Reflective Thinking: Exploring Blog Use by Adult Learners

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Abstract. This paper investigates the enhancement of reflective thinking in the context of online and distance adult education, through blogging as part of a course activity. A multi-case was conducted involving content and thematic analyses. The results show that students appreciated the reflection process that blogging engaged them into, while their motivation to further explore and use blogs to improve their learning experiences was increased. Factors affecting blog interaction are also identified, while the findings are associated with the key components of a theoretical framework for reflection in an attempt to link theory and research on reflective thinking.

Keywords: student reflection, critical thinking, blogging, adult education, case study, web-based course, online learning environments, perspective change, model of reflection.

1 Introduction

The popularity of distance and online education has indisputably increased over the last decade; a vastly growing number of higher education institutions worldwide, driven by the 'learning for anyone, anywhere, anytime' imperative, offer blended and/or purely online and distant courses on undergraduate and postgraduate levels [1]. With respect to this new academic paradigm, a great body of research has been devoted on the examination of the effectiveness of web-based programs and the conditions for optimized teaching and learning in online environments [2]. Certainly the field is relatively young and it is not surprising that findings on the quality of the online educational experiences, especially when compared to face-to-face formats, are rather inconclusive [3-5]. In this paper, we attempt to discuss how internet technologies and more specifically blog usage, may impact upon and improve students' online learning experiences by enhancing their reflective thinking and practices.

2 Reflection: A Key Element in the Learning Process

In this attempt, we should first define 'reflection'. John Dewey is considered the first scholar to have introduced the concept of reflective thinking in 1933 and defined it as

«Active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends» [6]. Despite the early introduction of the term by Dewey, it was not until the late '80s that researchers and academics started devotedly exploring the importance of reflection for learning. Indeed, over the last decades, reflection has been acknowledged as a crucial cognitive process and a key element in learning [7]. Learner-centred pedagogies identify the value of reflection in being a conscious process, according to which the learner purposefully attempts to make links between existing understandings, thoughts and experiences, with new information. Reflection embraces evaluation and analysis strategies, and is, thus, regarded a form of metacognition, crucial in view of the complicated objectives of today's education and the versatile requirements of our information society and its workplace [8, 9]. Particular emphasis has been placed in the literature on the importance of reflection in the context of adult learning, which is of interest in this review. In fact, critical reflection consists a major principle in Malcolm Knowles's theory of adult learning [10], while studies have proved that reflective strategies, accomplished through experiential practices, have the potential to establish meaningful learning experiences [11] and motivate adult learners [12].

Even though reflection is considered essential to teaching and learning and often set as a major educational goal, scholars have pointed out that its accomplishment can be challenging. This is often attributed to a lack of systematic definition of its elements, which in turn makes it difficult to «be taught, learned, assessed, discussed and researched» [13], and then to the fact that it is socially and culturally sensitive, making it highly context-specific and requiring strict structure in the educational environment [14]. Taking these challenges into account, we reviewed the literature in search of a comprehensive framework to understand reflection [8, 15, 16]. The metacognitive model of reflection proposed by McAlpine et al. [8], focuses on higher education, proved to be a guiding theoretical framework developing our understanding of reflection. In their paper, the authors describe the model and coding scheme resulting from their research study of six university professors who were considered excellent teachers and who provided data on their planning, instructing and evaluating of their students. They claim that their model incorporates the key theoretical concepts of the reflective process but also describes how these concepts are operationalized. According to the model [8], reflection is an ongoing process, composed of six prime components as outlined below and also presented in Figure 1:

- Goals, which translate into decisions
- Knowledge, which represent cognitive structures
- Action, which transforms cognition into behaviours and enacts plans
- Monitoring, which requires feedback during enactment
- · Decision making, which reflects the influenced action, and
- Corridor of tolerance, which defines the acceptable limits for change.

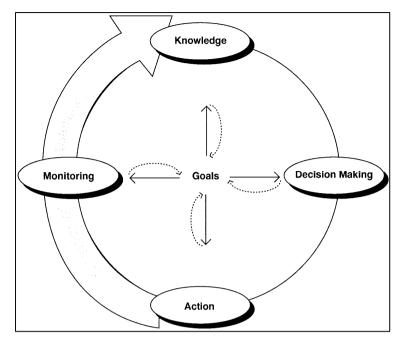


Fig. 1. Model of reflection [8]

Two more aspects are highlighted by the authors; the first is 'time of reflection', according to which reflection may be continuous and synchronous with an action (reflection-in-action) or asynchronous, meaning that it can occur or after an action (reflection-on-action). The second important aspect is 'spheres of reflection'; these are categorized into the practical sphere, which emphasizes improvement of actions in a specific context, the strategic sphere, which aims at generalizing approaches across contexts, and the epistemic sphere which represents knowing on a metacognitive level how reflection works and what it factors may influence it.

3 Reflection in Online Learning Environments

Technology-supported environments have been consistently associated with pedagogically meaningful practices and improved learning experiences, and research devoted to the incorporation of educational technologies, particularly web-based ones, in higher education has been extensive [17, 18]. Synchronous and asynchronous interaction formats, social networking, less-structured environments, multimedia incorporation and representation, unlimited choice over resources and personalization, are just some of the features of information and communication technologies reported to enhance the educational process [19], enabling constructivistic, self-directed and collaborative approaches to learning and knowledge acquisition [20].

