

Blogs demystified: How autism practitioners responded to scaffolded online learning



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This paper reports on a postgraduate case study investigating the learning benefits and issues associated with the adoption of blogs in a unit where they were not normally available within the University's version of the learning management system (WebCT). Of interest were various scaffolds designed to assist novice bloggers to reflect on their experiences of teaching children with autism using an approach called TEACCH. Interview data suggested that the ICT requirements enhanced the bloggers capacity to develop insights into their autism teaching. Structured blogging ("reflect-describe-analyse") was particularly useful. Practitioners were equivocal as to whether blogs should be initially linked to a familiar site such as WebCT, but agreed they needed to be given guidelines about how much and how often to blog. The practitioners interpreted "scaffolding" broadly to include their colleagues' blogs, and felt the closed membership structure facilitated the exchange of useful, albeit sensitive, information.

Keywords: novice bloggers; autism; TEACCH

Introduction

Take ten busy practitioners who are all focussed on participating in hand-on classroom interventions for their pupils with autism. All ten are mature age students who have just recently enrolled in an autism Masters course, and the majority are female schoolteachers who are over 40. They have disparate ICT experiences. None has ever engaged interactively with public domain learning platforms, and the requirement to do so certainly was not part of their expectations when they enrolled in the subject "Treatment and Education of Autistic and Communication-handicapped CHildren" (TEACCH).

Now tell them that blogs and a new Open Academic website will play an essential role in their learning journey. Given that none had ever interacted with this learning tool, does it surprise anyone to find that the practitioners' reaction was a mixed one?

Some students were particularly apprehensive about "blog overload" (Dawson 2007) and worried that the online requirement might overshadow their goal of expanding their theoretical and practical learning about autism interventions. However they were also ready to extend their skills, particularly if they enhanced their understanding of autism in the process. They were also encouraged because the aims of the subject matched the benefits of blogging - diverse perspectives, participation opportunities; heightened interest; and development of expertise in the subject matter (Ferdig & Trammell, 2004).

The concerns of these ten teachers, and how they were anticipated, addressed and resolved, forms the focal point for the present research. Their apprehensions are shared by others, as evidenced by documented reactions to online learning such as insufficient motivation, initial reluctance, and frustration (Clear & Kassabova, 2005; Herrington, Oliver & Reeves 2003). However, surprisingly little research has been published on online learning for professionals (Maor & Volet, 2007). Consequently it was decided to research the outcomes, with a focus on the following questions:

- How do professionals respond to the introduction of blogging in a masters level course?
- What is the impact of different forms of scaffolding on their online learning experience?

Methodology

Participants and setting

The participants consisted of eight female and two male teachers/counsellors who enrolled in a 15 week course to enhance their practical skills working with children with autism. Eight lived in the local Canberra region, another lived about 400 kilometres away, and one lived in Japan. Their entry ICT literacy skills included competency with *Word*, *Excel*, *Powerpoint*, and email. They also used more

specialised programs such as Boardmaker (computer generated pictographs), Smartboards, Clicker 5, Inspiration, and MyClass. All used library databases and surfed the net more or less frequently, but none had every interacted with a blogger. Most had a rough idea of what blogging meant and had read other's blogs, but none had ever commented on these let alone written their own.

These students were familiar with the WebCT from their previous studies. However it was decided to introduce them to blogs on Open Academic in view of the potential benefits. First, Open Academic is a more inclusive learning platform. It is potentially open to community members – including families with autism - who do not have to be enrolled students. Second, the blogs married well with one of the course assignments which comprised a shared weekly reflection on their teaching. Third, the course content was highly motivating for these postgraduates. Whilst they might not pursue blogs for their own sake, they were more likely to do so if these provided the means to improve their understanding of autism practices.

The course was delivered flexibly, using a mixture of face-to-face and online learning. There were two face-to-face sessions, the first consisting of a half day course and blog induction in March. This was followed about a month later by a short technology segment in a five day hands-on TEACCH workshop (Mesibov, Shea & Schopler, 2004) where participants worked with pupils with autism under supervision.

