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EXPLORING THE ROLE OF ACADEMIC BLOGS IN A BLENDED COMMUNITY: AN INTEGRATIVE APPROACH

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This study explores the role of academic blogs in supporting a group of preservice teachers while they became physically separated during the teaching practice. Underlying our study is an integrative approach that puts academic blogs alongside with other media in an attempt to discern their comparative strengths and limitations. In particular, academic blogs are compared with personal blogs in terms of individual expressions and reflection; and with discussion forums in terms of social interaction and reflective dialogue. The study took a qualitative case study approach and focused on a group of preservice teachers during their teaching practice. Academic blogging has been found to foster individual expressions, reflection, social networking, and peer support. It affords a more flexible and expressive way of individual-centered expressions. However, it is not very good at supporting dynamic and interactive online discussions. Our study helps deepen the insights into the educational affordances of blogs and marks an initial step towards discerning the niche of blogs as an educational media.

Keywords: Blogs; academic blogs; blended community; preservice teachers.

1. Introduction

In the past decade, blogs have replaced personal homepages as the dominant self-publishing vehicle on the Internet (Wortham, 2007). According to the recent report by Technorati (http://technorati.com) — the leading blog search engine, there were 133 million blog records created since 2002, approximately 900,000 blog posts in 24 hours (Technorati, 2008). The explosive growth of blogs can be attributable to their ease of use, flexibility, and interactivity. First, blogging technology is lightweight, easy to use, and cost-efficient (Blood, 2004). It significantly lowers the technical threshold of publishing online by allowing people with little or no programming skills to create online content. Second, as a flexible, versatile, and fluid

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medium (Herring, Scheidt, Wright & Bonus, 2005), blogs can be adapted for a wide variety of purposes or needs ranging from the casual release of emotions to task-oriented group collaboration (Nardi, Shiano, Gumbrecht & Swartz, 2004). Third, the interactive functionalities of hyperlinking and commenting allow for social connections and interaction between the bloggers and their audience. Therefore, the combination of a myriad of user-generated content, the user-friendly interface, and the possibilities of social connections and interaction contributes to the popularity of blogs (Du & Wagner, 2006).

Blogs have become increasingly popular especially among young people. It is reported that more than half (54%) of bloggers are under the age of 30 (Lenhart & Fox, 2006). There is, in fact, a growing recognition of the new generation of learners as "digital natives" with habitual use of social software such as blogs in their day-to-day lives (Selwyn & Grant, 2009). It is the characteristics of blogs as lightweight and flexible Internet medium together with their popularity among students that give rise to a growing interest in the educational potential of blogs.

The present study seeks to deepen our understanding of the educational affordances and constraints of blogs by examining how they have supported a blended community among preservice teachers. Our inquiry revolves on a general question: what role can blogs serve for the student teachers while they became physically separated? Specifically, our exploration focuses on "to what extant academic blogs can support self-expression, self-reflection, social interaction, and reflective dialogue among student teachers" (see Deng & Yuen, 2011). More importantly, academic blogs are not studied in an isolated fashion, but are contextualized in a media context. Academic blogs are compared with personal blogs in terms of individual expressions and reflection; and with discussion forums in terms of social interaction and reflective dialogue. Underlying this approach is an attempt to discern not just what blogs can afford, but their comparative strengths and limitations in supporting a blended community.

Our study is grounded in two lines of literature — blended community and educational blogging. The following review of the related work on blended community is not meant to be exclusive, but to highlight the characteristics of blended community and a holistic or integrative research stance it calls for.

2. Blended Community

Earlier research work in relation to online community often focused on whether online communities were as good as face-to-face communities or the impact of computer-mediated communications (CMC) on our offline reality. This collection of work, explicitly or implicitly, viewed online communications as a competitor, or even a threat, to face-to-face communications (Baym, Zhang & Lin, 2004). In recent years, there is a growing recognition that online communications can extend and augment our offline social interaction (Brown & Duguid, 2000;

Koku, Nazer & Wellman, 2001). This complementary relationship between online and offline communications lends theoretical support to the proliferation of "blended communities" which straddle the online and offline worlds.

In simple terms, a "blended community" or "hybrid community" refers to a community that is enabled and supported by both face-to-face and computer-mediated communications (Gaved & Mulholland, 2005). It is recommended to build an online community when an existing group has limited opportunities for face-to-face contact (Sproull & Kiesler, 1991). Such an online community can be regarded as an extension of a physical community or another channel to augment face-to-face interaction (Deng & Yuen, 2007). The communications afforded by networking technology are not meant to replace the pre-existing forms of communications, but to supplement them with the unique affordances for interaction at anywhere and anytime. In this study, we use the term "blended community" to depict a group of student teachers who used blogs as a supplement or an alternative channel for communications when they became physically dispersed during teaching practice. Online communications refer to the interaction supported by computer-mediated tools such as blogs, email, or MSN Instant Messenger (MSN-IM). Offline channels of communication refer to those traditional ways of interaction such as face-to-face meetings and phone conversation.

Together with the emergence of blended community is the increasing integration of CMC tools in our everyday life (Haythornthwaite & Wellman, 2002). Traditional media — TV, radio, phone — are blended with the Internet with accelerated speed and intensity. As Jenkins (2006) remarked, "ready or not, we are already living within a convergence culture" (p. 16). This convergence trend in media landscape together with the supplementary relationship between online and offline life give rise to a need to study cyberspace as part of a whole rather than an isolated social phenomenon (Wellman & Gulia, 1999) The exploration of online community should be contextualized in a local context and a web of social relationships (Boase & Wellman, 2005). As such, the study on an online medium should not lose sight of the parallel channels of communication and the underlying social structure.

