Claudia Bremer

Abstract für die eLBa 2012[1]:

Wikis in elearning and student projects

Introduction

The usage of wikis covers many different scenarios: they are used for collaborative text production in knowledge management systems, in elearning settings, or to provide online information around projects, institutions, or special topic areas. Their ease to use and common availability within learning management systems make them an attractive tool for teachers and learners. Either teachers use wikis as easily to edit webpages in order to provide information to learners (Konieczny 2007), or learners produce content collaboratively. An example for the first setting is the *Pflegewiki*[2] described by Panke and Thillosen (2008) which meanwhile became an information portal in the area of health care. Universities and educational institutions also use wikis in order to provide study relevant information. Examples are the Campus-Wiki of the University of Hamburg, *Unipedia* at the University Koblenz, the student association's wiki at the University Bremen, the university's library wiki at the University Rostock (Kleimann 2007), the *L-Wiki*[3] for teacher students at the University of Frankfurt, and the study information platform *Studiger*[4] described by Beisswenger and Storrer (2008, 2010). Some wikis have rather subject related intentions such as the *wiki portal for teaching and learning with digital media*[5] at the University Potsdam which addresses teachers and students in order to provided them an opportunity for exchange around options and challenges of new media in learning processes.

Besides the provision of information, wikis are used as a tool for discussions such as bulletin boards (Bergin 2002), and especially for collaborative text production by students (Brahm et al. 2007, Beisswenger & Storrer 2008, 2010, Bremer 2006, Ebersbach et al. 2008, Gaiser & Thillosen 2009, Konieczny 2007). Buchem and Hagenhofer (2007) describe a wiki based community project in which students can find material in order to prepare for exams and which combines information and communication aspects because learners can also provide content. According to the authors the quality of the exams were improved because teachers learned more about the reflection and preparation process of the students through the wiki (Buchem & Hagenhofer 2007).

---

[1] http://www.e-learning-baltics.de/science_program/
[2] http://www.pflegewiki.de/wiki/Hauptseite
[3] http://www.l-wiki.uni-frankfurt.de
[4] http://www.studiger.tu-dortmund.de
[5] http://www.uni-potsdam.de/db/wiki/elearning/index.php/Hauptseite

Other reports on the usage of wikis in learning processes can be found in (Guzdial 1999) who describes the *CoWeb* which already was published in 1999. While at the beginning, wikis were mainly used in the field of computer science (Edington et al. 2005), meanwhile wikis can be found in nearly every subject area (Augar et al. 2005, Lamb 2004, Schwartz et al. 2004). Examples at universities are well described in literature (Bristow 2005, Bruns & Humphrey 2005, Edington et al. 2005, Doebeli 2005a, 2005b, Ferris & Wilder 2006, Gaiser & Thillosen 2009, Godwin 2003, Kleimann 2007, Kozieczny 2007, Lamb 2004, Schwartz et al. 2004, Xu 2007). Besides these examples, wiki projects can also be found in schools (Beisswenger & Storrer 2010, Jonietz 2005), companies, and adult educational institutions (Bartel 2006, Robes 2006).

Research questions and first results

Studies upon the participation in text producing processes in *wikipedia* (Stegbauer 2009, Ebersbach et al. 2008) and wiki usages in learning settings (Thelen & Gruber 2005) show a rather low voluntary participation rate. Based on these results, the University of Frankfurt conducted a study in order to better understand what motivates students' encouragement in text production processes in wikis. Especially, wikis which were introduced by students' elearning projects financed by the university seemed to be a good vantage point for bottom up participation. For comparison, the wikis used in seminars were examined in order to better understand what motivates students to participate. Do group members participate equally, or do role differences occur such as described for *wikipedia* by Stegbauer (2009). Also aspects such as motivation through open access, self organization, autonomy, personal relevance and interest, diversity, and serendipity effects as described by Moskaliuk and Kimmerle (2008) were examined (see also Moskaliuk 2008). The study also focused on the collaboration and participation processes within the teams as well as on motivational aspects around students' participation and their provision of material and the extent to which the objectives of the project members were met. The aspects of interest along by which the wiki usages were analyzed and compared are