Scaffolding and choicemaking procedures

The practitioners were introduced to blogging in a two stage process. The first of these focussed on practising the diary task, and the second on generalising this task to the new Open Academic site. During the initial phase they were asked to write up weekly reflections in a word document and post it on the familiar WebCT learning platform. Diarising was further scaffolded through instructions to reflect then write for 10-15 minutes about significant classroom happenings that had occurred in the past week. This writing was to incorporate a description of each event followed by their reactions to it. Once they were comfortable with this framework, the second stage was introduced where the learners were invited to use WebCT to link to a customised blog site on Open Academic. The practitioners were given several choices: when to transfer to the new site; when to blog (once any time during the week); whether to keep the blog within the group; and how to access the blog – either through favourites; a link on WebCT; or via an email which alerted them to each new posting.

At the end of the semester the students were interviewed individually about their online learning experience, and user statistics were collected from *WebCT* and the Open Academic site.

Results and discussion

The first research question focused on how professionals respond to the introduction of blogging in a masters level course. Turning first to the blog record, the usage is impressive. Over two hundred pages were generated from a total of 165 messages which included 9 postings by the instructors. The total messages included 27 comments to others, one forum posting and two image postings. Defining success as at least one blog per week over 13 weeks, it can be seen from the “Total postings” column in Table 1 that eight of the ten practitioners successfully transitioned to the new technology. Of the two practitioners with the least activity, one had to evacuate to a new home following heavy flooding and was unable to

Table 1: Activity levels in WebCT and Open Academic, by student

Practitioner	OPEN ACADEMIC - BLOG					WEBCT		
	Total blogs	Outward replies to others	Forum posting	Image posting	Regular email	Hits	Read	Posted
1	17	0			Yes	39	0	0
2	23	9				715	116	21
3	17	1				411	116	1
4	18	0				886	96	3
5	0	0	1			117	93	1
6	17	2		2		489	116	12
7	19	0				365	116	1
8	24	9				704	116	17
9	6	0				474	114	10
10	24	6				1680	115	29
TOTAL	165	27						

access the internet for some time; and the other resorted to regular emails to submit assignments to the instructor and never used the online blog facility. The first Open Academic posting dates varied between practitioners due not only to choice, but to several unintended reasons. These included firewalls which initially blocked access, and misunderstandings about accessing the site (some students did not realise that they had to enter both their ID and password). One student commented she was reticent to contact the instructor for assistance because “I thought I should have been able to crack the online code myself”.

One influence on the students’ uptake of the new technology may simply have been their application to online work, irrespective of the learning platform. On this reasoning, those that used WebCT frequently would also be expected to be active on the Open Academic site. In order to ascertain whether there was an association between activity levels on the two sites, a Spearman’s rank correlation coefficient was calculated. This makes no assumptions about whether variables follow the normal distribution and so is a “safe” correlation to make. As Table 2 illustrates, a high number of blogs tends to be accompanied by a high number of WebCT postings. The correlation between blogs and WebCT postings is 0.629, which is a moderately high positive correlation that is significant at the .05 level. When supplementary tests were performed, there was a high and significant positive correlation (.865; $p < .001$) within WebCT, for “hits” and “posted” showing that those who visited WebCT were more likely to post there. There was a moderately high positive correlation (0.665) between total blogs and WebCT hits, significant beyond $p = .05$. This all suggests that the students’ prior online study habits were a factor in successfully transitioning to the new technology.

Table 2: Correlations

			Total Blogs	WebCT hits	WebCT Posted
Spearman’s rho	Total Blogs posted	Correlation Coefficient	1.000	.665*	.629*
		Sig. (1 tailed)		.018	.026
		N	10	10	10
	WebCT hits	Correlation Coefficient	.665*	1.000	.865**
		Sig. (1 tailed)	.018		.001
		N	10	10	10
	WebCT Posted	Correlation Coefficient	.629*	.865**	1.000
		Sig. (1 tailed)	.026	.001	
		N	10	10	10

*. Correlation is significant at the 0.05 level (1-tailed)

**. Correlation is significant at the 0.01 level (1-tailed)

The qualitative interviews were designed to complement the quantitative analysis and also to illuminate the impact of scaffolding on the practitioners’ online experience. Thirty open-ended questions were formulated following a Leximancer analysis (beyond the scope of this paper) of major blog themes; those which related to their blog experience (eg privacy issues) were incorporated into the interviews. Specific questions about scaffolding were also included, as were questions based on the literature and on solicited in-class group feedback to the question “Describe your blogging experience”.

