

An empirically grounded framework to guide blogging in higher education

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Abstract

We report on a study involving Masters-level students who blogged as a part of a distance-learning course at the Open University, UK. We present an empirically-grounded framework that can be used to guide educators when they are considering blogging as part of their courses, and can be used by students' whose courses include blogging activities. In our analysis of semi-structured interviews with students, we identified six factors that influenced their blogging: perceptions of, and need for, an audience; perceptions of, and need for, community; the utility of, and need for comments; presentational style of the blog content; overarching factors related to the technological context; and the pedagogical context of the course. The students' blogging behaviours were varied and depended upon the way in which they addressed each of the six factors. These factors, along with the associated questions in the proposed framework, provide insights about the activity of blogging from a student's perspective. Therefore, the framework can guide the design of blogging activities in courses.

Keywords

blogging, blogs, distance learning, higher education, learning design.

Introduction

Interest in using Web 2.0 technologies, such as blogs, in higher education is increasing (e.g. Weller 2007). Currently, the UK's Open University (OU) is implementing a £5 million programme in which an integrated virtual learning environment (VLE) is under development to meet the online learning needs of its 200 000 distance learners. The VLE will enable educators to incorporate blogs, wikis and pod-casting, as well as other asynchronous and synchronous communication and collaboration tools, into their courses. Some courses already offer students the opportunity to blog. In this paper, we will report on a study involving student bloggers on an OU course, and present an empirically grounded framework

for use by both students and educators when considering blogging as part of their courses.

The OU in the UK has been using online communication tools for students' use on their distance learning courses from the late 1980s. Jones *et al.* (1993) described developments and research on predigital media, demonstrating that lessons could be applied to the design of computer-based and online media. A great deal of work was done at the OU in the early days of educational use of computer-mediated conferencing (CMC) (Mason 1993, 1994). Salmon's books (Salmon 2002, 2004), which provide well-founded guidance for educators in how to create and support online group activities, also began their life with her work with distance students at the OU. The OU is now an institution in which CMC is a ubiquitous part of the learning environment. Any new communication system will need to offer new or additional affordance to challenge the hegemony of CMC. An important message that has come from all the prior

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research and practice with both predigital and digital media, is that students only make good use of a media/tool, or engage in any learning activity, if these are well embedded in the learning design.

However, there can be a risk of being ahistorical when implementing or conducting research in new e-learning tools for teaching and learning, which takes two forms: it can blind practitioners and researchers to useful findings from research on the use of earlier tools in education, and it can make researchers and practitioners behave as if the new tool is entering a pristine environment in which it can find its niche wholly on its own merits, rather than understanding both the technical and cultural context into which it is being introduced (Latour 2005). What has also been clear from previous experience is that it can take practitioners time to become skilled themselves with new tools and pedagogic practices. In this paper, we have conducted research on students' blogging behaviours on an OU course. The majority of the students are educators and e-learning professionals. We have found that the technological and pedagogical contexts of the course are over-arching factors that influence blogging by students and guide the design of blogging activities by educators.

Research in other institutions suggests that blogging can support learning in a number of ways. Students can use blogs to gather resources (Huann *et al.* 2005) and to share these, and individual opinions, with others (Williams & Jacobs 2004). This can be achieved through, for example, the exchange of hyperlinks (e.g. Oravec 2003) and commenting on each others' blogs (e.g. Windham 2007). Also, blogging can support meaning-making through reflective learning (Fiedler 2003). Blogging also places students in an ideal position to be able to reach out and interact with and/or build knowledge communities (e.g. Oravec 2003). This means there is also the potential for blogging to help distance learners by supporting collaborative knowledge-building activities and it also provides educators with an opportunity to comment on their student's work (Glogoff 2005). Blogging can also alleviate the feelings of isolation associated with distance learning (Dickey 2004).

