

Are They too Old to Learn? Exploring the Barriers to using Weblogs in Demystifying the Information Literacy Experience for Mature Age Undergraduate Students

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ABSTRACT

Active engagement with Weblogs by students presents an enticing new dimension in e.learning. Much of the current literature would suggest that embracing blogs appears, primarily, to be an activity of the young. This paper reports on findings from a survey that explored the blogging behaviours of mature age (23+ years), undergraduate students undertaking first year courses across a number of disciplines at an Australian regional University as part of a broader study. The researchers were keen to develop an understanding of Weblog usage from the learner's perspective. The study was able to identify some of the barriers that prevented this cohort of students from actively engaging in Weblog interaction. The findings from this study will inform the development of programs aimed at facilitating information literacy skills in students new to study at the university.

Keywords

Weblogs, e.learning, information literacy, undergraduate, mature age

INTRODUCTION

Weblog usage or 'blogging' is an opportunity to 'have one's own space' on the internet. This web-space can be utilised for personal writing and self-reflection, an opportunity to join with others to promote discussion and debate on topics of shared interest (Mortensen & Walker 2002), or simply as a chat facility. Some people may use a blog to create an identity (Chandler 1998). Others utilise blogs to self-publish, to embrace a cause, or to promote an ideology (Nardi, Schiano, Gumbrecht & Swartz 2004). It is, perhaps, this extreme versatility that creates room for blogs to be utilised as a unique e.learning opportunity. Despite this opportunity, however, not everyone embraces blogs with the same level of enthusiasm. According to a commercial web survey by Perseus Survey Solutions (2005), the 13-29 age groups account for ninety percent of all weblog interaction. At age 30 and older, weblog participation is minimal, around five percent. Unfortunately, if true, these figures will undermine the potential of weblog as a teaching and learning tool in higher education, particularly for mature age students.

Students, aged 24 years and over, are pre-WorldWideWeb learners. The 'super-highway' of information became a reality in 1991 when Berners-Lee (WWW), close on the tail of Lindner and McCahill (Gopher), guaranteed easy access to the internet for everyday users. The personal user interface with the Internet information system was firmly established in ordinary households throughout the Western world by 1993. In contrast to its availability, why is it then that there are people, both young and old, who have minimal skills in information access, retrieval and in communicating using Internet technology? The barriers seem to revolve as much around awareness and understanding of the technology as a genuine reluctance to engage in virtual relationships and interaction. Other impediments are not as obvious but constrain interaction just as effectively. The findings from the current research of a cohort of first year undergraduate students at Central Queensland University reveal some interesting insights into the student perspective regarding weblog usage by older students that reverse this thinking, at least for this particular group.

The value of 'blogging' as a teaching tool is being steadily revealed in the literature (Williams & Jacobs 2004). Bausch, Haughey and Hourihan (2002) introduce the concept of the blog as a knowledge management tool, describing it as an effective teaching learning interface that meets the students' need to express thoughts and opinion. The e.learning environment is reinforced by timely teacher feedback that encourages deeper thought with the convenience of ongoing discussion between student and teacher. Baker (2003) describes the alternative

use of the weblog as a learning log for students' that encourages personal reflective learning, particularly in professional courses.

A study by Rowley, Banwell, Childs, Gannon-Leary, Lonsdale, Urquhart & Armstrong (2002) in the UK, shows that higher education students make insufficient use of electronic information systems overall. Student use is focussed on the web, email and online catalogues. Non-traditional students in higher education generally have lower levels of information literacy on enrolment and require extensive tutorial assistance by library services staff in the initial stages of their study program. In the meantime, libraries are moving toward complete online information services and access to information resources by students is, necessarily, in the electronic mode (Embrey 2002, Gardner & Eng 2005). If 'blogging' activity becomes a natural extension of the available technology and the usage patterns by students can be developed sufficiently then, it stands to reason that, harnessing this behaviour in order to teach academic information literacy is a viable option.

