The paper 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. The participation in this survey was voluntary.

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

The paper concludes with a discussion of the results of this survey in contrast with other empirical studies already published. Also the limitations of this survey and ideas for further research are pointed out.

#### THEORETICAL FRAMEWORK

This part refers to the necessary theoretical background required for the following empirical 22 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

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