The challenge of educational blogging

It is important that educators are aware of the affordances of blogs and that these are matched to appropri-

ate learning activities that enable students to achieve the learning outcomes of the course (Divitini *et al.* 2005; Weller *et al.* 2005). As an illustration of the complexity of this undertaking, Conole's (2007) Learning Activity Taxonomy identifies 72 possible learning tasks including: analysing, creating, explaining, listing, refining and summarizing. This diversity of learning tasks suggests that it can be challenging for educators to implement blogging successfully (see examples in the following text), especially when students' prior experience of blogging is often minimal (Kerawalla *et al.* 2007)

Krause (2004) reports haphazard contributions to blogs, minimal communication between students through their blogs and poor quality reflection upon the course materials as evidenced in blog content. Homik and Melis (2006) report that students engaged in only a minimal level of blogging in order to meet assessment requirements. Williams and Jacobs (2004) introduced blogging to MBA students and encountered problems with students failing to comply with the blogging requirements of the course. Divitini *et al.* (2005) provided student teachers with a blog in which to reflect upon their teaching experiences. They report that the blogs were not used by the majority of the students and conclude that that this was because of several factors, including a lack of student awareness about how to use blogs alongside other e-learning tools, and students' lack of understanding about what to write in them, and why. Clearly, the ideals of educators can be difficult to implement in practice.

From the students' perspective, there are two fundamental questions that they ask themselves about blogs: 'why would I want one?' (Farmer 2006) and 'what's in it for me' (Efimova 2003). These authors suggest that students need to develop a purpose for blogging that is of clear benefit to them. Burgess (2006) argues that to blog effectively, students need to develop 'critical, creative and network literacies' (p. 106) that enable them to become active participants in the construction of knowledge. In an exploration of their own academic blogging experience, Mortensen and Walker (2002) argue that blogs 'are enclosed and private spaces that allow the writer to cultivate an autonomous voice. And yet they are visible, open spaces that encourage linking and conversations' (p. 260). Thus, to be able to blog effectively students need to develop a range of skills.

Table 1. Research questions and associated semi-structured interview questions for students.

Research questions	Example interview questions
What are the main motivations behind students' blogging?	Can you describe the types of things you do in your blog and why?
What are the issues regarding writing and learning in a public space?	<p>a) Negotiating the public-private nature of blogs: do you write your blog mainly for yourself or for others to read? How do you feel about making your thoughts and life events publicly available to [whomever]?</p> <p>b) The course community: has blogging made any difference to the extent to which you feel part of a community? Who are the members of that community?</p> <p>c) Comments you give and receive: do you get many comments? Do you read them? How do you feel about the quality and usefulness of the comments you get?</p> <p>d) Writing style and presentation: have you adopted a particular style of writing in your blog? Are you worried about spelling or grammar mistakes?</p>
How does course pedagogy impact on blogging?	What are your views on using blogs for [whatever activity was suggested]?
How do students differentiate their use of blogs from their use of other communication and collaboration tools provided on their course(s)?	Have you found that you have developed a particular use for your blog that is distinct from other tools provided on the course?

The aim of this paper is to report on the iterative development of an empirically grounded framework for understanding some of the important factors related to blogging in higher education. The framework can be used by students to guide their blogging activities, and educators can use the framework to guide their decisions about how to use blogs on their courses.

In our research, we investigated the following:

- What are the main motivations behind students' blogging?
- What are the issues regarding writing and learning in a public space?
- How does course pedagogy impact on blogging?
- How do students differentiate their use of blogs from their use of other online communication and collaboration tools provided on their course(s)?
- How can findings from our research be made available to students to guide course-related blogging?
- How can findings from our research best support educators in selecting when and where blogging can support learning tasks?

Methodology

We begin this section with an overview of our methodology for data collection and analysis.

An overview of our work to date

In the first stage of our research programme (Kerawalla *et al.* 2008), we interviewed 15 students studying on an OU distance learning Masters level course: the 'eLearning Professional' (see Table 1 for the interview schedule). This course is a part of the MA programme in Online and Distance Education (MAODE) and is designed for e-learning professionals. Reflection is the core theme and it is achieved through suggested activities that encourage knowledge sharing and collaboration between students. Students are provided with their own blog, use of which is not compulsory. The course materials suggest some blogging activities but the students are free to use their blogs in any way they wish.

Analysis of semi-structured interviews with these students gave rise to four emergent factors that the

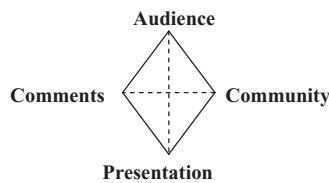


Fig 1 First iteration of a framework to represent factors from students' interviews.

students considered when they were blogging on this course:

- perceptions of, and need for, an audience.
- perceptions of, and need for, community.
- the utility of, and need for comments.
- presentational style of the blog content.