In educational settings, teachers are advised to provide multiple means of communication — asynchronous and synchronous, traditional and web-based — to support various communication needs or learning styles (Haythornthwaite, Kazmer, Robins & Shoemaker, 2000). Weller, Pegler, and Mason (2005) also remarked that the interaction in the learning environment should be "multi-channeled, with particular tools providing affordances for specific forms of communication" (p. 71). As such, teachers as well as instructional designers are faced with great challenges of choosing and blending various media for diverse learning objectives, contexts, and audience. A better understanding of the affordances of new media such as blogs then becomes a precursor for their meaningful application and integration. In the next section, we will turn to the scholarly discussions and studies on educational blogs that focus on the comparative or distinct values of blogs.

3. Blogs in Education

There is a small yet growing body of studies on the use of blogs in various learning environments (Martindale & Wiley, 2005). The existing work tends to focus on two aspects: reflective and interactive capabilities of blogs (Deng & Yuen, 2009).

3.1. Blogs for reflection

One line of scholarly work explores the potential of blogs as online reflective devices that could replace traditional paper-based journals (e.g. Bouldin, Holmes & Fortenberry, 2006; Ray & Coulter, 2008; Stiler & Philleo, 2003). Certainly, personal journals might also allow for self-expression, emotional discharge, and individual reflection. However, blogs transform the process and outcome of reflection by connecting bloggers to a global audience and opening channels for feedback that may lead to deeper thinking and learning (Ray & Coulter, 2008; Ševelj, 2006). Private journals preclude the opportunities for students to be exposed to different perspectives and to have their opinions challenged by others. The fundamental intention of a blog is to share ideas with others and to engage the audience in a conversation (Ševelj, 2006).

3.2. Blogs for interaction

The other line of research taps into the social values of blogs and their potential to foster interaction and collaborative learning (e.g. Du & Wagner, 2007; Hall & Davison, 2007; Loving, Schroeder, Kang, Shimek & Herbert, 2007; Makri & Kynigos, 2007; Williams & Jacobs, 2004). In terms of their affordances for interaction, blogs are then often compared with discussion forums. Efimova and de Moor (2005) maintained that the conversations afforded by blogs differed from the discussions via online forums in several significant ways. First, an online discussion forum had a shared community space. By contrast, interactivity via blogs was located in individual blog spaces and there was no effective mechanism to keep track of the flow of conversation. Secondly, the online discussion in a discussion forum was organized in tree-structured threads, while blog-enabled conversations, on the other hand, were "tangential" with multi-level conversations — global, local, public, private — taking place simultaneously.

Along a similar line, Cameron and Anderson (2006) contended that blogs were significantly different from discussion forums in several respects including focus, identity, security, style, and ownership. Topics of discussion on forums were usually course focused and instructor directed, while blogs were mostly learner focused and learner directed. Often, a discussion forum was integrated into a course management system, thus discussions were typically confined to a formal classroom setting and to the duration of a course. As such, postings in a forum were expected to conform to the associated learning tasks, guidelines, or norms. On the other hand, blogs offered blog writers the control over the style and format of their blogs.

The characteristics of blogs, such as permanence, personal responsibility, control over content and writing, enabled a blogger to build an online identity over time. Efimova and Fiedler (2004) further pointed out that it was not the content published, but the personalities or the identities behind blogs that distinguished blogs from online discussion forums. Unlike an online discussion centering on a topic or a community, a blog was often a personal narrative of feelings, experiences, and thinking.

Most of the scholarly discussions on the differences between blogs and discussion forums (including those mentioned above) are conceptual or theoretical. A nice exception is an empirical study conducted by Hodkinson (2007) that examined how a migration of an online group from a discussion forum to blogosphere impacted the patterns of communication, the identity of group members, and their sense of attachment towards the group. The shift from discussion forum to blogosphere was described as a transition from a shared space governed by group norms to a personal territory where interactions were initiated, centered around, and regulated by individuals. The content of blogs was found to be more varied and individually distinct than that on the discussion forum. Hodkinson argued that the collective structure of an online forum might be more conducive for nurturing substantive online groups, while the individual sovereignty rendered by blogs allowed for more liberty to individual expressions and less conformity to group rules and expectations.

3.3. Distinct values of blogs

Some theoretical and empirical endeavors have been made to determine the distinct value of blogs. Several researchers have collectively claimed that the unique value of blogs resided in the dual roles they served as both individual and collaborative vehicles. Representative descriptions of such dual roles of blogs include monologues and dialogues (Wrede, 2003); conversations with self and others (O'Donnell, 2006); individualistic and collaborative (Huffaker, 2005); a combination of self-expression and social interactions (Richardson, 2006). Efimova and Fiedler (2004) described it as a synergy of personal and community learning as blogs provided personal spaces without imposing a community learning agenda or style. At the same time, learners were not alienated but could benefit from feedback from the community, validation, and support. Along the same vein, Bruns and Jacobs (2006) commented: "blogs represent for authors an opportunity to reach out and connect with an audience never before accessible to them, while maintaining control over their personal expressive spaces." (p. 5)

Hall and Davison (2007) further explicated the advantages of such a mixture of personal and community space: on one hand, the personal ownership of blogs affords an individual voice and; on the other hand, the interactive and linking mechanisms open the possibility for discussion and connection. "This clear ownership principle takes advantage of the democratic nature of online communications while preserving the freedom of expression that is valued in a personal diary or journal." (p. 169)

