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APPLICATION OF SOCIAL NETWORKING AS A REFLECTIVE LEARNING AND CRITICAL THINKING TOOL

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Abstract

Educators seek ways to improve the learning process such as stimulating students' interest in subject matter, helping students visualize concepts, and heightening student-student and student-instructor engagement and collaboration. One valuable approach is through the application of technology.

The objective of this research is to evaluate the use of Twitter, a social networking technology, in a graduate level online class to support reflective learning and critical thinking. It describes a study in which students participated in a weekly learning activity in which they would share their reflections from the course through the use of Twitter messages and demonstrate critical thinking. A survey was conducted to capture student reactions to the use of this social networking media for these purposes.

Introduction

Context and relevancy of this study

Educators constantly seek ways to improve the learning process such as the practice of reflective learning and the promotion of critical thinking. There are various ways to achieve this and one novel approach is through the application of technology. This research explored the use of an online social networking service to facilitate reflective and critical thinking in order to provide a more engaging online experience for both students and instructors.

The objective of this research is to evaluate the use of one social networking service, Twitter, by students in a graduate class towards enhancing the online learning experience.

Another objective is to compare the use of Twitter with the use of other social media platforms, specifically, blogs, wikis and podcasts – and evaluate the effectiveness of each.

Background

Twitter is a popular microblogging service in which users send and read 140-character messages called *tweets*. Users access Twitter via websites, mobile device apps or SMS. Users can create their own tweets and if they wish they can subscribe or *follow* other users' tweets. Messages can be grouped together using hashtags which are word or phrases with a # prefix.

Application

The study period was during 2015-2016 semesters starting from the spring 2015 through the fall 2016 semesters. Approximately 100 students were exposed to the study.

Students were assigned a voluntary weekly activity in which they would capture their reflections as they progressed through the course. As an incentive, they would receive bonus points at the end of the semester if they participated in the activity regularly.

The instructional steps which the students were asked to follow as listed below:

1. Signup for an account and watch videos explaining Twitter and hashtags.
2. After end of each week, tweet the following (be sure to include the hashtag: #610reflect):
   - What did you learn in the preceding week? (Not a list of facts, but rather, what can you take from the lesson, what had an impact on you, and what has value to you?)
   - How do you connect what you learned this week with your personal experience or what you already knew?
   - How could/would you apply your new knowledge?
   - What new knowledge and skills do I need and want?
3. At the end of the semester, provide culminating tweet(s).

Throughout the semester, students were encouraged to visit Twitter and use the hashtag #610reflect to review their fellow students' tweets and participate in the exchange.

A survey was conducted at the termination of each semester. This is the link to the survey form:
https://docs.google.com/forms/d/18485ZRw29XyarfyH9RhAWxGNVCqrW2XglkPkhnpQVV0/viewform?c=0&w=1

Findings

Preliminary results from surveys are summarized below:

- For most students, this was their first experience with Twitter. For those it was their first time using Twitter, a vast majority of the students plan to use it again.
- Most students found Twitter a "good" way to collect weekly reflections. No student felt that it was a "poor" way.
- All students felt that the reflective writing they did helped in some degree in their learning experience.
- To improve their experience, they suggested more instruction on the use of Twitter include the "language" of Twitter.
- Most students felt that Twitter reflections should not be graded and be kept as an extra credit assignment.

Lessons learned from this study include the following:

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- Use a short hashtag. There is a 140-character limitation to the length of a tweet.
- Outsiders should be allowed to participate and/or follow the students in Twitter.
- Provide this media as an opportunity for participants to ask questions and provide comments and feedback to the instructor and classmates.
- Utilize photos in tweets for richer exchanges.
- Encourage use of mobile devices to access the class tweets.
- This experience was an effective introduction to Twitter and social media.

It was concluded that Twitter can used for reflective learning. When comparing with blogs, wikis, podcasts, Twitter offered these advantages:

- high availability (such as through mobile apps);
- concise messages (140 characters);
- accessibility to the instructor and classmates;
- immediate collaboration and exchange with other students.

However, there were disadvantages compared to these other platforms. For example:

- Blogs, wikis and podcasts offered a larger and richer environment for reflection.
- Weekly blogs tend to be much more structured and orderly.
- Wikis afford more interaction when engaging with a body of work.
- Podcasts takes advantage of the audio capabilities.

All in all, Twitter showed to be a useful tool to promote engagement and reflective learning in an online graduate class. However, the 140-character limitation restricted in-depth critical thinking by the students.

Conclusions

There are new, innovative and useful ways to utilize technology to improve the quality of learning for students and heighten the effectiveness of instructors. When applied properly, technology such as social networking sites will mean higher levels of interaction and productivity, increased accessibility, and improved efficiencies for everyone involved. The future looks very promising as the educational technologies such as microblogs grow and evolve to better meet the needs of students, educators and administrators.

References

1. Allen, M., & Long, J. (2009, October). *Learning as knowledge networking: Conceptual foundations for revised uses of the Internet in higher education*. Paper presented at the World Congress on Engineering & Computer Science, San Francisco. Retrieved from http://netcrit.net/content/wcecslearningasknet2009.pdf
2. Best Online Universities LLC (2009, August 11). 13 enlightening case studies of social media in the classroom. Message posted to http://web20teach.blogspot.com/2007/08/twitter-tweets-for-higher-education.html

ISBN 978-615-5511-18-9

3. Burden, K., & Atkinson, S. (2008). Evaluating pedagogical affordances of media sharing Web 2.0 technologies: A case study. In Hello! Where are you in the landscape of educational technology? *Proceedings of the Australian Society for Computers in Learning in Tertiary Education [ascilite]. Melbourne, Australia*. Retrieved from http://www.ascilite.org.au/conferences/melbourne08/procs/burden-2.pdf

4. Clark, R., & Mayer, E. R. (2011). *e-Learning and the science of instruction: Proven guidelines for Consumers and designers of multimedia learning* (3rd ed.). San Francisco: Pfeiffer.

5. Crook, C., Fisher, T., Graber, R., Harrison, C., & Lewin, C. (2008, September). Implementing Web 2.0 in secondary schools: Impacts, barriers and issues. Retrieved from http://dera.ioe.ac.uk/1478/1/becta_2008_web2_useinschools_report.pdf

6. Hacker, D. J., & Niederhauser, D. S. (2000). Promoting deep and durable learning in the online classroom. In R. E. Weiss, D. S. Knowlton, & B. W. Speck (Eds.), *Principles of effective teaching in the online classroom* (pp. 53–64). San Francisco, CA: Jossey- Bass.

7. Lewis, C. C., & Abdul-Hamid, H. (2006, May). Implementing effective online teaching practices: Voices of exemplary faculty. *Innovative Higher Education, 31*(2), 83-98. doi: 10.1007/s10755-006-9010-z

8. Michigan State University Center for Teaching and Learning (2009, April 16). *Social media in the classroom*.

9. Rienzo, T., & Han, B. (2009, Summer). Microsoft or Google Web 2.0 tools for course management. *Journal of Information Systems Education, 20*(2), 123-127. Retrieved November from http://jise.org/Volume20/20-2/Pdf/V20N2P123-abs.pdf

10. Selwyn, N. (2007). *Web 2.0 applications as alternative environments for informal learning – A critical review*. Paper presented at the OECD-KERIS International Expert Meeting on ICT and Educational Performance, Cheju Island, South Korea. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.117.9470&rep=rep1&type=pdf

11. Young, J. (2008). 3 ways that web-based computing will change colleges—and challenge them. *The Chronicle of Higher Education, 55*(10), A16.

ISBN 978-615-5511-18-9