The student responses were initially analysed using emergent open coding. Responses were tabulated where each new unit of meaning/ phrase was written on the left hand column, and coded with a single descriptor in an adjacent column. This phase was followed by axial coding, where those preliminary labels with similar meanings, causes, and relationships were combined into clusters. Each cluster was defined and given a summary label. An assistant then coded the data, necessitating that one definition be modified slightly. On the final run through, the entire data were coded independently by two coders and 97% agreement reached using the formula total agreements / (total agreements + disagreements). Finally, a draft form of the current paper was distributed to the practitioners for comment; none wished to change the author’s interpretation.

In order of importance (defined as number of comments) the ensuing cluster labels were: blog ease/difficulty; utility; access; privacy/sharing; networking; scaffolding; perseverance; work framework; prior experience; and freedom of information. In relation to the second research question concerning scaffolding, the **different scaffolds** were variously perceived. All participants responded positively to the diary guidelines of “reflect-describe-evaluate”, but the eight most active students felt they could have begun straight away without the initial WebCT practice. All were grateful for the instructions about blogging and accessing the Open Academic site on WebCT, although choicemaking regarding when and how to access the blogs appeared to be relatively unimportant. Somewhat unexpectedly, the practitioners

interpreted “scaffolding” in a broader sense than the author had originally envisaged. All construed the **work framework** of weekly postings as an instance of scaffolding, with several commenting that “I needed this discipline”. Some students interpreted **scaffolding in relation to the utility of the course content, including their colleagues’ postings**. These professionals without exception commented that the digital diary was a valuable exercise. All ten visited the blog site and read their colleagues’ reflections with interest. One professional said turning on the computer was one of the first things she did on arriving home after work. Others commented on **networking** (“it was real; it was interactive”) and another suggested she would have liked a farewell blogging session with everyone who had “helped me understand autism”. Comments such as “it was worth persevering because I learnt heaps” suggest interest is as important as scaffolding in helping students **persevere** with a new online learning platform.

In relation to **blog ease/difficulty**, eight respondents commented that they initially “spent a bit of time” remembering their log / password and exploring the site, and advocated some hand-on learning for future cohorts. There was no clear association between uptake of the blog and **previous online experience**, although two of the four most frequent bloggers were either avid computer users or leaders in computer technology at their workplace. **Access** remained an issue for some students. One student could only access the blog through gmail, not the WebCT link. This student did not have broadband and admitted it was irksome to wait for a connection. Most (70%) students were simply too busy to blog at work, and they found access easier at home.

Some of the material was quite personal and for many the blogs seemed to function like a debriefing exercise after a demanding day. Perhaps not surprisingly there was a strong feeling that **privacy** was important and blogs needed to be “closed” to outsiders. This is not unusual amongst bloggers. Many blog for their friends and don’t expect visits from strangers. The statistics reflect this - there is an average of only seven readers for each of the 12.5 million blogs on LiveJournal, a popular blog host service (Holahan, 2007). One professional felt that the privacy gave them a freedom of expression. Another however, echoed the sentiments expressed by Oblinger and Hawkins (2006) and was especially concerned that the group be informed not just about netiquette (which they had been given previously) but also **freedom of information** issues.

Conclusions

This research consists of a small case study so interpretations must be made with caution. However it appears that these practitioners responded well to their first blogging experience, with eighty percent generating more blogs than were required for course completion. Facilitative factors appeared to be prior online use, and various forms of scaffolding. Students appreciated lucid instructions for accessing and using the site, and clarity regarding the frequency and form of blogging (“reflect-describe-analyse”). Providing choices about when and how to move to the blog site appeared immaterial. Interestingly, the practitioners interpreted “scaffolding” broadly to also include the advice provided by fellow bloggers in relation to the course content. They valued the candid sharing of their experience and advocated a closed group structure (thereby contraindicating greater inclusivity through community access to such blogs). Ultimately blogging perseverance appeared to be related to both the instructor’s scaffolding and the interest and utility of the course.

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