These factors are represented in the framework in Fig 1.

Iterative development of the framework: a further study

In this section, we discuss the iterative development of the framework in Fig 1) by presenting findings from the second stage of our research programme involving students who were blogging on another OU course on the MAODE programme.

Students and their course

These students were studying a 22-week online distance education Masters course: 'Innovations in eLearning' (hitherto referred to as the 'Innovations course') and were provided with an individual blog. This course was one of the first at the OU to introduce blogging so the use of this tool was exploratory. The course materials suggested only one standalone blogging activity that was designed to introduce students to blogging and to encourage them to think about whether and how blogging could support their learning. Students were asked to summarize four case studies (out of a total of ten) and to share the summaries by posting them in their blogs. As part of their first assignment, students could gain extra marks by quoting from the summaries posted on others' blogs, to support their own arguments. Once this activity was complete in week 5, there were no further suggested blogging activities on the course and the students were free to blog as they wished, within the OU's Computing Practice guidelines. The students used other

e-learning tools also as part of the course such as a wiki, pod-casts, email and an asynchronous text-based discussion forum. One of the aims of the course is to encourage reflection by students (primarily educators in further and higher education and/or e-learning professionals), about whether/how the different e-learning tools can support learning and teaching.

Recruitment notices inviting participation in our research were posted on the course website. The notices emphasized that we had no expectations about the amount, quality and type of blog posts that students had written, and that we were interested in whether they had found their blogs useful. We received ten positive replies from six females and four males with a mean age of 43.5 years (range 29–54 years). Nine of these students were studying on the 2006–2007 course and one student studied in 2005–2006. All were residents in the UK or Europe. Eight of the volunteers had previously studied the 'eLearning Professional' course (the course that we had considered in the first stage of our research programme) and three of these had been interviewed by us regarding blogging on that course. As a result, they were able to compare their experiences across courses.

Six of the students had prior experience of blogging on their previous course only (that is, in the last 6 months), two had read blogs but had not blogged themselves, one student maintained a blog for his own students, and one had briefly tried social blogging several months earlier but had since stopped blogging. Some of the students in this research, particularly those who had enjoyed blogging on the previous course, had started their own blogs alongside the one provided by the current course. However, their personal blogs were social blogs and we did not consider them as a part of our research data as our aim was to concentrate on course-related blogs and learning.

Data collection from students

Each student gave consent that we could access, read, analyse and use anonymized quotes from their blogs that they had posted prior to their recruitment date. We read each student's blog carefully and prepared a list of the different types of content. Following this, each student participated in an audio-recorded semi-structured telephone interview with two researchers, which addressed aspects identical to our previous research with students on the 'eLearning Professional'

course and listed in Table 1. Though the interviews were conducted around the key aspects in Table 1, we adapted the interview schedule to specifically enquire about the experiences on the course (Innovations course). Also, having read their blogs prior to the interview, we asked individual students specific questions about their blogs. For example, if their blogs contained very few entries, they were asked more questions about why they were not blogging often, and so on.

Analysis of the students' interviews

As discussed above, our aim was to iteratively evaluate and, if necessary, elicit factors in addition to the four that we derived in the first stage of our research programme: community, audience, comments and presentation. Therefore, at this stage, we were looking for evidence of the four factors as well as keeping an open mind for the possibility of new factors that may arise due to the different course context of the 'Innovations course'. The interviews were analysed in Microsoft Word™ (Microsoft Corporation, Redmond, WA, USA): separate files were created for each of the pre-existing four factors and individual student's responses were pasted into each file if they addressed each theme. As new factors were identified, new files were created for each of the emergent factors.

Findings

There was one student out of the ten students who could not blog because she was temporarily without an internet connection. We found that the responses from the remaining students could be categorized in terms of the four factors identified in Fig 1. In addition, our analysis revealed three more factors that relate to the overarching technological and pedagogical context of the course:

- whether/how students perceive that blogging has a role that is distinct from the ways they use other e-learning tools on the course.
- the functionality of the blogging software.
- the pedagogical context (i.e. the type of activities the course suggested were carried out in the blog, and why).