With specific respect to the facilitation of reflective thinking, internet technologies have been analogously claimed, in theory and in research, to provide authentic opportunities for learners [21]. Such activities may include creation of multimedia such as podcasts [22], development and maintenance of e-portfolios [23], engagement with distant learning objects [21], creation and contribution to wiki sites [24], online gaming [25] and others. This paper is particularly concerned with blogging, as an activity for enhancing learner reflection.

The literature presents several other studies that have investigated blog use for educational purposes [26-28]. Three main categories of reflection are identified with regards to blogging: Self-directed, peer-inspired and collaborative reflection. We consider self-directed reflection as the process when a learner reflectively contributes to her own blog or shares thoughts and ideas on an educational topic addressed in a third party blog, driven by her individual pursuit of learning and knowledge acquisition. Furthermore, we understand peer-inspired reflection as the process in which a learner reflects on another person's message (whether posted on her own blog or a third party blog), and purposefully comments or discuss further that message. We distinguish peer-inspired reflection from collaborative reflection in that learners engaged in the latter, attempt to create and maintain a blog on a topic towards a collaborative construction of knowledge.

In view of the dramatic change that (formal and informal) education faces with the growth of the web-based tools, it is key to collect additional practices and accumulate evidence on how reflection can be prompted in online and virtual spaces. This paper aims to contribute towards this direction addressing self-directed and peer-inspired reflection during blog-based activities.

4 Methodology

A multi-case study of 6 (out of 19) participants in a course within a graduate program at a US university, was conducted. The study sample was based on volunteer participation. Participants fell within the 35-45 age group, with four of them holding teaching posts and two working at administrative positions. The course was offered exclusively online, and aimed at preparing participants to design and deliver online learning programs in both formal and informal settings. It ran over a 4-month period and was moderated by a single tutor. Instruction and communication occurred asynchronously throughout the course. Participants were expected to contribute to the online discussion and accomplish weekly activities assigned by the tutor. Three data sets were collected; the first set included participant messages on the discussion board. The second set included their responses to a brief questionnaire on online reflection. Great emphasis was particularly placed on the third data set which included the participants' assignments on an individual blog activity. According to the activity, participants were asked to follow and comment on an educational blog of their preference, and then describe and reflect on that experience. As shown in Figure 2, data were analysed qualitatively, using content and thematic analyses.

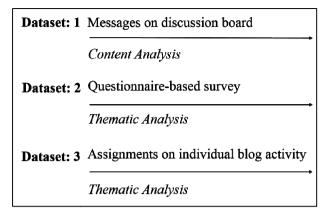


Fig. 2. Data collection and analysis

5 Results

The findings showed that although the study participants followed educational blogs for both personal and professional purposes, they did not tend to comment on posts due to fear of exposure, even with their anonymity maintained. Corresponding the McAlpine et al.'s Model of Reflection [8], this would mean that their *goal* was not strong enough so as to be translated into decision. Being limited to reading the blog and not attempting to contribute to it, seemed to have a negative impact on the development of their reflective thinking.

Also, most of the participants acknowledged that blogging bore a learning curve for them at times. Yet they admitted often skipping posts and replies with unfamiliar concepts or terms instead of looking those up; this again discouraged any reflection process, while it may be inferred that their pursuit of *knowledge*, linking to the second component of the Model of Reflection reviewed earlier, was occasionally uninspired. Following the blog activity however, where participants had to follow an educational blog and purposefully challenge at least one post, was reported as a highly positive learning experience, corresponding to the *action* component of McAlpine et al's model [8].

As participants indicated, the assignment was valuable in encouraging them to gain not only new knowledge but new perspective also. It is important to note that all participants chose to follow educational blogs with professional responses usually authored by well-established figures in the international educational community, in an attempt to secure the source quality. In addition, it could be argued that, the pursuit of discussion quality is related to the *monitoring* component of the aforementioned model, according to which valuable feedback is key in the process. What seemed to be the case for all six participants was that, in view of the compulsory reply, their motivation to further explore the blog content increased with them becoming more interested in the subject matter, suggesting their *decision making* in continuing blogging (influenced action) even after the end of the activity.

Most of them even expressed their surprise how reflective thinking enabled their ideas and argumentation to flow naturally, despite their initial reservations about posting online. Overall, it was evident among participants that the reflective experience resulted in a perspective change. This last finding indicates the setup of a *corridor of tolerance*, linking students' present, past and future intentions towards blogging, which however we are not in position to evaluate since the study concluded following the end the blog-based activity. Yet, this is of key importance, especially within the context of education for adults, where participants consciously (and, as with the study sample, often on economic and family sacrifices) attend professional and academic programs, investing in the improvement of their learning curve.