3.4. Research gap

On the whole, the empirical studies focusing on blogs for teaching and learning are still rather limited (Williams & Jacobs, 2004). What is even more lacking is the research that examines the significant difference between blogs and other forms of web-based tools (Farmer & Bartlett-Bragg, 2005; Kim, 2008), which leads to a weak theoretical and empirical backing to the question of "why blog" (Kim, 2008). O'Donnell (2006) then advocated that blogs should be studied within a broader social and media context. Meanwhile, in spite of the prevalence of blended communities, the research attention paid to the communication dynamics of a community, online or offline, is still limited (Haythornthwaite & Nielsen, 2007). In this study, an integrative approach was employed by contextualizing blogs within other media. Central to our approach is a conviction that each technology has different affordances and constraints (Norman, 1993) and Internet-based media should not be studied in isolation (Wellman & Gulia, 1999).

4. Methods

This study focused on a group of year-four Bachelor of Education (BEd) students during their teaching practice (TP). TP was a vital part of the BEd curriculum that gave preservice teachers the opportunity to integrate theory with practice and to instill and strengthen their identity and commitment to education. During the eight-week TP, student teachers were placed, either individually or in pairs, at schools scattered across Hong Kong. Academic blogging was introduced as a means of documenting, sharing, and reflecting on their TP experiences. The fundamental premise was that the geographic separation might create a need for blogging as an alternative channel of communications and sharing. Blogging was voluntary and not included in the assessment. The student teachers were strongly encouraged to write one blog per week to document and reflect on their teaching, and read as well as reply to their peers' blogs.

Given the fragmented and distributed nature of the interaction enabled by blogs (Efimova & de Moor, 2005), a community blog was constructed as a central community hub. As shown in the screenshot (Figure 1), the community blog had four main features: (1) community discussion space to host community-wide discussion; (2) links to students' individual blogs; (3) links to other useful websites and resources; and (4) messages from the instructor and a weekly summary of students' blogs. One of the researchers also took the role of online facilitator and was responsible for maintaining the community blog, monitoring students' blogging, and providing technical assistance to students and their instructor when necessary. The community blog was set up on a free commercial blogging platform, Xanga (http://ww.xanga.com), based on two major considerations. First, the vast majority of the students kept their personal blogs on Xanga and was reluctant to switch to other authoring platforms. Second, the embedded subscription and privacy features could be used when the community blog and students' blogs shared the same

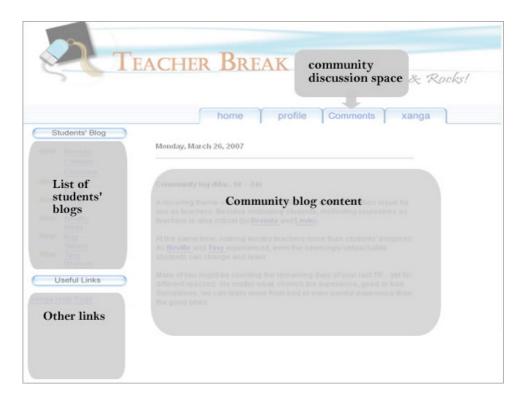


Figure 1. The screenshot of the community blog.

platform. The students could easily subscribe to this community blog or to each other's blogs to obtain email reminders or a quick view of the recent updates when they were logged into Xanga.

The study took a qualitative case study approach and centered on the perceptions of the student teachers. The main instruments used for data collection were questionnaires and interviews. Two paper-based questionnaires were registered one before and the other after the TP, both on an anonymous basis. The questionnaire conducted before TP aimed to gather data on students' technical proficiency, habits, and preferences of using different media. Nineteen students completed the paper-based questionnaire and the results indicated that these students were rather sophisticated users of technology and quite familiar with blogs. When evaluating their comfort level with technology in general on a 4-point scale with 1 as "very uncomfortable" and 4 as "very comfortable", the mean value was 3.05. The vast majority of them had prior experience with online discussion forums (95%), Instant Messenger (95%), Facebook (89%). Nearly seventy percent of the student teachers had their own personal blogs prior to the study.

The post-TP questionnaire was designed to examine the participants' experiences and perceptions of academic blogs and other communication tools. The

Student	Gender	Level of Engagement with Academic Blogging	Prior Experience with Blogging
S2	F	High	Yes
S5	F	Moderate	Yes
S7	F	High	Yes
S8	M	Low	Yes
S10	F	Moderate	No
S11	M	High	No
S12	F	Moderate	Yes
S20	F	None	No

Table 1. Profiles of the interviewees.

construction of the post-experience questionnaire drew on the researchers' observation, reactions of the student teachers to the blogging project, the relevant literature and the instructor's feedback. The questionnaire consisted primarily of 5-point Likert-type questions (1 for strongly disagree, 3 for neutral, 5 for strongly agree). For the sake of clarity, strongly agree (5) and agree (4), disagree (2) and strongly disagree (1) are combined when reporting the data of the questionnaire. At the end of the questionnaire, there were several open-ended questions designed to elicit the perceptions and opinions of the student teachers regarding various media and their general comments on blog-supported community. Also nineteen students completed the post-TP questionnaire.

On the basis of the post-experience questionnaire, individual interviews were conducted to probe deeper into student perceptions of and experiences with blogging. Some students volunteered to participate in the interview in response to a recruiting email. Based on the responses, we then sent out individual emails to specific students in an effort to include interviewees with different levels of engagement and prior experiences with blogging. Altogether, eight students (6 female, 2 male) participated in the individual interviews that lasted from 30 to 45 minutes. The profiles of the interviewees are summarized in Table 1. The interview questions consisted of a series of semi-structured general questions and tailor-made questions based on the individual student's blogging behaviors. The interviews were recorded and transcribed for the later analysis using NVivo.

