

Supporting Learning Through the Use of Self-Reflection Blogs: A study of the experience of blended learning students in the United Arab Emirates

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Abstract

This exploratory study seeks to examine how the use of student-written blogs support student learning through the student perspective. The blogs were introduced to provide support in four distinct areas: as a medium for facilitating learning; as a medium for interactivity; as a medium for metacognitive thought and reflection; and as a learning tool. This study was conducted over the course of one academic year with undergraduate and postgraduate students enrolled in a blended learning university located in the United Arab Emirates. Results indicate that for the students in this study, the use of blogs provided support in all four identified areas, as well as in additional areas not expected by the researchers. This paper provides details of the results of the data analysis, provides suggestions for classroom implementation, discusses the limitations of this research study, and proposes research questions which can guide future research studies on this topic.

Keywords: blogs; learning facilitation; online learning; student perspectives; United Arab Emirates; Web 2.0 technology

Introduction

As our world grows smaller and increasingly more connected, technological tools become embedded into the social fabric of our cultures and enable greater sharing, collaboration, and interaction among individuals and groups. In particular, the advent of Web 2.0 technology has increased the rapidity of adoption of such tools into our everyday lives. Of course, such technology has not only changed our social interactions but has also had a great impact on instructional strategies, and it is critical as these tools are so rapidly adopted into our pedagogies that they be critically examined for evidence of the type of impact, if any, they have on the learning process and outcomes of our present and future students. This paper reports on an exploratory study that seeks to illuminate student perspectives of using a particular Web 2.0 technology, blogging, in enhancing the learning process.

Web 2.0 technology in support of student-centered learning

Proponents of constructionist theory posit that learning is both an active and a reflective process (Paily, 2013) and that for learning to be truly student-centered, the student must play an active role in their learning activities. In other words, students are not only given autonomy and control over their learning, but indeed must also take responsibility and ownership of their learning process, and not rely just on the instructor's direction (Neo, Neo & Kwok, 2009). Therefore, as online education continues to become increasingly present in higher education, it is critical that it is used in such a way as to support best practices in learning, and not just as an online replication of the traditional, teacher-centered classroom.

Web 2.0 technology is noted for its critical characteristics of enabling user-generated content by any user, as well as promoting sharing and collaboration of knowledge, regardless of knowledge of programming language and/or sophisticated technological skill. Because of these features, the use of Web 2.0 technology enables online learning to move beyond a teacher-centered approach to promote more active learning by students (Avci & Asker, 2012; Neo *et al.*, 2009). Indeed, such technology provides instructors with the opportunity to “provide opportunities for students to take ownership of the learning process” (Martin & Noakes, 2012, p. 288). Of the various Web 2.0 technologies available, the weblog, or blog, has gained increasing interest and traction in educational use and research.

Blogging in higher education

As Web 2.0 technology becomes increasingly prevalent as a non-extraordinary part of social life, it is inevitable that scholars have sought to understand the role it can play in education. In particular, weblogging, or blogging as it is more commonly known, is a Web 2.0 tool which is steadily gaining acceptance as a viable tool in the learning process. Over the past decade, scholars have demonstrated multiple uses for blogs in enhancing student learning (Churchill 2009; Ducate & Lomicka 2008; Goldman, Cohen & Sheahan 2008). It has been found that blogs help to create a more student-centered instructional site, almost in the guise of an extension of the classroom through which students are encouraged to continue in interaction with each other as well as the instructor (Higdon & Topaz 2009; Neo & Neo 2010; Williams & Jacobs 2004). Kerka (1996) highlights the usefulness of blogs in a learner’s documentation of their learning, acting as a collection point for knowledge aids in self-analysis and reflective activities at a later date. Furthermore, blogs allow a high degree of customization, which Goh, Quek and Lee (2010) theorize leads to a greater sense of ownership of the learning process. There is also evidence that blogs can help to improve literacy skills in learners (Downes, 2004).

A growing body of empirical research is also demonstrating evidenced outcomes from the use of blogging. The outcomes which have been reported include: greater student to student interaction (Neo & Neo, 2010); students taking greater ownership of their learning process (Martin & Noakes, 2012); an enhancement of reflective thinking (Farmer, Yue & Brooks 2008) and deeper learning and knowledge construction (Ferdig & Trammel, 2004; O’Donnell, 2006); as well as increased teacher-learner social interaction, creativity, and high-level thinking skills (Avci & Askar, 2012). Undoubtedly, the studies published so far on the use of blogging to facilitate learning demonstrate that from a pedagogical perspective, blogging is a valuable tool in an instructor’s arsenal.