- the purpose of the usage of the wiki
- the existence of an 'editor team'
- number of people involved in this team, number of members in an inner circle of writers, a circle of readers, different target groups
- Do people overwrite each others' articles? How is the collaborative text production organized? Are there rules? Do they apply?
- Are quality checks applied? Are articles reviewed and/or approved?
- Is the target group of readers reached?
- What is the motivation of the writers to participate, to get involved?
- What kind of incentives are applied?

For the study nine different wiki projects were examined: four wikis were started by students in order to provide study relevant material to their fellow students. Two wikis

were applied in university seminars in order to provide students a platform to produce content which later was provided to school teachers and other students. One wiki is run by an university institution, the center for teacher students, and has the intention to provide study relevant information to this target group. As a result of the study, a deeper understanding of editing and cooperation processes in wikis could be gained.

In a full paper version the different wiki projects will be described along with their objectives and the cooperation structures found. The results which were collected through oral interviews based on a questionnaire and an expert round for deeper discussions are compared to results found in studies mentioned above.

First results show a rather disillusioning picture: Mainly students are motivated to cooperate in text production processes in wikis if this is part of the compulsory output they have to produce in seminars. But besides this extrinsic motivation other motivational aspects occur. For example the provision of information to a larger group showed to have a positive effect. In this case aspects of communal constructivism (Holmes 2001) or service learning (Weigert 1998) might occur. But as the results show these effects are rare and even the bottom up started wikis, made by students, had difficulties to engage more active writers into the teams. Being doubtful about the quality of their contribution might prevent students from participation, especially if experts and people from higher status groups are involved (Ebersbach et al. 2008). [6] Uncertainty can be reduced by provision of examples, training and consulting as well as feedback loops during as part of quality control procedures. Some projects even applied creative and effective mechanisms to encourage students to participate. Other projects managed to become part of the study program in their department. Despite some disappointments and unmet expectations, overall, almost all of the projects provided satisfying results to their active students.

Bibliography

Augar, Naomi, Ruth Raitman & Wanlei Zhou (2004). Teaching and learning online with wikis. In: R. Atkinson, C. McBeath, D. Jonas-Dwyer & R. Phillips (Ed.): Beyond the comfort zone: Proceedings of the 21st ASCILITE Conference, 95-104. http://www.ascilite.org.au/conferences/perth04/procs/augar.html (2.2.2012)

Bartel, Tim (2006). Nutzung von Wikis in Unternehmen – Kollaboratives Arbeiten mit Wikis im Unternehmensumfeld. In: Tagungsband zur KnowTech 2006 – Mit Wissensmanagement besser im Wettbewerb, 8. Konferenz zum Einsatz von Wissensmanagement in Wirtschaft und Verwaltung; Muenchen, 25 - 26. Oktober 2006 im Rahmen der SYSTEMS 2006. Muenchen: SYSTEMS, 161-168.

Beisswenger, Michael & Angelika Storrer (2008). Wiki-Einsatz in universitaeren Blended Learning-Szenarien: Konzepte und Erfahrungen aus der Dortmunder Germanistischen Linguistik. In: Sybille Hambach, Alke Martens & Bodo Urban (Ed.): e-Learning Baltics 2008. Proceedings of the 1st International eLBa Science Conference in Rostock, Germany, June 18-19, 2008. Stuttgart, 129-138.

---

[6] On the loss of motivation due to low subjective ranking the own contribution see (Kerr & Brunn 1983)

Beisswenger, Michael & Angelika Storrer (2010). Kollaborative Hypertextproduktion mit Wiki-Technologie. Beispiele und Erfahrungen im Bereich Schule und Hochschule. In: Eva-Maria Jakobs, Katrin Lehnen & Kirsten Schindler (Ed.): Schreiben und Medien. Schule, Hochschule, Beruf. Reihe "Textproduktion und Medium" 10, 13-36.