5. Results

Due to the voluntary nature of academic blogging, only thirteen student teachers (ten female and three male) wrote a total number of seventy-five blog entries during their teaching practice. There were also sixty-two comments exchanged on the blogosphere. The results of the post-TP questionnaire shown in Table 2 indicate that the thirteen blogging students acknowledged the values of blogs in terms of self-expression, self-reflection, and the documentation of experiences. In particular, all respondents felt that blogs facilitated the process of self-reflection. All but two students believed that blogging helped to facilitate personal expressions and to

	Agree	Neutral	Disagree	Mean
Enabling self-expression	11	2	0	4.1
Enabling self-reflection	13	0	0	4.1
Recording my TP experiences	11	2	0	4
Enabling exchange of teaching ideas	11	2	0	4
Enabling exchange of social support	11	0	2	3.9

Table 2. The perceived value of writing academic blogs (n = 13).

record one's experiences. The vast majority of the blog writers also acknowledged that blogging fostered a sharing of teaching ideas and social support. One student teacher also remarked in an answer to an open-ended question: "we can share experiences and offer support to each other. We can also keep track of our own and our friend's progress".

The individual interviews further illuminated the affordances of blogs. Blogging technology was considered a good publishing and broadcasting vehicle to share within a group. S8 saw blogs as a channel to broadcast feelings and thoughts: "I don't think it's a one-to-one way of communication, it's like a newspaper to share with the whole group". Echoing this point, S10 called blogs a "sounding board" where she could "put stuff up there, like an expression and I don't really need people to respond." In this sense, blogs functioned mainly as a one-to-many broadcasting vehicle. In addition, S8 saw blogging as a more subtle and less intrusive way to seek support, "sometimes you want to get some advice or suggestions from the classmates, and you don't want to do it too directly, I think blogging is a more subtle way to talk about it."

Overall, twelve out of the nineteen respondents felt more connected through blogging compared with the TP in the previous year. This sense of connectedness was achieved through reading each other's blogs. According to the results presented in Table 3, seventeen students acknowledged that they felt more in touch with each other during TP. Moreover, fourteen affirmed that reading the blogs of their peers prompted them to reflect on their own teaching.

The student teachers were also asked to rate the frequency of using several other media to communicate with fellow students during their TP on a scale of 0 to 5 with 0 for never, 3 for sometimes, and 5 for always. The results are presented in Table 4. Phone was found to be the most popular media for peer communications. Besides,

1	0		0 (/
	Agree	Neutral	Disagree	Mean
Keep us in touch during TP	17	2	0	3.93
Seek new teaching ideas	17	2	0	3.87
Promote me to reflect on my own teaching	14	5	0	4
Compared to TP last year, I felt more connected with peers	12	5	2	3.74

Table 3. The perceived value of blog-reading and commenting (n = 19).

	Mean
Phone	3.74
MSN-IM	3.37
Face-to-face	3.21
Email/mailing list	3.16

Table 4. Frequency of media usage (n = 19).

the student teachers also used MSN-IM, face-to-face meetings, and email/mailing list sometimes.

The interviewees were asked explicitly how they used various media forms mentioned above and for what purposes. The use of other media did act as interference with their engagement with academic blogging as some of the student teachers preferred other media for peer communications. S7 and S2 stated that they tended to share feelings and sensitive issues with close friends over phone or MSN Instant Messenger (MSN-IM). Phone was rated as the most frequently used mode of communication for peer interaction because it afforded immediacy and extended conversation. The student teachers opted for phone when they were emotionally stressed and in need of just-in-time support. Phone was regarded conducive for self-expression and social interaction, but it was used only rarely for resource sharing and reflective dialogue.

Among the eight interviewees, there was only one student who did not use MSN-IM during TP. As primarily a one-to-one online chat tool, MSN-IM allowed an informal and spontaneous online chat as well as the sharing of files with their friends and classmates. However, both phone and MSN-IM were not meant to be vehicles for self-reflection. Email basically represented a rather formal way of communication. It was perceived as an important tool to communicate with teachers and other peer students concerning more formal and serious work. Another salient affordance of email was to send teaching materials or files as attachments. The media mentioned above — phone, MSN-IM, Email — mostly allowed for one-to-one communication. S20 stated that she preferred such one-to-one type of contact rather than broadcasting her feelings and thoughts in a public space. The face-to-face meetings, according to our respondents, enabled interaction at a more personal level. In-person meetings were also favored to discuss important issues and to build social rapport.

Besides the tension between blogs and other media, we found a tension between personal blogs and academic blogs. The questionnaire data also showed that six student teachers wrote personal blogs and fifteen wrote personal journals during teaching practice. Prior to the study, nearly 70% of the student teachers had their own personal blogs through which they could record their daily life and get in touch with their friends and family. All except one student set up new blog accounts as their academic blogs. It seemed that they tended to draw a line between their personal blogs and academic blogs. Some student teachers were not comfortable

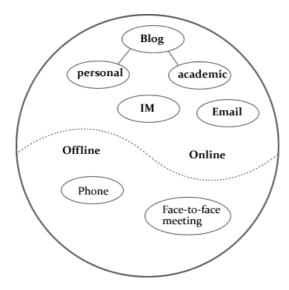


Figure 2. Media in use among the student teachers.

broadcasting their feelings and thoughts in the academic blogs shared with the instructor and other fellow students. They felt less refrained when writing in their own personal space. However, when asked whether they tended to reflect on their teaching practice via personal blogs, the student teachers acknowledged that they rarely engaged with critical thinking when writing for leisure or social purposes. Personal blogs were used mainly for recording daily happenings and expressing their emotions. The existence of personal blogs made the already complex media landscape even more complicated. Figure 2 illustrates the communication tools used by the preservice teachers in this study.