Research question

Scholars have used varied theoretical models to explore the impact of Web 2.0 technology, and specifically blogging, on the learning process. These range from a reflective thinking perspective (Dos & Demir, 2013; Kukkonen *et al.*, 2011), social constructivism (Li 2010; Namwar & Rastgoo, 2008; Paily 2013), and a community of inquiry framework (Daspit & D’Souza, 2012; Garrison *et al.*, 1999, 2001; Garrison & Arbaugh, 2007; Jimoyiannis & Angelaina, 2012). Regardless of which varied theoretical model is used, as discussed in the previous section there is widespread evidence from a pedagogical perspective of the usefulness of blogging in the learning process. However, what is missing from the academic discourse on this topic is the student perspective of its usefulness. In other words, while instructors and researchers alike are becoming increasingly convinced of the usefulness of blogging, do learners share this conclusion? Therefore, the intent of this study was

guided by the following research question: *From a learner's perspective, in what ways does the use of blogging enhance and improve the learning experience in a blended-learning environment?*

The study

The exploration of the impact of blogging on learner perceptions of enhancing the learning experience was conducted during one academic year with 24 undergraduate and postgraduate learners studying at a blended-learning medium university in the United Arab Emirates during the academic year of 2012–2013. All learners were working toward degrees with a human resource management concentration, and all were taking required courses in their respective degree programs. All learners spoke English as a Second Language, and all courses in the university are conducted in English.

The blogs were introduced to provide support in four distinct areas: as a medium for facilitating learning; as a medium for interactivity; as a medium for metacognitive thought and reflection; and as a learning tool. Learners were required to publish weekly blog postings in their individual blogs while adhering to posting guidelines for each week in the semester, excluding exam weeks. Learners were assessed on the basis of a rubric which awarded points as follows:

Table 1: Rubric for assessing student blog postings

Rating	Characteristics
2	Good. The blog post is focused and coherently integrates examples with explanations or analysis. The entry reflects in-depth engagement with the topic.
Low (1)	Satisfactory. The blog post is not focused; and/or engagement with the topic is limited; and/or does not go in depth or provide analysis.
0	No Credit. The blog post is missing or consists of one or two disconnected sentences.

The total assessment for blogging was incorporated into the participation grade for the course, with the blogging component accounting for four percent of the total course grade.

Data was collected through the instructor as participant observer; analysis of the blog content and artifacts generated by the learners; an anonymous, voluntary survey administered to learners at the end of the academic year; and a voluntary focus group of participating learners. The voluntary survey contained 16 items to be answered on a 5-point Likert scale (from 1—Strongly Disagree to 5—Strongly Agree) which were designed to collect perceptions regarding learning in the course taken; how blogging contributed to the learning process; reasons for blogging; and willingness to blog in the future. In addition four demographic questions were included in the survey. The survey items were adapted from the survey instrument used by Churchill (2009). Participants were also provided with two open-ended questions about their blogging experiences. Multiple sources of data were included to ensure a more comprehensive understanding of the phenomena under study.

Results

Out of 24 learners enrolled in the targeted classes, 20 participated in the quantitative survey (an 83.3% response rate), and six participated in the follow-up focus group session (all of which self-reported that they answered the quantitative survey). The results therefore discussed in this paper will concentrate on those learners that gave feedback through the survey and/or focus group.

Of the 20 survey respondents, half were undergraduates and the other half were graduate students. Eighty-five percent of the participants had an overall grade point average (GPA) of 3.00

Table 2: Demographics of survey participants

Gender	Frequency	Age Category	Frequency
Female	80%	18–21	15%
Male	20%	22–29	45%
		30–39	25%
		40–49	15%
		50–59	0%
Average GPA	Frequency		
3.75–4.00	15%		
3.50–3.74	45%		
3.25–3.49	10%		
3.00–3.24	15%		
2.75–2.99	15%		
2.74 and below	0%		

or above on a 4.00 scale. Eighty percent of respondents were female, while the largest age category was between 22–29 years of age (see Table 2 for detailed demographic information). Results of the survey are presented in Table 3. In Table 3, the survey choices of Strongly Agree and Agree are collapsed into “Agree.” Similarly, the survey choices of Strongly Disagree and Disagree are collapsed into “Disagree.” Furthermore, the Cronbach Alphas by section are as follows: 1. $\alpha = .99$; 2. $\alpha = .95$; 3. $\alpha = .94$; 4. $\alpha = .77$.