Information literacy in this paper means the ability to seek information using a variety of effective search strategies. Many studies have considered the information seeking behaviours of undergraduate and postgraduate students. The current study draws mainly on Joint Information Systems Committee's User Behaviour Monitoring and Evaluation Framework's JUSTEIS and JUBILEE findings (Rowley et.al, 2002). The JUBILEE study sought to 'predict, monitor and characterise information-seeking behaviour in relation to electronic information services (EIS)' and to 'provide illuminative and conceptualised pictures built up over time, in different disciplines' (Gannon-Leary, Banwell & Childs, 2001). The first part of the JUBILEE study focused on the computer skills of Health Sciences, Business Studies and English students that are considered necessary to use EIS effectively and found that students saw EIS as an email, word processing and Internet searching facility only (Banwell & Gannon-Leary 2000).

Other EIS usage studies include the EDNER study (Brophy, Fisher, Griffiths & Markland, 2003) that discovered information seeking behaviours consistent with JUSTEIS. Callinan (2005) reported on research conducted at University College Dublin comparing final year biochemistry students' and first year biology students' EIS use. Callinan found that the e-library was used by 27% of the first year biology students and 56.5% of final year biochemistry students suggesting that first year students are under-educated in the information seeking technology and processes. The Glasgow Caledonian University study (Crawford 2004) showed that off-campus student EIS access was very rare (9%) and lower than on-campus students, despite a high level of Internet access available to students (78.4%) overall. Waldman (2003) at the Baruch College Library surveyed first year undergraduate students and found that 44% used the Internet for educational purposes. Yu, Sullivan & Woodall (2005) found similar patterns amongst first year engineering students at the University of Queensland.

Literature reveals that self-efficacy, personality and study approaches all have significant impact on information searching behaviour by students. Kurbanoglu (2003) conducted a study that reviewed the information literacy levels of students enrolled in an Information Management course throughout the duration of their study program. Kurbanoglu concluded that the program of study did not provide students with enough opportunity to practice newly acquired information seeking skills in order to develop a sense of self efficacy with both the process and the e.learning facility itself. This was a significant drawback considering the content of the course. Urquhart, Thomas, Armstrong, Fenton, Lonsdale, Spink & Yeoman (2003) in the JUSTEIS study identified 'habit' as the most important influence on EIS use, and students look to their peers first, followed by academic staff for EIS use advice (Urquhart et.al 2003, Waldman 2003)

Barriers to the use of scholarly EIS prevail throughout the literature. Brophy et.al, (2003) describe lack of awareness, lack of understanding of the value of EIS and lack of knowledge and practice as primary barriers for student engagement. Armstrong, Fenton, Lonsdale, Stoker, Thomas & Urquhart (200) and Callinan (2005) describe similar findings. Price (2004) cites internet access as a problem for students, along with lack of academic encouragement and time constraints. Waldman (2003) argues that primary barriers are the students' self-efficacy in their perceptions of their ability to use EIS effectively and an associated lack of motivation to learn. Banwell & Gannon-Leary (2000) take this issue one step further and claim that student self-efficacy is undermined by their own reluctance to reveal that they lack the required knowledge to interact with EIS effectively. These findings are similar to the student technophobia and lack of EIS knowledge described by Gannon-Leary et.al. (2001).

METHODOLOGY

This study was a profiling exercise to map the Weblog usage and behaviour of a target population that was, potentially, all distance mode, first year students enrolled in undergraduate courses at Central Queensland University. In general, the study is following the User Behaviour Monitoring and Evaluation Framework methodology described by the JISC of the United Kingdom Higher Education Funding Councils (Rowley et.al,

2002). This Framework is a multi-dimensional methodology and consists of three strands. Strand A is a general survey of patterns of use and non-use of all electronic information services by populations in relation to information retrieval. Strand C reviewed education institutions regarding their electronic information systems and EIS purchasing intentions and Strand D was a longitudinal data collection, both qualitative and quantitative, that monitored electronic information services use by participants.

Primary survey

The JISC Framework Strand A was applied in this study. The initial survey consisted of two parts. A primary online survey intended to describe the pattern of use and non-use of weblog technology in the target population. A twenty-one (21) question primary survey questionnaire was piloted and minor adjustments made prior to implementation. The survey was conducted on-line in November – December 2005. All mature age, first year, undergraduate, distance education students enrolled at Central Queensland University (n=679) were invited to participate through a designated student access pathway within the CQU website. 205 students responded to the invitation to participate (30%) and 180 completed questionnaires were submitted electronically. The overall response rate was 27%.