One salient advantage of blogs over the person-to-person communication tools such as phone, email, MSN-IM was their affordances for group-wide interaction. In this respect, blogs were then explicitly compared to discussion forums that were used often to support group-wide interaction. The student teachers were asked to compare their experiences of blogging with their use of discussion forums on Interactive Learning Network (ILN, a home-grown Course Management System developed by the faculty where the study was conducted) during their previous TP. A number of significant differences were highlighted in both the post-TP questionnaire and the interviews. Blogs were perceived to be a more flexible, expressive, and descriptive medium. They were more conducive to express one's feelings and thoughts as one student commented in the questionnaire, "You are allowed to write more freely and comfortably through blogs. ILN is too formal." Echoing this, S7 commented: "In a way, using blog encourage us to write more. We know we can write a blog whenever we want, whether it's a big thing, whether it's a small thing." S5 also remarked in the interview that postings on a forum tended to be concise, while blogs writing

tended to be more descriptive. The affordances of blogs for self-expression were clearly associated with their individual ownership as S12 noted, "blog is your thing, your room. I feel more comfortable and easy to type what I feel." Additionally, blogs were perceived as more casual as S8 remarked, "Xanga is more casual, people can talk about their lives, ILN is purely for learning". By contrast, the forums on ILN were perceived as a platform for posting formal and academic content. Additionally, blogging technology was seen as a good publishing and broadcasting vehicle to share within a group. S8 looked on blogs as a channel to broadcast feelings and thoughts: "I don't think it's a one-to-one way of communication, it's like a newspaper to share with the whole group". Here, blogs was regarded mainly as a one-to-many broadcasting vehicle.

In spite of their differences, blogs and forums were perceived to have similar affordances for self-reflection. All of the interviewees believed that both systems could be effective vehicles for encouraging individual reflection. As S7 commented, "it (blogging) gets myself to think, to reflect on what I have done in teaching". Moreover, self-reflection was blended with emotional expressions in their blogs. S2 also stated, "in one blog entry I can wrote about how I feel about the lesson, like my personal feelings, but also I reflect on it. So there are both academic and about my personal feelings."

However, some respondents thought discussion forums might be more conducive for reflective dialogue since it was easier to keep track of discussions on the forums. Compared to discussion forums, the content of individual blogs tended to be much more diversified. S10 observed, "with the blog, there are all kind of input, some are problem-related, some are strategy-related, so the scope of the content is wider than those days." This type of heterogeneous contents might be problematic for group-wide discussion. S7 remarked that everyone tended to talk about different problems or topics to their interest in their own blog space; thereby it became difficult for the readers to respond to each and every entry. The interaction on discussion forums, on the other hand, was perceived to be richer and more cohesive as S7 commented, "we can post a topic, for example, on classroom management, then everybody can see and reply according to the topic. It's much easier commenting and reflecting according to topics." This might help to explain why some interviewees felt reflective dialogue was more likely to occur in discussion forums than in blogs.

The student teachers liked the feature of email reminders embedded in blogs and the possibility of their blogs reaching a wider audience. As three interviewees mentioned, bloggers could get email reminders of incoming comments or new content on the blogs they subscribed to, which made it easy to keep them updated. On the other hand, ILN had the advantage of being familiar and convenient. Every student teacher already had an ILN account and they had used it for several years. As S20 notes: "It becomes part of my practice although I don't like ILN to be honest". In this respect, academic blogging required more investment in terms of time and efforts since they might need to register and set up a new account.

6. Discussion

This study has investigated the role of academic blogs in supporting dispersed student teachers from four aspects: self-expression, self-reflection, social interaction and reflective dialogue. Deliberate attempts have been made to compare academic blogs with other media such as personal blogs and discussion forum in an attempt to gauge their relative strengths and constraints. This study has demonstrated that academic blogs first allow for both individual-centered expressions and reflection on the part of the student teachers. Admittedly, personal blogs might encourage a more intimate and expressive way of writing since the student teachers felt less refrained when writing in their own personal space. However, although personal blogs share the same social characteristics as academic blogs, they usually fell short of the reflective elements. Herring, Scheidt, Wright and Bonus (2005) noted that vast majority of personal blogs could be categorized as a "personal journal type" that was characterized by a highly individualistic or even intimate form of self-expression. The student teachers rarely engaged in serious reflection and deep thinking in their own personal blog space. In contrast, academic blogs not only encouraged individual student teachers to express their thoughts and feelings, but also facilitate their critical reflection on teaching practice. It is the affordance for reflective writing that distinguishes academic blogs from their casual siblings. Indeed, academic blogs straddle the personal and academic domains.

Additionally, the sense of connections and social rapport with other fellow students are cemented. The student teachers also regarded blogs as a platform for exchanging teaching ideas and much-needed social support during the fieldwork. The interactive characteristics of blogs are compared with discussion forums that have been widely used to support interaction within learning communities. Similar to other studies on discussion forums (Nicholson & Bond, 2003) and mailing lists (DeWert, Babinski & Jones, 2003), blogs were found to support the communities of student teachers by providing a place to reflect, share ideas, and exchange support. However, discussion forums were perceived to be more interactive, coherent, and structured due to the fact that discussion is structured in threads and accommodated in a space shared by all. A blog-supported community is, in fact, a cluster of inter-connected blogs owned by individuals. This defining feature of a blog-supported community has both positive and negative implications.