Responses to the open-ended questions, as well as feedback provided during the focus group, support the survey data and also identified a number of unexpected benefits of blogging. The open-ended responses and comments made during the focus group, when analyzed, fall under six distinct themes: 1) study/review aid; 2) learning/analysis tool; 3) allowing for personal expression and interaction; 4) providing connections between the studied content and real world application; 5) building self-confidence; and 6) improving writing skills. Student perspectives for each of these themes are provided below.

Data from the survey suggests that the learners surveyed believed that blogging aided their learning in many ways. For example, over 70% believed that blogging facilitated and contributed to their learning. More specifically, learners indicated that blogging supported their learning in the following ways: interaction with the instructor (75%); as a self-reflection tool in reviewing learned content (75%); and as a study aid for exam preparation (66.7%). Indeed, the learners more strongly agreed with blogging for these reasons rather than just for fulfilling assessment requirements in the course. There was also strong indication that learners would continue to blog in future classes, even if not necessarily required as a part of a course assessment.

Several participants described how useful blogs were in reviewing learned content and preparing for exams: As one student commented, “*Blogging encouraged me to pay more attention to the lecture during class and read the materials more carefully during self-study weeks.*” Another student reported that the benefits of blogs can be evident during exam preparation period, with one student

Table 3: Data on survey items as completed by participants (n= 20)

Survey Item	Agree % (n)	Disagree % (n)	Mean
1. Learning in this course			
1.1 Compared to other courses, in [this instructor's] course(s) I am learning much more.	75% (18)	8.3% (2)	4.35
1.2 In this course I believe I will get a higher final grade than in other courses.	62.5% (15)	8.3% (2)	4.05
1.3 Overall in this course, blogging facilitated and contributed to my learning.	70.8% (17)	8.3% (2)	4.25
1.4 Due to the blogging requirement in this course, [this instructor] was involved in supporting my learning more than professors in other courses.	72% (18)	8.3% (2)	4.40
2. Blogging contributed to my learning in the following ways			
2.1 Accessing and reading blogs of my classmates.	58.3% (14)	16.7% (4)	3.65
2.2 Encouraged me to review the weekly slides and other Virtual Learning Environment materials.	75% (18)	8.3% (2)	4.35
2.3 Receiving comments from other classmates about my blog postings.	37.5% (9)	12.5% (3)	3.45
2.4 Receiving comments from [the instructor] in relation to my blog postings.	75% (18)	8.3% (2)	4.35
2.5 Accessing and reading my blog when studying for course exams or assignments.	66.7% (16)	8.3% (2)	4.10
3. Reasons for blogging			
3.1 Because of assessment requirements.	62.5% (15)	16.7% (4)	3.85
3.2 Because it contributed to my learning.	75% (18)	8.3% (2)	4.30
3.3 Because it was a useful study tool.	66.7% (16)	12.5% (3)	4.15
3.4 To have one-on-one interaction with [the instructor].	70.8% (17)	12.5% (3)	4.20
4. Willingness to blog in the future			
4.1 In future I will continue blogging on my own to support my learning.	45.8% (11)	12.5% (3)	3.80
4.2 In future I will blog if it is required by a professor.	66.7% (16)	12.5% (3)	4.10
4.3 In future I will blog if it is a part of a course assessment.	70.8% (17)	12.5% (3)	4.15
4.4 In future I would prefer not to have to do blogging.	16.7% (4)	58.3% (14)	2.10

going so far as to say *"I mean, I barely had to study for my midterm exam thanks to the blogs. I mean, without those blogs, it would be like other courses . . . where study material just piles up."* Moreover, another student provided a description of how blogging aided in meta-cognitive activities: *"[Blogging] helped me in linking previous knowledge and experiences with current ones and creates an enjoyable learning situation."*

The participating students reported that the blogs not only helped prepare them for exams, but actually aided them in building their learning and analytical abilities. One learner expressly stated this: *"I feel it is extremely crucial for the learning process,"* while others expressed this sentiment more personally. For example, one student commented that *"I just feel that [blogging] allows me to think deeply."* Another student mused about the transformational nature of learning through blogs: *"I start out by wanting to answer the 3 questions you provided initially but then I go deeper, why is that? Blogging tends to provoke questions."*

The students who participated in the focus group greatly enjoyed the expressive and interactive aspects of blogging. One learner, when asked about her favourite part of the blogging experience, reported that *"I get to express my feelings about the topic."* Another student stated *"I like the interaction and reading your comments is always a pleasure,"* while a third most enjoyed *" . . . the feedback because it encourages me a lot."* Another learner expressed pleasure in that *"if we need advice from [the instructor] we can address our problems or the challenges we are facing."*