We found that there were commonalities in blogging behaviours within groups of students, in terms of the ways in which each approached the four factors in Fig 1

and the additional three factors related to the pedagogy and technological context of the course. We identified the following types of blogging behaviour among the students:

- carrying out course-directed activities (only) to share (four students).
- carrying out course-directed activities (only) for oneself (one student).
- keeping a learning journal (one student).
- blogging as self-motivation (one student).
- creating a personal online store (two students).

Students' blogging behaviours

In this section we characterize each of the blogging behaviours in terms of how the students addressed the factors of audience, community, comments and presentation. Where there was one student who adopted a particular blogging behaviour, we will present this as a case study. Where there was a group of students who adopted a particular behaviour, the group will be discussed as a whole.

Carrying out course-directed activities to share

Audience: these four students expected and wanted an audience. They wanted to post their thoughts on all the course activities, including the case study summaries, and receive comments.

Comments: these students wanted comments, because 'they throw up other angles, other points you may have missed and give alternative views'. However, they were soon disappointed by the lack of interaction with other students; most comments were from their tutor.

One said, 'there doesn't seem much interaction . . . then you wonder if other people think I'm writing rubbish or what? I would have liked to have some comments from other people'. Two of these students had studied the eLearning Professional course previously. They said that the different nature of the activities on the two courses, that is, reflective narratives on the previous course and the summaries of case studies on this (Innovations) course had an impact on their engagement and, hence, relative success of blogging, for them. One said, 'On [the eLearning Professional course] we reflected on our [professional] contexts and people would comment . . . [on the Innovations course] all they've done is regurgitated from the course literature. If there's no personal

thoughts there, what can I respond to?' These four students stopped blogging shortly after completing the case studies activity.

Community: as a consequence of minimal or no comments, blogging did not contribute to a sense of community for these students. One explained that 'it feels a bit isolating'. Another said that the introductory activities at the beginning of the course had been successful but that this had not been sustained.

Presentation: these students carried out a few of the early course activities in their blogs, such as reflecting upon an article. They said that they checked their grammar and spelling as well as the sense of their posts as they were in a public space.

Carrying out course activities for oneself: a case study
This student said that he blogged because he thought that it was a course requirement. He understood that it was not being assessed and explained that one of the learning outcomes of the course was to 'understand conceptions of learning with electronic media' and said that that, to him, included blogging and meant that he should engage with it.

Audience: he was not concerned with his audience and expected little from them. He said, 'I see my blog as for myself, I wasn't motivated to do it for other people. The things I put in it were to serve my purposes and to help my learning and study'.

Comments: this student received comments only from his tutor. He said that they were neither 'expected, motivational nor helpful'. His main motivation was to blog because he thought it was required of him.

Community: he said that he was not concerned with using his blog to feel part of a community. He said that he stopped blogging halfway through the course because he preferred to interact through the asynchronous forum (see following section for a further discussion of this aspect).

Presentation: this student said he checked his spelling and grammar 'as if I was writing in a word document kept on my own computer', which is consistent with his view that he was blogging for himself.

Keeping a learning journal: a case study

Community: this student was interviewed previously about his blogging experience on the eLearning Profes-

sional course where he belonged to a small community of bloggers who derived both academic and social support from each other. Their academic posts were interspersed with humour, chat and more informal material. However, this was not the case on the Innovations course. He said 'I thought blogging would take off after [the case study activity] but it didn't seem to' and as a consequence, 'it has been less about interaction with other students so blogging was much more for me than anyone else'.

Audience: this student said that his main motivation was to use his blog as a notebook or learning journal that was primarily for him but that was open to comments. He described his posts as 'mini-essays that contain all that I've read and is important and relevant to me'. As he was not reliant on his audience for motivation, he was blogging throughout the duration of the course.

Comments: he said he welcomed comments but did not specifically seek them. He received several comments on most of his blog posts, and many of these were from students that formed part of the small community of bloggers that had evolved previously on the eLearning Professional course and, interestingly, this included one student who was not studying the Innovations course but who kept in touch with him through his blog. He said that 'the comments are mostly coffee bar chat' and suggested that this reflected the fact that the course emphasised individual learning rather than the sharing of ideas. As a result, he said that he 'enjoyed the blogging in a different way than on [the eLearning Professional course]'.