Brahm, Taiga, Selina Ingold & Bruno Wenk (2007). Paedagogische Einsatzszenarien von Wikis unter besonderer Beruecksichtigung der Nutzung an der FHS St. Gallen – Hochschule fuer Angewandte Wissenschaften. In: Sabine Seufert & Taiga Brahm (Ed.): „Ne(x)t Generation Learning": Wikis, Blogs, Mediacasts & Co. - Social Software und Personal Broadcasting auf der Spur. St. Gallen: SCIL-Arbeitsbericht 12, 54-68.

Bremer, Claudia (2006). Wikis im eLearning. In: Christoph Rensing (Ed.): Proceedings der Pre-Conference Workshops der 4. e-Learning Fachtagung Informatik DeLFI , Darmstadt 11.-14.9.06. Bonn: Gesellschaft fuer Informatik, 101-106.

Bristow, Robert (2005). Beyond Email: Wikis, Blogs and Other Strange Beats. In: Ariadne, 42. http://www.ariadne.ac.uk/issue42/beyond-email-rpt (2.2.2012)

Bruns, Axel & Sal Humphreys (2005). Wikis in teaching and assessment: the m/cylopedia project. In: WikiSym '05: Proceedings of the 2005 international symposium on wikis. New York: ACM, 25-32.

Buchem, Ilona & Thomas Hagenhofer (2009). Didaktische Entscheidungen bei der Konzeption einer Web 2.0-basierten Lernercommunity. In: Andreas Schwill & Nicolas Apostolopoulos (Ed.): Lernen im digitalen Zeitalter. Workshop-Band. Dokumentation der Pre-Conference zur DeLFI2009, Berlin: Logos, 26-28.

Doebeli Honnegger, Beat (2005a). Wiki und die starken Lehrerinnen. In: F. Steffen (Ed.): Unterrichtskonzepte fuer informatische Bildung. Fachtagung Informatik und Schule der Gesellschaft fuer Informatik. Bonn: Gesellschaft fuer Informatik, 173-183.

Doebeli Honnegger, Beat (2005b). Wikis: a rapidly growing phenomenon in the German-speaking school community. In: WikiSym '05: Proceedings of the 2005 international symposium on wikis. New York: ACM. 113-116.

Ebersbach, Anja, Markus Glaser & Richard Heigl (2008). Social Web. Berlin: Springer.

Edington, Justin, Joseph Funk, Rick Thorpe & Jacob Warrington (2005). Professional Applications of Wikis and Weblogs. Prepared for the Open Source Development and Documentation Project. http://www.docstoc.com/docs/28679464/h3The-Professional-Applications-of-Wikis-and-Weblogsh3# (2.2.2012)

Ferris, S. Pixy & Hilary Wilder (2006). Uses and Potentials of Wikis in the Classroom. In: Innovate 2 (5).

Gaiser, Birgit & Anne Thillosen (2009). Hochschullehre 2.0 zwischen Wunsch und Wirklichkeit. In: Nikols Apostopoulos, Harriet Hoffmann, Veronika Mansmann & Andreas Schwill (Ed.): E-Learning 2009. Lernen im digitalen Zeitalter. Muenster: Waxmann, 185-196.

Godwin-Jones, Robert (2003). Emerging Technologies. Blogs and Wikis: Environments for Online Collaboration. In: Language Learning & Technology 7 (2).