The questionnaire was divided into two parts. Part A gathered demographic data: including age, gender, course enrolment data, employment status, and Internet usage at both home and at work. Questions in Part B were about participants Weblog behaviours and were divided into four sections:

1. knowledge of weblogs
2. weblog participation – factors affecting usage and non-usage of weblog interaction
3. anonymity and the reasons why one might participate anonymously
4. whether the student had their own weblog and why.

Knowledge of weblogs

Participants were asked a single question to establish whether they were familiar with weblogs or not. Participants who responded in the affirmative were asked further questions about their level of engagement with this e.feature.

Weblog participation

Participants were asked about their level of weblog engagement. Those who had never engaged in weblog discussion were referred to questions regarding whether they had ever read other people's weblogs and if so, what prevented them from participating in weblog discussion. Participants who had engaged in blogging were asked about the frequency of their blog activity and about the factors that encouraged their participation.

Anonymity

To assess the potential of anonymity on usage behaviour, two questions were asked. Participants were asked whether they engaged in weblog interaction anonymously or not. Those who responded in the affirmative were asked why.

Own weblog

Participants were asked if they had their own weblog. Those responding in the affirmative were asked why.

Motivators or barriers to weblog interaction

Subsequent questions in each section asked participants to give details to explain their weblog behaviours and usage. Responses to these questions would clarify the behaviours for the researchers and some provide insight into the student perspective. Descriptive statistics were generated using SPSS for Windows version 13.

Secondary survey

A random telephone survey of the same population (n=100) asked a single question 'Do you use Weblogs?' This survey was undertaken to normalise the findings from the primary data collection survey. The researchers considered that it was possible that the primary survey, being online, would attract a higher proportion of well

developed internet users who would most likely be more familiar with weblog than would be representative of the total target population.

RESULTS

Part A - Demographics

The majority of respondents were aged between 23 and 49 years (90%). 77 of the respondents (43%) were aged between 30 and 39 years. Gender distribution of respondents was female 54 % and male 46%. Respondents were enrolled in 37 different undergraduate programs. Respondent enrolment numbers were grouped according to discipline areas. Discipline areas were determined using the current Australian Department of Education, Science & Technology student contribution band classifications (Australian Govt DEST, 2005). See Figure 1.

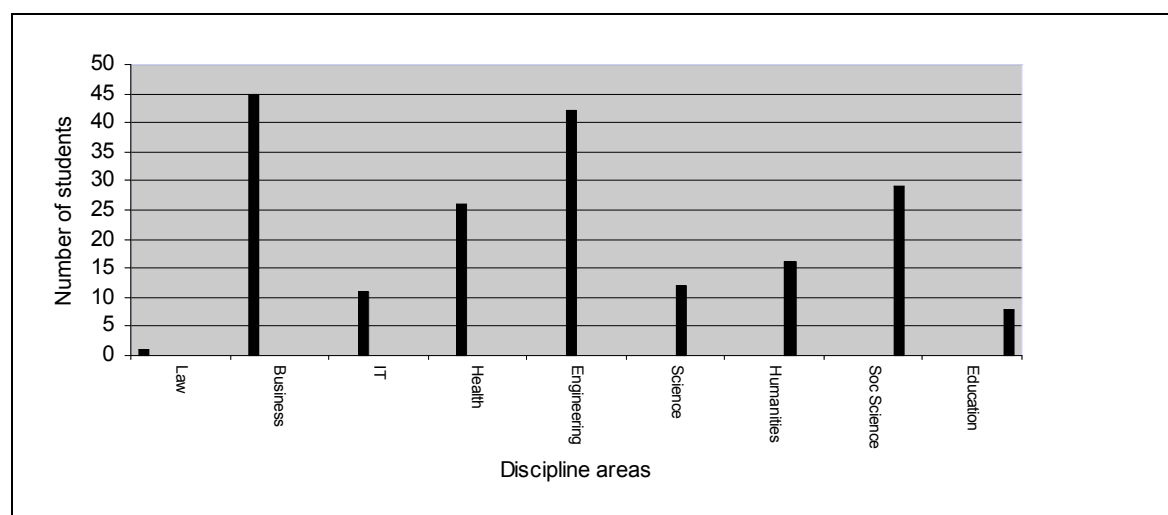


Figure 1: Survey Participants by Academic Discipline

Enrolment status: 81% of respondents study part-time. 19% study full-time.