Presentation: most of this student's posts were 'mini-essays' and were carefully constructed. He created drafts of his posts in MS-Word© first, although he was unsure why he did not type directly into his blog.

Blogging as self-motivation: a case study

Due to personal or unforeseen circumstances, this student's engagement with the course was sporadic and she was often behind with her work. For these reasons she used her blog as a means to motivate herself to continue. However, she also spoke about how the pedagogy of the course had an impact on her overall enthusiasm for and engagement with blogging.

Audience: We interviewed this student previously about her blogging experience on the eLearning Profes-

sional course. On that course, she had been part of the small community of bloggers who blogged regularly (as described above). Her main aim for blogging on the Innovations course was very different because it was mainly for herself. She said that this change in blogging behaviour was partly because 'you feel much more in isolation [on the Innovations course] . . . there's no people to communicate with'. This student wanted a wider audience but failed to find one.

Community: this student said that her blog 'has been my way of talking to myself'. She found it useful as a means of 'trying to catch up and get my head back into it' when she had fallen behind. She also set up a news-feed of e-learning-related articles to stimulate and motivate her thinking as she found it difficult to engage with the course. However, this student also used her blog to inform fellow students about general life events, as she was experiencing both exciting and worrying times so, in this more informal sense, she was part of a course community but yet her aim was to blog for herself. She was blogging throughout the duration of the course.

Comments: she did receive supportive comments on many of her posts, most of which were from students on the current course who had belonged to the small community of bloggers on the 'eLearning Professional' course.

Presentation: she said she was not worried about her spelling and grammar.

Creating a personal online store

Audience: neither of these two students was concerned about their audience as they were motivated primarily by the affordances of the blogging technology. This was described by one of them who said, 'it's a place that I can put text and get at it in a structured and organised way, with a search feature. The issue of it being available to anybody doesn't excite me very much but the issue of it being available to me when I'm online anywhere is good'.

Comments: these students neither expected nor wanted comments as communication was not their priority. One of them explained how it was often difficult to avoid them, even though she did not want them: 'the tutor would ask me questions [comments] and I'd have to reply . . . you may want it more as a private space, so there's that tension'.

Community: these students were not concerned with belonging to a course community of bloggers. They used their blog as a learning journal for themselves which included, for example, summaries and reflections on what they had been reading, a to-do list, and URLs of interest. One student blogged several times a month throughout the whole course, while the other student blogged minimally and sporadically.

Presentation: they were unconcerned about the presentation of their work as it was for them only. In fact, it was difficult, at times, for us to understand some of the posts as they were not presented for a third party's benefit.

In addition to the four factors that influenced students' blogging behaviours, as discussed above, we uncovered other factors related to the technological and pedagogical contexts of the course.

The technological context

The technological context refers to how the students used their blog in conjunction with the other e-learning tools on the course, and the functionality of the blogging software.

Use of the blog in relation to other course communication tools

In addition to their blogs, the students had access to an asynchronous text-based discussion forum. Forums are the main online communication tool on OU courses and embedded on every course. Therefore, all new tools, like blogs, are benchmarked against what additional or different pedagogic functions they can offer beyond those offered by forums. Students on the Innovations course also contributed to a course wiki, explored podcasting, and had access to email.

Two main factors emerged from the students' interviews regarding the advantages of blogging over posting to an asynchronous discussion forum:

- A blog is owned by the individual and is personalized. Students said, for example, that it is 'my site, I'm in charge' and that their blog was a space for their own learning, thinking, planning, note-taking, reflections and opinions. One student said that his blog posts were more intrinsically motivated and thus more independent than the posts in a discussion forum.

- Two students who had studied on both courses said that a blog was a more informal space than a forum, where 'I can let my hair down and be myself'. This is related to the point above, in that personal ownership allows for informal content if the blogger wishes. Two other students said that they felt that their blog posts could be longer and more detailed because, unlike a forum, reading is considered to be less obligatory.