Guzdial, Mark (1999). Teacher and Student Authoring on the Web for Shifting Agency. Presented at AERA 99 Session: How can CSCL (Computer Supported Collaborative Learning) change classroom culture and patterns of interaction among participants? http://guzdial.cc.gatech.edu/papers/aera99/default.html (2.2.2012)

Holmes, Bryn, Brendan Tangney, Ann Fitz Gibbon & Tim Savage (2001). Communal Constructivism: Students constructing learning for as well as with others. https://www.cs.tcd.ie/publications/tech-reports/reports.01/TCD-CS-2001-04.pdf (2.2.2012)

Jonietz, D. (2005). Ein Wiki als Lernumgebung? Ueberlegungen und Erfahrungen aus schulischer Sicht. In: J. M. Haake, U. Lucke, D. Tavangarian (Ed.): DeLFI 2005: 3. Deutsche e-Learning Fachtagung Informatik. Bonn: Koellen, 35-44.

Kerr, Norbert L. & Steven E. Bruun (1983). Dispensability of member effort and group motivation losses: free rider effects. In: Journal of Personality and Social Psychology 44, 78-94.

Kleimann, Bernd (2007). eLearning 2.0 an deutschen Hochschulen. In: Marianne Merkt, Kerstin Mayrberger, Rolf Schulmeister, Angela Sommer & Ivo an den Berk (Ed.): Studieren neu erfinden - Hochschule neu denken. Muenster: Waxmann, 149-201.

Konieczny, Peter (2007). Wikis and Wikipedia as a Teaching Tool. In: International Journal of Instructional Design and Distance Learning, Vol. 4. (1), Januar 2007, 15-30. http://www.itdl.org/journal/jan_07/article02.htm (2.2.2012)

Lamb, Brian (2004). Wide Open Spaces: Wiki Ready or Not. In: Educause Review. 39 (5), 36-48.

Moskaliuk, Johannes & Joachim Kimmerle (2008). Wikis in der Hochschule - Faktoren fuer den erfolgreichen Einsatz. In: eTeaching.org, 19.11.2008. http://www.e-teaching.org/didaktik/kommunikation/wikis/08-11-19_Moskaliuk-Kimmmerle_Wikis.pdf (2.2.2012)

Moskaliuk, Johannes (2008). Wissenskonstruktion mit Wikis aus konstruktivistischer und systemtheoretischer Sicht. In J. Moskaliuk (Ed..). Konstruktion und Kommunikation von Wissen mit Wikis. Boizenburg: Werner Huelsbusch, 51-68.

Panke, Stefanie & Anne Thillosen (2008). Unterwegs auf dem Wiki-Way. Wikis in Lehr- und Lernsettings. In: eTeaching.org, Didaktisches Design. http://www.e-teaching.org/didaktik/kommunikation/wikis/08-09-12_Wiki_Panke-Thillosen.pdf (2.2.2012)

Robes, Jochen (2006). e-Learning 2.0: Neue Perspektiven fuer die Weiterbildung. http://www.weiterbildungsblog.de/wp-content/uploads/2011/08/elearning_20_jr. pdf (2.2.2012)

Schwartz, Linda, Sharon Clark, Mary Cossarin & Jim Rudolph (2004). Educational Wikis: Features and Selection Criteria. In: The International Review of Research in Open and Distance Learning 5. http://www.irrodl.org/index.php/irrodl/article/view/163/244 (2.2.2012)

Stegbauer, Christian (2009). Wikipedia. Das Raetsel der Kooperation. Wiesbaden: Verlag fuer Sozialwissenschaften.

Thelen, Tobias & Gruber, Clemens (2005). Textproduktions- und Kommunikationsprozesse in WikiWikiWebs. In: Hans-Werner Huneke (Ed.): Geschriebene Sprache: Strukturen, Erwerb, Modellbildung. Weinheim: Deutscher Studienverlag, 183-202. http://tobiasthelen.de/uploads/Wissenschaft/thelen_gruber_2005_textproduktions_und_kommunikationsprozesse_in_wikiwikiwebs.pdf (2.2.2012)

Weigert, Kathleen Maas (1998). Academic Service Learning: Its Meaning and Relevance. In: New Directions for Teaching and Learning 73, 3-10.

Xu, Li (2007). Project the wiki way: using wiki for computer science course project management. In: Journal of Computing Sciences in Colleges 22 (6), 109-116.