Work status: Only 20% of respondents did not engage in paid work. 8% engaged in less than 20 hours paid work per week, and 72% engaged in greater than 20 hours paid work per week.

Internet access: 80% of respondents use the internet as part of their work. 94% have access to the internet at home. 58% have broadband access at home.

Internet usage: Only 3% of respondents have been using the internet for less than 12 months. 46% have been using the internet for more than 6 years. 85% use the internet at least weekly to communicate with other people.

Part B – Weblog Behaviour

Knowledge of weblogs

Less than half of the 180 participants had heard of weblogs. All participants responding in the negative were eliminated from the survey at that point. 82 participants (46%) continued to provide data in relation to the following sections.

Results show that the sample size decreased following each Yes/No decision point in the survey. See Figure 2.

| Participant Age (years) | 23-29 | 30-39 | 40-49 | 50-59 | 60+ | Total |
|-----------------------------------|---------|---------|---------|--------|-------|----------------|
| Knowledge of weblogs | (n=43) | (n=75) | (n=45) | (n=15) | (n=2) | (n=180) |
| | n(%) | n(%) | n(%) | n(%) | n(%) | n(%) |
| Yes | 21 (49) | 32 (43) | 23 (51) | 6 (40) | 0 (0) | 82 (46) |
| Read other peoples weblogs | (n=20) | (n=32) | (n=28) | (n=7) | (n=3) | (n=89) |

| | | | | | | |
|--------------------------------|----------------|----------------|----------------|---------------|---------------|----------------|
| | n(%) | n(%) | n(%) | n(%) | n(%) | n(%) |
| Yes | 12 (60) | 19 (59) | 20 (71) | 4 (57) | 1 (33) | 56 (63) |
| Weblog participation | (n=24) n(%) | (n=39) n(%) | (n=23) n(%) | (n=6) n(%) | (n=0) n(%) | (n=92) n(%) |
| Yes | 6 (25) | 13 (33) | 11 (48) | 1 (25) | - | 31 (34) |
| Anonymous participation | (n=5) n(%) | (n=13) n(%) | (n=10) n(%) | (n=1) n(%) | (n=0) n(%) | (n=29) n(%) |
| Yes | 1 (20) | 0 (0) | 1 (10) | 0 (0) | - | 2 (7) |
| No | 2 (40) | 8 (62) | 5 (50) | 1 (100) | - | 16 (55) |
| Sometimes | 2 (40) | 5 (38) | 4 (40) | 0 (0) | - | 11 (38) |
| Own weblog | (n=6) n(%) | (n=13) n(%) | (n=10) n(%) | (n=1) n(%) | (n=0) n(%) | (n=30) n(%) |
| Yes | 3 (50) | 6 (46) | 3 (30) | 0 (0) | - | 12 (40) |

Figure 2: Cross tabulation of self declared knowledge of weblogs, weblog behaviour, anonymity and own weblog in relation to participant age group.

Weblog behaviour

The following tables describe the motivators for participant engagement with various weblog activities.

| Participant Age (years) | 23-29 | 30-39 | 40-49 | 50-59 | 60+ | Total | No response |
|---|--------------|--------------|--------------|--------------|------------|--------------|--------------------|
| | (n=6) | (n=13) | (n=10) | (n=0) | (n=0) | (n=29) | |
| Curiosity | 1 | 4 | 2 | - | - | 7 | 22 |
| Know the author | 3 | 1 | 1 | - | - | 5 | 24 |
| Blog topic is interesting | 5 | 5 | 6 | - | - | 16 | 13 |
| Share thoughts on a topic | 3 | 7 | 4 | - | - | 14 | 15 |
| Create debate by contributing | 1 | 3 | 5 | - | - | 9 | 20 |
| Author is an expert/colleague | 1 | 2 | 1 | - | - | 4 | 25 |
| Create dissent/argument | 0 | 2 | 0 | - | - | 2 | 27 |
| Communicate on subject of mutual interest | 2 | 9 | 3 | - | - | 14 | 15 |
| Other | 0 | 1 | 4 | - | - | 5 | 24 |