Participants also provided meaningful feedback with regards to the use of blogging in connecting their acquired knowledge from their class to real world situations in the HRM field. One student mentioned that blogging *"enhances my experience and lets me search for more information about any topic and how it affects my reality."* Another student said that she would advise new students in the program to embrace blogging, as *"it's the way to understand what is going on with HR knowledge by combining all that information with their experience."*

In addition, although the building or reinforcement of self-confidence and improvement of writing skills were not considered as potential outcomes when blogging was added to the courses in question, several students reported that blogging did provide these benefits. One student discussed how the blogging experience *"made me confident on what I was writing and made me analyse things,"* while another student pointed out that she felt blogging was *"cool because you know it's ok to make mistakes."* Indeed, one student reported how blogging provided benefits that spilled over into other areas such as time management: *"I used to worry about the deadlines and would wait till the last minute, but now I started managing my time and doing them a few days before the deadline."* Another student stated that blogging forced her to improve her writing skills.

Discussion and recommendations for future research

Based on the results of this study, learners found blogging to be a beneficial tool with regards to their learning experiences, and described benefits beyond those which that were imagined by the instructor when adding blogging to the required assessments. In particular, participants in this study reported how blogging helped to increase their self-confidence and also tangentially helped to improve other skills such as writing and time management. If these benefits are taken into consideration in combination with the willingness shown in responses to the survey that many of these students would be willing to continue to blog in the future, could blogging perhaps be a Web 2.0 technology that learners could rely on outside of the classroom? In other words, can learners be encouraged to take control over their blogs, or take ownership of them and use them for further self-development in other aspects of their education or personal lives? Would students be motivated by such empowerment? Such questions indicate possible foci for this research stream to explore.

Suggestions for classroom use

From a practical standpoint, this study demonstrates that blogs add value to the learning experience not only from the instructor's standpoint but from the student perspective as well. It is recommended that blogs can be incorporated into any class, regardless of content or delivery method. The blogs that were written by the students in this study all focused on answering three questions on a weekly basis: 1) What was my biggest take-away from this week's topic and activities?; 2) What would I most likely share with a colleague about this week's topic and activities?; and 3) What comments and/or recommendations do I have about this week's topic and activities? These three questions are designed to, respectively, encourage self-reflection and review of learning activities and content for the week; encourage ownership of learning through the dissemination of content to other parties; and encourage immediate and personal feedback to the professor regarding what of the weekly content and activities are supporting the learner and what could improve the learning experience.

Limitations of study

As with any study, the one described in this paper has limitations which prevent a broader generalization of results to all learners. The participant sample was small, despite being very representative of the classes in question. However, for an exploratory study the sample sized used was adequate to generate data which, in turn, provides impetus to continue this research stream with larger population samples, particularly with students in different fields of study and geographical locations.

Conclusion

The purpose of this study was to explore the effect of blogging on the students' experience of learning. The professional consensus amongst educators is generally positive, but we were concerned that there is a lack of evidence from a learners' perspective: hence this study.

This study provides evidence that the use of the Web 2.0 technology of blogging aids in student learning, not only from a pedagogical perspective but also from the student point of view. Indeed, students who participated in this study reported more benefits than were anticipated by the researchers. As Web 2.0 technology increasingly becomes an integral part of our social lives, its use in the educational and learning arenas cannot be understated.

A number of unexpected findings emerged which we believe provide good signposts for future research, specifically on how Web 2.0 technology can assist in developing greater learner ownership and self-management of learning.

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References

- Avci, U. & Asker, P. (2012). The comparison of the opinions of the university students on the usage of blog and wiki for their courses. *Educational Technology & Society*, 15(2), 194–205.
- Churchill, D. (2009). Educational applications of Web 2.0: Using blogs to support teaching and learning. *British Journal of Educational Technology*, 40(1), 179–183. <http://dx.di.org/10.1111/j.1467-8535.2008.00865.x>