On the negative side, the group-wide conversations became fragmented as they were scattered in individual blogs. In a discussion forum, discussions within each thread usually revolve around a specific topic. The contents of blogs, on the other hand, are more personalized and diversified since bloggers tend to write on subjects of personal meaning and/or relevance (Hodkinson, 2007). Accordingly, the student teachers in this study wrote on a wide variety of topics in accordance with personal interests, concerns or specific classroom situations. They also chose to respond to entries that struck their interest, echoed their thoughts, or stimulated their thinking. In this circumstance, the attention of a community as a whole became divided as 66

each student teacher had different personal agenda and interest. As Dennen and Wieland (2007) observed, when students did not have a shared artifact as the anchor of discussion, they were less likely to be engaged in meaningful and focused online dialogue.

On the positive side, the sense of individual sovereignty allows the blog owner more liberty to express him/herself with less conformity to group rules and expectations (Hodkinson, 2007). A shared community space inevitably imposed on members a community agenda or norm (Efimova & Fiedler, 2004). Blogs were found to be more flexible, expressive, and casual than discussion forums. The intrinsic characteristic of individual ownership inherent in blogs rendered a sense of autonomy, control, and a more open, free, and informal forms of expressions. Echoing the findings of Kerawalla and colleagues (2009), the student teachers saw their blogs as individually owned spaces, which encouraged personalized content and a less formal form of expressions. The student teachers felt more comfortable to express their feelings or opinions in an online space they could claim their own; conversely, they felt it inappropriate or reserved to post messages charged with emotions in a community space such as discussion forums.

In addition, the voluntary nature and the loose structure of the blogging activities in this study also encouraged expressive writing via blogs. When a piece of reflective work is linked with assessment, students usually feel out of place to reveal their negative feelings such as uncertainty or frustration (Boud & Walker, 1998). Without the pressure of assessment, the student teachers were more likely to attend to their inner feelings and to pursue issues of personal meanings and relevance in their academic blogs. Additionally, the existing social relationships contributed to a safe, open, and trusting atmosphere that was considered essential for one to express inner thoughts and feelings (see Andrusyszyn & Davie, 1997). The student teachers in our study had been together for more than three years, hence the bonding with and trust in other fellow students had long been cultivated. Such a social context created a favorable condition for the student teachers to publicly reveal their real feelings and opinions.

Moreover, the student teachers in this study felt it less intrusive and more subtle to seek help or celebrate one's success in a space they could claim as their own. In comparison with other "push" technologies such as emails, blogs seemed to be more modest as a "pull" medium in that bloggers usually posted content without directly targeting or imposing upon others to read (Trevino, 2005). In this way, blogs seemed less intrusive as they gave the audience more freedom and control over what to read and when to read.

In summary, compared with online forums, the student teachers saw blogs as a less formal and intruding, more flexible, descriptive, and expressive vehicle for individual-centered expressions. The fact that blogs were individually owned made some student teachers more comfortable to share their feelings and thoughts. Unlike threaded messages structured by topics on a forum, contents in one's blogs tend to be diversified, which poses a challenge for carrying out a cohesive group-wide

discussion. Therefore, it remains debatable to what extent blogs could afford dynamic dialogue within a community.

In addition to blogs, this group of preservice teachers used multiple media email, MSN-IM, phone, and face-to-face meetings — to maintain interaction and exchange social support. The existence of other media put on a tension on the adoption of blogs as both individual and social vehicles. As an asynchronous communication medium, blogs are not good at support problem solving or help seeking. The student teachers opted to use phone or MSN-IM when they were in need of help or advice. Blogs make it difficult, if not impossible, to get just-in-time help. In addition, blogs do not allow for the exchange of files. When the student teachers needed to send files, they had to resort to email or MSN-IM.

An important lesson we learn here is that the synergy among various media will not come naturally. This is probably more so when the use of certain media is externally initiated and its adoption is voluntary. When we introduce a new medium, the existing media context should be put under scrutiny. At the core of an intentionally built blended community is the balance among various media. When chosen, designed or deployed properly, various media can come together to create a synergy; otherwise, the tension might prevail.

7. Conclusion

This study has delineated the educational affordances of blogs in the context of preservice education. Blogs have been situated in a wider media landscape in an effort to identify their comparative advantages as well as constraints. The salient benefits of blogs lie in their affordance for individual expressions, self reflection, and connecting dispersed groups. However, blogs are not very good at supporting dynamic and interactive online discussions. The existing media practices of student teachers have a significant impact on whether and how academic blogs were accepted and adopted. The result of this study can contribute to our understanding concerning the potential, strengths and limitations of this new member in the arena of educational media.

Other than that, this study has methodological implications for future research work on educational blogging or other emergent technologies. It has been noted that an integrative process that situates the new technology in a broader social context and media landscape is desirable for discerning its affordances. We now live in an age with ever-growing number of new technologies and means of communication they render. When a new technology is introduced, it does not substitute an old one, but is added to the growing repertory of technical tools at our disposal (Flanagin & Metzger, 2001). Our media landscape is becoming increasingly complex not only because of ever-emergent new media, but also because of their versatility and flexibility. Unlike traditional communication technologies that usually have single function, the new network-based communication tools can meet a variety of needs including person-to-person, group, and mass communications (Flanagin & Metzger,

2001). In this circumstance, a better understanding of not only what a new technology can afford, but more importantly, what it is good at, will help inform educators to better choose from the dazzling array of technical tools available and make a more purposeful and meaningful use of it. That is why this study adopted a comparative stance and evaluated the merits of blogs against its natural competitors such as personal blogs and discussion forums.