Figure 3. Factors that encourage participation in weblog discussion by age group

| Participant Age (years) | 23-29 | 30-39 | 40-49 | 50-59 | 60+ | Total | No response |
|--|--------------|--------------|--------------|--------------|------------|--------------|--------------------|
| | (n=2) | (n=5) | (n=4) | (n=0) | (n=0) | (n=11) | |
| Curiosity | 0 | 1 | 1 | - | - | 2 | 9 |
| Professional reflection | 1 | 1 | 1 | - | - | 3 | 8 |
| Share life experiences | 2 | 4 | 0 | - | - | 6 | 5 |
| Publish own thoughts | 1 | 2 | 1 | - | - | 4 | 7 |
| Improve technical competence | 0 | 3 | 0 | - | - | 3 | 8 |
| Develop written communication skills | 0 | 2 | 1 | - | - | 3 | 8 |
| Use 'blog' as learning tool | 1 | 3 | 2 | - | - | 6 | 5 |
| Create personal web space | 1 | 2 | 1 | - | - | 4 | 7 |
| Help focus / develop opinion | 1 | 1 | 1 | - | - | 3 | 8 |
| Communicate with others on subject of interest | 0 | 1 | 1 | - | - | 2 | 9 |
| Other | 0 | 3 | 0 | - | - | 3 | 8 |

Figure 4: Factors that influence participant's decision to have their own weblog by age group

Participants who did not engage or participate in weblog discussion self declared early in the survey and were directed immediately to a question that identified barriers that inhibit interaction with weblogs for them.

| Participant Age (years) | 23-29 | 30-39 | 40-49 | 50-59 | 60+ | Total | No response |
|--|--------------|--------------|--------------|--------------|------------|--------------|--------------------|
| | (n=19) | (n=30) | (n=20) | (n=6) | (n=0) | (n=75) | |
| | (n%) | (n%) | (n%) | | | (n%) | |
| Just not interested | 0 | 4 | 5 | 2 | - | 11 (15) | 64 |
| Not enough spare time | 11 (58) | 16 (53) | 12 (60) | 1 | - | 40 (53) | 35 |
| Unsure of technology | 2 | 7 | 3 | 0 | - | 12 (16) | 63 |
| Internet access not good | 0 | 2 | 2 | 1 | - | 5 (7) | 70 |
| Concerned about online privacy/security | 3 | 1 | 4 | 0 | - | 8 (11) | 67 |
| Computer literacy skills low | 0 | 1 | 1 | 0 | - | 2 (3) | 73 |
| Think computer interaction is depersonalised | 2 | 5 | 2 | 1 | - | 10 (13) | 65 |
| Writing not preferred communication style | 2 | 1 | 2 | 0 | - | 5 (7) | 70 |

| | | | | | | | |
|---|---|---|---|---|---|---------|----|
| Fear of disclosing in the public domain | 2 | 3 | 1 | 0 | - | 6 (8) | 69 |
| Other | 0 | 4 | 5 | 2 | - | 11 (15) | 64 |

Figure 5: Barriers to participation in weblog activity by age group

DISCUSSION

This survey has collected data that describes the weblog behaviour of a limited sample of mature age undergraduate students studying at undergraduate level by distance at a regional university in Australia. The data includes their knowledge and understanding of weblogs and their use of weblog. It also describes the reasons for and the barriers against participation in weblog activities.

The survey findings indicated that many respondents did not have knowledge of weblogs (54%). This knowledge gap was evenly spread across the age-groups. This finding was not consistent with findings for the general population in the United States as identified in the Perseus Survey (2005) where only 5% of over 30 year olds were weblog active. For university lecturers and library support staff this statistic, alone, can be used to develop a sound argument to incorporate weblog activities into EIS orientation programs for all first year undergraduate students. This finding, however, does not reflect respondents' actual internet knowledge or communication patterns, as 97% of participants have been using the internet for more than twelve months and 85% claim to use the internet at least weekly to communicate with other people. These figures suggest that for many respondents interaction is primarily limited to email, chat and web information search.

