EVALUATING WEB CONNECTIVITY FOR ADULT DISTANCE LEARNERS – FACEBOOK OR FORUMS?

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Introduction

Adult learners tend to have many demands placed up them, often preventing them from engaging in the traditional pattern of daytime study (Callendar & Feldman, 2009). Whilst online distance education offers adult learners opportunities to study without attending a campus-based university it also implies separation from fellow learners. Regarding distance learning in particular, the extent to which social interaction can be accomplished is open to question. At physical campus-based universities students have opportunities between lectures to discuss and debate topics relating to their studies. For those online distance learners who want to engage in interactive, collaborative learning, the question is to what extent students feel they belong to a dynamic network of learners? How does an online 'virtual proximity' relate to' physical proximity' (Haythornthwaite et al., 2006)?

Tinto (1988) suggests that social integration, alongside academic integration, is key to retention within an educational environment. This paper explores the role the Internet plays in students' social integration within the distance learning environment. The affordances of social networking sites, such as Facebook, are viewed in comparison to University-provided online forums.

The context

The Open University has evolved significantly since its creation over forty years ago. It is not a profit-making institution, in contrast to many other distance learning providers, and aims to offer a high quality and well-regarded option for those who cannot, or prefer not to, go to a physical campus university. Key to its continuing success is the utilisation of new technologies. As Oblinger (2012, p.17) notes *'For education to do better we cannot just keep doing the same things'*. Academics are increasingly encouraged to implement new technologies in classrooms (Barnes & Tynan, 2007). Although many of these technologies may be utilised frequently in everyday life, their current level of use will not necessarily lead to widespread adoption in the academic world. It is far from clear whether teaching and learning activities that are underpinned by social networking, for example, can become fully established within a formal learning environment.

The Open University has developed its own style of distance learning called 'supported open learning', offering students opportunities to study flexibly, whether at home, work, library, study centre. Before the advent of the Internet, students relied solely on printed study materials. Contact with other students was via face-to-face methods, both formal tutor-led tutorials and student-led self-help groups. Contact with the tutor was via telephone, face-to-face or postal methods. There were necessarily restrictions to such interactions and the Internet offers potential for alleviating some of these.

Literature Review

Students engaged in both formal and informal learning are increasingly being encouraged to take ownership of their learning (Sharples et al., 2010). They have the opportunity to build a Personal Learning Environment (PLE) consisting of many types of tools, possibly provided by the educational institution, but not necessarily. They might wish to learn individually or socially but, whatever their preferences, students need to be comfortable with the tools they select, and also have confidence that they can be used in a way that promotes learning in a constructive way. Hence a mix of approaches is required to accommodate student preferences (Bates, 2010), to meet the diverse range of student requirements within a learning environment. Distance learners, for example, might have particularly selected that study mode as they prefer to learn individually. However, if distance learners wish to interact with their peers there should be opportunities for them to do so. The main point to note is that, whatever students' preferences, they should be met by the teaching institution developing a flexible learning environment.

Anderson (2003) suggests a theory of *'equivalency of interaction'* , proposing three modes of interaction, namely student-student, student-teacher and student-content, as shown in Figure 1.

> *Deep and meaningful formal learning is supported as long as one of the three forms of interaction (student–teacher; student–student; student–content) is at a high level…Interaction is also 'fundamental to the creation of learning communities'* (Anderson, 2003, p.2).
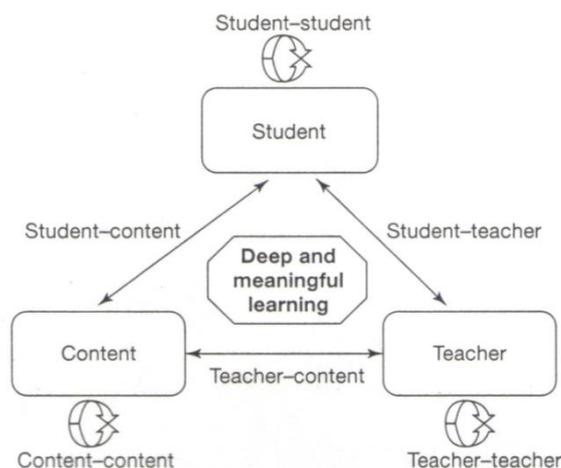

Figure 1 –Equivalency of Interaction (Anderson, 2003)

From Anderson's viewpoint each of these interactive opportunities form a necessary part of the study experience yet emphasis on student-student, student-teacher and student-content can be flexible, according to individual circumstances. For this paper, which is a summary of one chapter of a doctoral thesis researching *'equivalency of interaction'*, the focus is on student-student interaction, contrasting the more formal online study forum as provided by the university, with interaction via social networking. Other sections of the thesis cover student-material and student-tutor relationships but detail of these are beyond this paper's scope.