As a small-scale study, the present study has several limitations. The sample size was small and the time span for students' blogging was rather short. Future study should expand the scope of data collection to a wider population and a longer period. In addition, this study was contextualized in a specific type of community and situation: a tightly-knit group of student teachers becoming physically separated. Arguably, this type of blog-supported community differs drastically from those exclusively online communities without pre-existing social relationships. Further studies are needed to examine to what extent our findings can be generalized to other types of online communities. We also felt that the instruments for data collection were inadequate to capture the communication dynamics of a community. An ethnographic approach might be more appropriate to collect rich and in-depth data on the frequency and purposes of using a variety of media.

Still, this study signals an initial step towards discerning the communication niche that blogs might fulfill better than other educational media. Through identifying the niche of academic blogs, we can make a big step towards the purposeful use of blogs or the optimal combination of blogs with other tools in support of diverse learning needs. The study suggests that the integrative approach is vital to have a comprehensive picture of interaction among a community and a comparative approach that compares blogs with their predecessors or competitors may be a promising avenue for future research.

References

- Andrusyszyn, M. A., & Davie, L. (1997). Facilitating reflection through interactive journal writing in an online graduate course: A qualitative study. Journal of Distance Education, 12(1). Retrieved April 2, 2009, from http://www.jofde.ca/index.php/ jde/article/view/266/427.
- Baym, N. K., Zhang, Y. B., & Lin, M. (2004). Social interactions across media: Interpersonal communication on the Internet, telephone and face-to-face. New Media & Society, 6(3), 299–318.
- Blood, R. (2004). How blogging software reshapes the online community. Communications of the ACM, 47(12), 53–55.
- Boase, J., & Wellman, B. (2005). Personal relationships: On and off the Internet. In A. L. Vangelisti & D. Perlman (Eds.), The Cambridge handbook of personal relations (pp. 709–723). Cambridge, New York: Cambridge University Press.
- Boud, D., & Walker, D. (1998). Promoting reflection in professional courses: The challenge of context. Studies in Higher Education, 23(2), 191–206.

- Bouldin, A. S., Holmes, E. R., & Fortenberry, M. L. (2006). "Blogging" about course concepts: Using technology for reflective journaling in a communications class. American Journal of Pharmaceutical Education, 70(4), 84.
- Brown, J. S., & Duguid, P. (2000). The social life of information. Boston: Harvard Business School Press.
- Bruns, A., & Jacobs, J. (2006). Introduction. In A. Bruns & J. Jacobs (Eds.), Uses of blogs (pp. 1–8). New York: Peter Lang.
- Cameron, D., & Anderson, T. (2006). Comparing weblogs to threaded discussion tools in online educational contexts. International Journal of Instructional Technology & Distance Learning, 3(11), 3–15.
- Deng, L., & Yuen, H. K. (2007). Connecting adult learners with an online community: Challenges and opportunities. Research and Practice in Technology Enhanced Learning, 2(3), 1-18.
- Deng, L., & Yuen, A. H. K. (2009). Blogs in higher education: Implementation and issues. Tech Trends, 53(3), 95-98.
- Deng, L., & Yuen, H. K. (2011). Towards a framework for educational affordances of blogs. Computers & Education.
- Dennen, V. P., & Wieland, K. (2007). From Interaction to Intersubjectivity: Facilitating online group discourse processes. Distance Education, 28(3), 281–297.
- DeWert, M. H., Babinski, L. M., & Jones, B. D. (2003). Safe passages: Providing online support to beginning teachers. Journal of Teacher Education, 54(4), 311–320.
- Du, H. S., & Wagner, C. (2006). Weblog success: Exploring the role of technology. International Journal of Human-Computer Studies, 64(9), 789-798.
- Du, H. S., & Wagner, C. (2007). Learning with weblogs: Enhancing cognitive and social knowledge construction. IEEE Transactions on Professional Communication, 50(1), 1-16.
- Efimova, L., & de Moor, A. (2005). Beyond personal webpublishing: An exploratory study of conversational blogging practices. In 38th Annual Hawaii int. conf. system science (HICSS'05). Los Alamitos: IEEE Press.
- Efimova, L., & Fiedler, S. (2004). Learning webs: Learning in weblog networks. In Proc. IADIS int. conf. web based communities (pp. 490–494).
- Farmer, J., & Bartlett-Bragg, A. (2005). Blogs@anywhere: High fidelity online communication. In H. Goss (Ed.), Balance, fidelity, mobility: Maintaining the momentum? Proc. 22nd ascilite conference (pp. 197–204). Brisbane.
- Flanagin, A. J., & Metzger, M. J. (2001). Internet use in the contemporary media environment. Human Communication Research, 27(1), 153–181.
- Gaved, M., & Mulholland, P. (2005). Grassroots initiated networked communities: A study of hybrid physical/virtual communities. Paper presented in 38th Hawaii int. conf. system sciences. Hawaii.
- Hall, H., & Davison, B. (2007). Social software as support in hybrid learning environments: The value of the blog as a tool for reflective learning and peer support. Library and Information Science Research, 29(2), 163–187.
- Haythornthwaite, C., Kazmer, M. M., Robins, J., & Shoemaker, S. (2000). Community development among distance learners: Temporal and technological dimensions. Journal of Computer-mediated Communication, 6(1). Retrieved June 11, 2007, from http://jcmc.indiana.edu/vol6/issue1/haythornthwaite.html.
- Haythornthwaite, C., & Nielsen, A. L. (2007). Revisiting computer-mediated communication for work, community, and learning. In J. Gackenbach (Ed.), Psychology and the internet: Intrapersonal, interpersonal, and transpersonal implications (2nd ed., pp. 167–186). Amsterdam, Boston: Elsevier.