- Daspit, J. J. & D'Souza, D. E. (2012). Using the community of inquiry framework to introduce wiki environments in blended-learning pedagogies: Evidence from a business capstone course. *Academy of Management Learning & Education*, 11(4), 666–683. <http://dx.doi.org/10.5465/amle.2010.0154>
- Dos, B. & Demir, S. (2013). The analysis of the blogs created in a blended course through the reflective thinking perspective. *Educational Sciences: Theory & Practice*, 13(2), 1335–1344.
- Downes, S. (2004). Educational blogging. *Educase*, September/October, 14–26.
- Ducate, L. C. & Lomicka, L. L. (2008). Adventures in the blogosphere: From blog readers to blog writers. *Computer Assisted Language Learning*, 21(1), 9–28.
- Farmer, B., Yue, A. & Brooks, C. (2007). Using blogging for higher order learning in large-cohort university teaching: A case study. *Proceedings ascilite Singapore 2007*. Retrieved from <http://www.ascilite.org.au/conferences/singapore07/procs/farmer.pdf>
- Ferdig, R. E. & Trammell, K. D. (2004). Content delivery in the “blogosphere.” *T H E Journal*, 31(7), 12–20.
- Garrison, D. R., Anderson, T. & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, 2(2–3), 87–105. [http://dx.doi.org/10.1016/S1096-7516\(00\)00016-6](http://dx.doi.org/10.1016/S1096-7516(00)00016-6)
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence and computer conferencing in education. *American Journal of Distance Education*, 15(1), 7–23. <http://dx.doi.org/10.1080/08923640109527071>
- Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Review, issues, and future directions. *The Internet and Higher Education*, 10(3), 157–172. <http://dx.doi.org/10.1016/j.iheduc.2007.04.001>
- Goh, J. W. P., Quek, C. J. & Lee, O. K. (2010). An investigation of students’ perceptions of learning benefits of weblogs in an East Asian context: A Rasch analysis. *Educational Technology & Society*, 13(2), 90–101.
- Goldman, R. H., Cohen, A. P. & Sheahan, F. (2008). Using seminar blogs to enhance student participation and learning in public health school classes. *American Journal of Public Health*, 98(9), 1658–1663. <http://dx.doi.org/10.2105/AJPH.2008.133694>
- Hain, S. & Back, A. (2008). Personal learning journal—Course design for using weblogs in higher education. *The Electronic Journal of e-Learning*, 6(3), 189–196.
- Higdon, J. & Topaz, C. (2009). Blogs and wikis as instructional tools: A social software adaptation of just-in-time teaching. *College Teaching*, 57(2), 105–110.
- Jimoyiannis, A. & Angelaina, S. (2012). Towards an analysis framework for investigating students’ engagement and learning in educational blogs. *Journal of Computer Assisted Learning*, 28(3), 222–234. <http://dx.doi.org/10.1111/j.1365-2729.2011.00467.x>
- Kerka, S. (1996). Journal writing and adult learning. *ERIC Digest No. 174*. Retrieved from <http://www.ericdigests.org/1997-2/journal.htm>
- Kukkonen, J., Kärkkäinen, S., Valtonen, T. & Keinonen, T. (2011). Blogging to support inquiry-based learning and reflection in teacher students’ science education. *Problems of Education in the 21st Century*, 31, 73–84.
- Li, K-M. (2010). Integrating weblogs in a pedagogy model for enhancing students’ critical thinking skills. *Research and Practice in Technology Enhanced Learning*, 5(1), 35–49. <http://dx.doi.org/10.1142/S1793206810000803>
- Martin, M. & Noakes, M. (2012). Fostering a web 2.0 ethos in a traditional e-learning environment. *The Electronic Journal of e-Learning*, 10(3), 284–292.

- Namwar, Y. & Rastgoo, A. (2008). Weblog as a learning tool in higher education. *Turkish Online Journal of Distance Education—TOJDE*, 9(3), 176–185. Retrieved from <http://tojde.anadolu.edu.tr/tojde31/index.htm>
- Neo, T. K., & Neo, M. (2010). A study using web-logs or blogs as a tool for student-centered learning in a computer graphics course: A Malaysian perspective. *The International Journal of Learning*, 17(9), 77–86.
- Neo, T. K., Neo, M. & Kwok, W. J. (2009). Engaging students in a multimedia cooperative learning environment: A Malaysian experience. In Same places, different spaces. Proceedings ascilite Auckland 2009. Retrieved from <http://www.ascilite.org.au/conferences/auckland09/procs/neo.pdf>
- O'Donnell, M. (2006). Blogging as pedagogic practice: Artefact and ecology. *Asia Pacific Media Educator*, 17, 5–19.
- Paily, M. U. (2013). Creating constructivist learning environment: Role of “Web 2.0” technology. *International Forum of Teaching and Studies*, 9(1), 39–50.
- Williams, J. B. & Jacobs, J. (2004). Exploring the use of blogs as learning spaces in the higher education sector. *Australasian Journal of Educational Technology*, 20(2), 232–247. Retrieved from <http://www.ascilite.org.au/ajet/ajet20/williams.html>