However, several students said that they were confused about how to use their blog both in terms of posting material and responding to comments. One said 'I didn't know where to put stuff. It was confusing' and another that 'we can comment on each others' posts both in the blogs and in the forums, do I put it here [blog] or do I put it there [forum]?' Sometimes, this resulted in 'a lot of people repeating the same comments they had on their blog, in a posting on the forum' and this student eventually stopped using his blog because he felt 'there were too many places to have to go to'.

Functionality of the blogging software

Some students were not happy with the blogging software ('Moveable Type', an open source blog created by Six Apart Ltd., San Francisco, CA, USA) as the OU provided them with blogs where the blog roll function was disabled and the RSS feed functionality was not available. Also, students were disappointed that they were unable to personalize the user interface of their blog, such as the banner and the name of their blog.

One student already had a personal blog using 'Blogger' software and switched to this one halfway through the course. He said this was because: the OU blog had a limited life and was kept for only 6 months once the course ends (this will not be the case from 2008 when the VLE will provide a single blog that can be used for the entire time-period of a student's OU study); and the OU blog had no export function that enabled him to copy the whole content to another blog once the course ends.

The pedagogical context

We found that the students on the course were looking forward to the opportunity to blog. However, once they had completed the suggested case-study summaries, seven of the nine bloggers (one volunteer did not blog) expressed two reservations about the suitability of the

suggested activity for blogging. First, the limited selection of ten case studies for the 102 students on this course meant that posts were repetitive. Second, the course materials did not suggest that students critique the case studies, which meant that many summaries did not offer engaging opinions.

For example, one student said, 'everybody was doing the same activity so there comes a point when the summaries are very similar . . . they weren't personalised. If you're able to bring in your own experience then every account is different and it's more interesting'. Another said that 'I was looking at other people's blogs because I was asked to for the assignment, not because I wanted to out of fun or interest'. However, one student preferred this activity to the reflections she had been encouraged to carry out as part of the eLearning Professional course because confidentiality issues in her workplace made reflection on her practice difficult. The ninth student did not undertake the suggested activity (but blogged on his own) so could not comment.

A framework for student bloggers and educators

Our research has revealed that there are a variety of ways in which students find blogging useful, which suggests that it would be unwise to develop rigid guidelines for blogging. Guidelines are unlikely to give the students an opportunity to explore blogging and to appropriate it to support their individual requirements. It seems more prudent to offer guidance in the form of questions that students can use as triggers to explore the role of blogging for themselves, within the requirements of their particular course, hence increasing their awareness of the factors involved in blogging.

Towards the aim of developing guidance, we have drawn upon the findings from our research to iteratively develop the framework in Fig 1 into Fig 2. The framework in Fig 2 presents questions for students to answer, from the perspective of their own technological and pedagogical context, about how blogging can be initiated and sustained. Features of the overarching pedagogical and technological context of the course are represented at the top of Fig 2. Each contextual feature is accompanied by a set of questions that have been derived directly from student responses in their interviews. It is important that all decisions about blogging are considered within the course context, thus making the framework applicable across a range of courses.