- Haythornthwaite, C., & Wellman, B. (2002). The Internet in everyday life: An introduction. In B. Wellman & C. Haythornthwaite (Eds.), The Internet in everyday life (pp. 3–44). Malden, MA: Blackwell Pub.
- Herring, S. C., Scheidt, L. A., Wright, E., & Bonus, S. (2005). Weblogs as a bridging genre. Information Technology & People, 18(2), 142–171.
- Hodkinson, P. (2007). Interactive online journals and individualization. New Media & Society, 9(4), 625-650.
- Huffaker, D. (2005). The educated blogger: Using weblogs to promote literacy in the classroom. AACE Journal, 13(2), 91–98.
- Jenkins, H. (2006). Convergence culture: Where old and new media collide. New York: New York University Press.
- Kerawalla, L., Minocha, S., Kirkup, G., & Conole, G. (2009). An empirically grounded framework to guide blogging in higher education. Journal of Computer Assisted Learning, 25(1), 31-42.
- Kim, H. N. (2008). The phenomenon of blogs and theoretical model of blog use in educational contexts. Computers & Education, 51(3), 1342-1352.
- Koku, E., Nazer, N., & Wellman, B. (2001). Netting scholars: Online and offline. The American Behavioral Scientist, 44(10), 1752–1774.
- Lenhart, A., & Fox, S. (2006). Bloggers: A portrait of the internet's new storytellers. Washington DC: Pew Internet & American Life Project. Retrieved September 19, 2008, from http://www.pewinternet.org/Reports/2006/Bloggers.aspx?r=1
- Loving, C. C., Schroeder, C., Kang, R., Shimek, C., & Herbert, B. (2007). Blogs: Enhancing links in a professional learning community of science and mathematics teachers. Contemporary Issues in Technology and Teacher Education, 7(3), 178–198.
- Makri, K., & Kynigos, C. (2007). The role of blogs in studying the discourse and social practices of mathematics teachers. Educational Technology & Society, 10(1), 73–84.
- Martindale, T., & Wiley, D. A. (2005). Using weblogs in scholarship and teaching. Tech Trends, 49(2), 55–61.
- Nardi, B. A., Shiano, D. J., Gumbrecht, M., & Swartz, L. (2004). Why we blog. Communications of the ACM, 47(12), 41-46.
- Nicholson, S. A., & Bond, N. (2003). Collaborative reflection and professional community building: An analysis of preservice teachers' use of an electronic discussion board. Journal of Technology and Teacher Education, 11(2), 259–279.
- Norman, D. A. (1993). Things that make us smart: Defending human attributes in the age of the machine. Reading, Mass.: Addison-Wesley.
- O'Donnell, M. (2006). Blogging as pedagogic practice: Artefact and ecology. Asia Pacific Media Educator, 17, 5-19.
- Ray, B. B., & Coulter, G. A. (2008). Reflective practices among language arts teachers: The use of weblogs. Contemporary Issues in Technology and Teacher Education, 8(1), 6-26.
- Richardson, W. (2006). Blogs, wikis, podcasts, and other powerful web tools for classrooms. Thousand Oaks, Calif.: Corwin Press.
- Selwyn, N., & Grant, L. (2009). Researching the realities of social software use An introduction. Learning, Media and Technology, 34(2), 79–86.
- Sevelj, M. (2006). Weblogs as dynamic learning spaces. Paper presented at the Distance education association of New Zealand biennial conference, Auckland, New Zealand.
- Sproull, L., & Kiesler, S. (1991). Connections: New ways of working in the networked organization. Cambridge, Mass.: MIT Press.
- Stiler, G. M., & Philleo, T. (2003). Blogging and blogspots: An alternative format for encouraging reflective practice among preservice teachers. Education, 123(4), 789 - 798.

- Technorati. (2008). State of the blogosphere/2008. Retrieved August 9, 2009, from http://technorati.com/blogging/state-of-the-blogosphere/
- Trevino, E. M. (2005). Blogger motivations: Power, pull, and positive feedback. In *Internet* Research 6.0. Chicago: Association of Internet Researchers.
- Weller, M., Pegler, C., & Mason, R. (2005). Use of innovative technologies on an e-learning course. The Internet and Higher Education, 8(1), 61–71.
- Wellman, B., & Gulia, M. (1999). Virtual communities as communities: Net surfers don't ride alone. In M. Smith & P. Kollock (Eds.), Communities in cyberspace (pp. 167–194). London: Routledge.
- 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.
- Wrede, O. (2003). Weblogs and discourse: Weblogs as a transformational technology for higher education and academic research. In Bloqtalk conference. Paper presented at the Blogtalk Conference, Vienna.
- Wortham, J. (2007). After 10 years of blogs, the future's brighter than ever. Wired. Retrieved July 8, 2008, from http://www.wired.com/entertainment/theweb/news/ 2007/12/blog_anniversary.