A small number of respondents (31%) with weblog knowledge claim to participate in weblog discussion in some form or another. Blogging frequency is not vigorous, with 80% engaging in weblog activity once a week or less. This suggests that once embraced, this feature is absorbed into the student's information literacy repertoire but does not feature strongly. The frequency of blogging in relation to educational usage requires further exploration. Weblog is beginning to feature as a teaching/learning tool in the university sector in Australia but it is still in its infancy and the level of weblog usage by academic staff seems to be patchy, at best, perhaps even erratic.

Previous studies (Williams & Jacobs 2004, Baker 2003, Bausch et. al, 2002) have shown that blogging is valuable for students as a knowledge management tool. Blogging provides an opportunity for the student to express ideas, formulate opinions, create debate, and to reflect on processes or learning experiences. In the context of a learning environment, these dimensions of a weblog are invaluable if the student has the maturity to connect with it appropriately. Responses by weblog active participants in the current study reveal that they engage primarily with blogs that are interesting (50%), where they can share their thoughts (54%) and where they can communicate with others on a subject of interest (60%). These responses are spread evenly across the age-groups.

A small number of participants (11) claim to have their own weblog. This may or may not be a requirement of a course in which they are currently enrolled. Irrespective of the reason for the existence of the blog, their motivation for maintaining the blog includes publishing their own thoughts (7, 64%), creating their own personal space on the web (7, 64%) and helping them to focus/reflect/develop an opinion (5, 45%). These are precisely the reasons cited in the literature by Mortensen & Walker (2002), Chandler (1998) and Nardi, Schiano, Gumbrecht & Swartz (2004). The value of the blog to the respondent in terms of education does not feature in the responses. This issue needs to be considered by academic staffs that are planning to use weblog as a teaching strategy.

Barriers to weblog participation are well documented in the literature and findings in this study are generally consistent with previous studies, with one notable exception. Lack of interest in the blog topic (50%) is the primary reason why blog active respondents will not engage in an instance of weblog interaction. Respondents who do not blog identify the following barriers for them. Time constraints (53%) and just not interested in blogging (39%). These reasons require further exploration as lack of awareness and lack of understanding of the value of EIS (Brophy et.al, 2003) and technophobia (Gannon-Leary et.al, 2001) are likely to be underlying causes of this apparent lack of interest. It could be suggested that time constraint is an excuse not to engage in the blog experience rather than a reason despite similar findings in a study by Price (2004). Callinan (2005) found improved engagement in EIS by third year students as compared with first year students with increased exposure to e.learning methods. Waldman (2003) found that first year students use the Internet primarily for

information retrieval (44%) at the expense of EIS interaction (24%). Students lacked motivation to learn to use a more complex system.

CONCLUSION

Based on the results of this survey, the authors conclude that weblog is a useful educational tool for EIS. Students who are using the media appear to be doing so in a meaningful and productive way. Weblog is a great opportunity for university teaching and support service staff to promote EIS skills in first year students through information and training. It is the student capability with this e.media that remains underdeveloped. Too many of the student cohort (54%) do not have the prerequisite knowledge to consider weblog as a useful tool for learning. Awareness of the usefulness of weblog is likely to improve usage. Contrary to existing literature, in this study, the age of the student did not affect weblog usage or behaviour. The study has explored some of the factors affecting weblog behaviour from the student perspective. This paper outlines the first phase of a continuing research study exploring the effectiveness of weblog in facilitating EIS competency in undergraduate students in an Australian regional university.

RECOMMENDATIONS

Further study is required in a number of key areas. These include:

- Quantitative and qualitative investigation of weblog behaviours of particular cohorts of students in relation to educational needs
- Exploration of self-efficacy issues and information seeking behaviour in undergraduate students of all ages
- Deeper enquiry into the value that students place on having their own weblog as part of the learning process
- Survey of weblog understanding and usage by academic staff in Australian universities

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