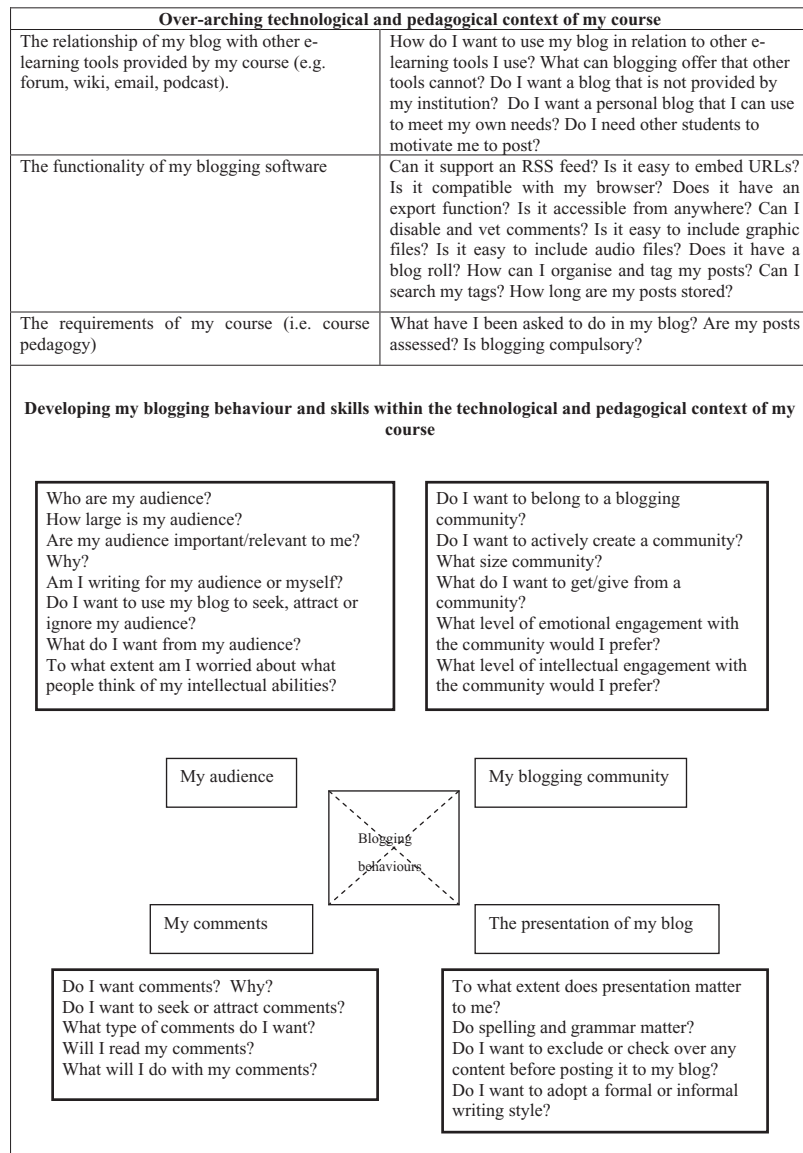


Fig 2 A framework for student bloggers and educators.

Below this (and, in fact, co-constituted by the context), the framework represents the four factors that students indicated were important considerations when blogging on their course. Each of the four factors is accompanied by a set of questions that we have adapted from the students' interview responses, and that play a part in answering the bigger question of 'why do I want to blog?' The ways in which each student addresses each of the four factors will give rise to their blogging behaviour(s), which are represented diagrammatically in the centre, where the four factors interact with one another.

Some questions that the students may wish to consider are: how can I ensure that I know when the other students have added a blog-post (technological context)? What are the requirements of the course for blogging (pedagogical content)? Am I writing for my audience or myself, or both, and what benefits are there to each of these approaches? Do I want comments, how will I make use of the comments I receive, and will I be posting comments on others' blogs? Should I be involved in the creation of a community of bloggers on the course? And so on. In this way, the framework could guide students by encouraging them to think

about how best to make use of blogging on their course.

The framework also highlights some interesting questions that may help educators when designing appropriate blogging activities for their students. For example, if the desired learning activity involves 'explanation', educators could use the framework and ask themselves the following questions: is the personal nature of a blog space important in giving students a place to represent their own explanations, or could this activity be done in a more communal space such as a forum or a wiki? Is it important that students' explanations are tagged and organized for later retrieval, e.g. for submission in an assignment? Are other students' comments useful, and why? Should students be advised to post comments and why would this be beneficial? Would the explanations be better supported by a community of student bloggers or should the activity be restricted to an individual? Is it important that the explanation is presented in any particular style? In this way, the rationale for the blogging activity can be made transparent and available to students. This clarity of the rationale will help students to understand why they are being asked to blog and what their educators hope it will achieve. This may overcome some of the problems faced by previous researchers (e.g. Divitini *et al.* 2005), as discussed in the introduction to this paper.

Discussion

We have presented findings from our research of students blogging on an OU online distance-learning Masters course and have illustrated some of the different ways in which blogging may support learning. The course materials suggested a single standalone blogging activity related to the first assessed piece of coursework. Thereafter, it was suggested to students that they should explore blogging as they wished. The initial blogging activity on the course met with limited success in engendering socialization among students. Socialization (fostered by the exchange of ideas, experiences and comments), or being aware of one another, is an antecedent for effective collaboration and for the generation of a learning community (Irwin & Berge 2006). The blogging activity failed to generate socialization so many students thereafter either blogged for themselves, or gave up.