6 Conclusion and Discussion

The study findings highlight the impact of blogging, not as a learning journal as it is often addressed in the literature, but as an educational activity for professionally interacting with and meaningfully challenging others' ideas and posted content, on the development of reflective thinking. Implications are, therefore, drawn for the integration of blogging activities in the design and implementation of programs for adult learners, so as for learner reflection to occur at all three spheres proposed by McApline et al. [8] (practice, strategic and epistemic), and not just the basic one (practice), as proved to be the case in this study. Future research avenues could include the repetition of the study involving a larger sample in order to strengthen the conclusions from this study and also generalize the findings to the broader adult learner population. Moreover, a similar but longitudinal study could be conducted so as to examine whether engagement with blog-based activities could impact on a more sustainable way on students' reflective attitude. Finally, it would be interesting to compare blogging and reflective thinking among young and older adults, taking into account that young adults are overall significantly more exposed to online messaging, discussion and reading.

References

- Allen, I.E., Seaman, J.: Changing Course: Ten Years of Tracking Online Education in the United States. ERIC (2013)
- 2. Boling, E.C., et al.: Cutting the distance in distance education: Perspectives on what promotes positive, online learning experiences. The Internet and Higher Education 15(2), 118–126 (2012)
- Bernard, R.M., et al.: How does distance education compare with classroom instruction? A
 meta-analysis of the empirical literature. Review of Educational Research 74(3), 379–439
 (2004)
- Rovai, A.P., Downey, J.R.: Why some distance education programs fail while others succeed in a global environment. The Internet and Higher Education 13(3), 141–147 (2010)
- Zhang, P., Goel, L.: Is e-learning for everyone? An internal-external framework of elearning initiative. Journal of Online Learning and Teaching 7(2), 193–206 (2011)

- 6. Dewey, J.: How we think. Courier Dover Publications (2012)
- 7. Baird, J.R., et al.: The importance of reflection in improving science teaching and learning. Journal of Research in Science Teaching 28(2), 163–182 (1991)
- 8. McAlpine, L., et al.: Building a metacognitive model of reflection. Higher Education 37(2), 105–131 (1999)
- 9. White, B.Y., Frederiksen, J.R.: Inquiry, modeling, and metacognition: Making science accessible to all students. Cognition and Instruction 16(1), 3–118 (1998)
- 10. Knowles, M.S., Holton III, E.F., Swanson, R.A.: The adult learner. Routledge (2012)
- Williamson, A.: Reflection in adult learning with particular reference to learning-in-action (1997)
- 12. Włodkowski, R.J.: Enhancing adult motivation to learn: A comprehensive guide for teaching all adults. John Wiley & Sons (2011)
- Rodgers, C.: Defining reflection: Another look at John Dewey and reflective thinking. The Teachers College Record 104(4), 842–866 (2002)
- Boud, D., Walker, D.: Promoting reflection in professional courses: The challenge of context. Studies in Higher Education 23(2), 191–206 (1998)
- Garrison, D.R.: Critical thinking and adult education: a conceptual model for developing critical thinking in adult learners. International Journal of Lifelong Education 10(4), 287– 303 (1991)
- Kuhn, D.: A developmental model of critical thinking. Educational Researcher 28(2), 16–46 (1999)
- 17. Hung, H.-T., Yuen, S.C.-Y.: Educational use of social networking technology in higher education. Teaching in Higher Education 15(6), 703–714 (2010)
- López-Pérez, M., Pérez-López, M.C., Rodríguez-Ariza, L.: Blended learning in higher education: Students' perceptions and their relation to outcomes. Computers & Education 56(3), 818–826 (2011)
- 19. Conole, G., Alevizou, P.: A literature review of the use of Web 2.0 tools in Higher Education. A report commissioned by the Higher Education Academy (2010)
- 20. Huang, H.M.: Toward constructivism for adult learners in online learning environments. British Journal of Educational Technology 33(1), 27–37 (2002)
- Mason, R.: Learning technologies for adult continuing education. Studies in Continuing Education 28(2), 121–133 (2006)
- 22. McLoughlin, C., Lee, M., Chan, A.: Using student generated podcasts to foster reflection and metacognition. Australian Educational Computing 21(2), 34–40 (2006)
- 23. Stefani, L., Mason, R., Pegler, C.: The educational potential of e-portfolios: Supporting personal development and reflective learning. Routledge (2007)
- Tétard, F., Patokorpi, E., Packalén, K.: Using wikis to support constructivist learning: A
 case study in university education settings. In: 42nd Hawaii International Conference on
 System Sciences, HICSS 2009. IEEE (2009)
- 25. Moreno-Ger, P., et al.: Educational game design for online education. Computers in Human Behavior 24(6), 2530–2540 (2008)
- Halic, O., et al.: To blog or not to blog: Student perceptions of blog effectiveness for learning in a college-level course. The Internet and Higher Education 13(4), 206–213 (2010)
- 27. Li, K., et al.: Blogging for Teaching and Learning: An Examination of Experience, Attitudes, and Levels of Thinking. Contemporary Educational Technology 4(3) (2013)
- 28. Ahmad, R., Lutters, W.G.: Promoting reflective learning: The role of blogs in the classroom. In: Ozok, A.A., Zaphiris, P. (eds.) OCSC 2011. LNCS, vol. 6778, pp. 3–11. Springer, Heidelberg (2011)