Integrating the technology within the pedagogy of the course and clarifying its role to the students

Guidance on the pedagogical and technology-related aspects of blogging would have helped students to understand the role of blogs on the course and how blogging can be used in conjunction with other tools such as wikis and forums. In our previous research on another OU Masters course – the eLearning Professional – (Kerawalla *et al.* 2008), the students were aware, from the course guide, that they 'will be encouraged to use personal blogs (web logs) as a learning journal to record and reflect upon your course activities, professional practices and development needs as you progress through the course.' Even though the students struggled with some fundamental aspects such as how to reflect on learning and the benefits of reflection, the role of the blog was much clearer, as compared with the course ('Innovations in eLearning') that we have investigated in this paper. Students on the 'eLearning Professional' course used their blogs for more than just reflection, thus their blogging did not match completely with the course team's intentions. However, the students' experiences of blogging increased their awareness of the technology and their personal explorations enabled them to devise strategies on how they would use blogs in their teaching. So a further learning outcome of the course – 'evaluate specific technologies and their uses of learning and teaching' – was achieved.

These two case studies (in this paper and in Kerawalla *et al.* 2008) have shown that there are some key social and pedagogical factors that influence the student's learning experience with technology-enabled learning. These factors relate to: (a) integrating the technology within the course; (b) clarifying the role of the technology within the pedagogy of the course to the students; (c) providing guidance about the usage of the technology and related social norms; (d) designing for socialisation in online collaborations; and (e) the activities and guidance should be so designed to sustain the socialization throughout the course so as to foster the development of a learning community.

Students' blogging behaviours: adapting and making their own choices

It is interesting that some students studying on the 'eLearning Professional' and the 'Innovations' courses

chose not to engage with the course community through blogging and blogged mainly for themselves. They used their blog simply because it was a convenient, accessible tool for making notes, storing materials and retrieving them. These blogging behaviours challenge the popular assumption (e.g. Nardi *et al.* 2004) that blogs are primarily a communication tool.

Moreover, these behaviours suggest that, for some students, the design of activities can be less important, and that the existence (or not) of a course blogging community has no effect on their willingness to communicate with fellow students through blogging. However, when interpreting these findings it should be borne in mind that these students were engaging with voluntary blogging activities and their behaviours may have been different had blogging been a compulsory requirement of their courses. These findings have implications for course designers who may need to bear in mind that some students may find blogging useful for personal and non-collaborative purposes.

A comparison between the different blogging behaviours of students on two different courses provides insights on how students can adapt their behaviours across different pedagogical and social contexts. As stated above, several of the students on the Innovations course had already been on the eLearning Professional course. These students reported how they adapted their blogging to meet the pedagogical and social contexts of their new course. They adjusted to the lack of community and, therefore, blogged primarily to meet their own needs (for example, one of them blogged to motivate herself; another blogged to create a learning journal). Further, some of these students had set up their own personal blogs after positive experiences on the eLearning Professional course. Thus, it is likely that previous experiences enabled them to adapt and sustain their blogging in the absence of any course-directed blogging activities on the Innovations course. This behaviour is in contrast to novice bloggers on the Innovations course; many of whom gave up blogging after the first compulsory activity on the course. This suggests that once students have discovered how blogging can be appropriated to meet a range of personal learning needs, and understand how it can benefit them, they may rely less on course-directed activities to maintain their enthusiasm and momentum.

The framework and its role in guiding students and course designers

It is the ways in which students negotiated the factors of audience, community, comments and presentational style, within the pedagogical and technological contexts of their course, that gave rise to their blogging behaviours. The framework in Fig 2, which includes the factors and associated questions, can help sensitize the students to the decisions they may need to make when blogging. By asking themselves questions about how they want to approach each factor, they can work towards developing blogging behaviours that will enable them to appropriate the technology to meet their own learning needs within the pedagogical context of their course.

In the next stage of our research programme, we will be organizing a series of workshops to iteratively evaluate the usability and utility of the proposed framework. In these workshops, we will invite educators from different disciplines who are currently designing blogging activities, or are planning to include blogging in their courses, to apply the framework and share their experiences with us. The feedback received in the workshops will be incorporated to improve the design and effectiveness of the framework. We suggest that our research has identified features of blogging that are not confined just to distance learners, making the framework broadly applicable within the higher education sector as a whole.

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