From a social constructivist view, the role of group formation and the significance of communication are vital for learning to occur. Lave and Wenger (2002) argue that learning occurs most effectively in what they refer to as a '*community of practice'*, which provides support for the learner. They emphasise the importance of readily available interactive resources for the learner as, from this perspective, learning is accomplished by direct involvement, building on the acquired heritage of the community.

Forum use is an integral part of much Open University study and affords communication between a group of learners studying the same module. It is moderated and clear message threads are formed (Kear, 2001). However, there are certain limitations as, compared to social networking sites, it is not possible to see who else is online, friendship links cannot be made, there are a limited number of participants as forums are usually closed at the end of a module, and there are no quick response features such as 'like' or 'poke'.

In contrast, Duffy (2010, p.284) suggests that social networking sites can provide an alternative community of practice:

> *They enable different forms of pedagogy equally as they disable and challenge more traditional teaching and learning approaches within tertiary education.*

He evaluates the potential of Facebook as a learning tool within tertiary education, alongside more 'cautionary tales' (Duffy, 2010, p.285). This paper aims to address the benefits and issues relating to forums and social networking, under the umbrella of research into social learning.

Data collection instruments and ethics

The methodology employed a mix of quantitative and qualitative research methods. A large amount of data were generated but emphasis here is primarily on student–student interaction.

The students involved in the research were from wide range of backgrounds, ranging from those working in a technical environment, to managers, teachers, programmers and administrators. The majority of students fell in the 26-55 age range, mainly studying subjects from the Maths, Computing and Technology (MCT) faculty. Some were in full time employment, some part time, some unemployed. All were located at a distance from each other, their tutors and the institution. The issue of gender was a consideration in this study, as only 10-20% of the student sample were female. Hence data could be heavily male-biased. This was partially addressed by including interview evidence from a relatively high proportion of female contributors. Most of the students who responded connect to the Internet several times a day, leading to the assumption that online interaction was not limited due to technical difficulties.

Oates' (2006) ethical framework was adopted for the research stages. Within the research setting, authorisation for research was gained via the Student Research Project Panel (SRPP), Human Research Ethics Committee (HREC) and data protection.

An initial study was devised as a testing ground, to help establish a picture of the current use of Open University forums and social networking sites. The purpose of the second, pilot phase, was to test the full questionnaire format and to undertake initial data analysis ensuring that data was of value to the research. Interview volunteers could be invited directly via Confirmit (Open University questionnaire system), adhering to ethical guidelines in a more seamless manner than during the initial study, where written consent was gained via email. The main data collection phase explored more fully the research questions, gathering an extensive data set. All interviews were recorded, transcribed and anonymised. The interviews were semi-structured, ensuring key research themes were discussed utilising open questions, with maximum opportunity for presentation of emergent data. Prompts were added to each question, not seen by the interviewees, to ensure that sufficient scope was covered, and the prompts very much depended on the direction that the interview was taking.

Table 1   Research phases

Research phase	Student faculty	Questionnaire tool, number of participants	Interview method, number of participants
Initial study	Business, language, MCT	Survey Monkey, 10	Face-to-face, 4
Pilot	MCT	Confirmit, 18	Telephone, 3
Main	MCT	Confirmit, 146	Telephone, 14

Analysis of results

Thematic analysis was employed to draw out key themes from the data, utilising the software tool Nvivo. Nvivo can help to move beyond merely comparing data responses to give a fuller data analysis (Leech & Onwuegbuzie, 2011).

Features of Excel were also explored for analysis of survey data as the graphical features of Excel proved acceptable for reviewing the data. Excel has a powerful tool set for visual display of data summaries.

Participants were asked specific questions regarding interaction with materials, tutor and fellow students and, as noted, the focus here is on student-student interaction.

Student-student interactions

The Open University provides shared learning spaces, via online forums, but the advent of Web 2.0 collaborative technologies promotes a debate regarding the role that social networking can play in formal education. To explore this aspect further, the main research phase invited participants to indicate how well online spaces helped

to promote a feeling of belonging to an online community, as shown in Figure 2. It can be seen that many students have indicated the 'not applicable' category for the interactive spaces listed, so interview questions further explored reasons for non-participation. The two main peaks where students experience the community feeling 'to some extent' (red) are Facebook and forums. These are both asynchronous communication methods, the main benefit being that learners can access whenever they wish (Minocha & Thomas, 2007). Further, Eisenstadt and Vincent (1998) suggest that with asynchronous communication the online learning campus is recreated whenever needed, without the restriction of organising real-time meetings. For this reason the interview questions focused on asynchronous communications.
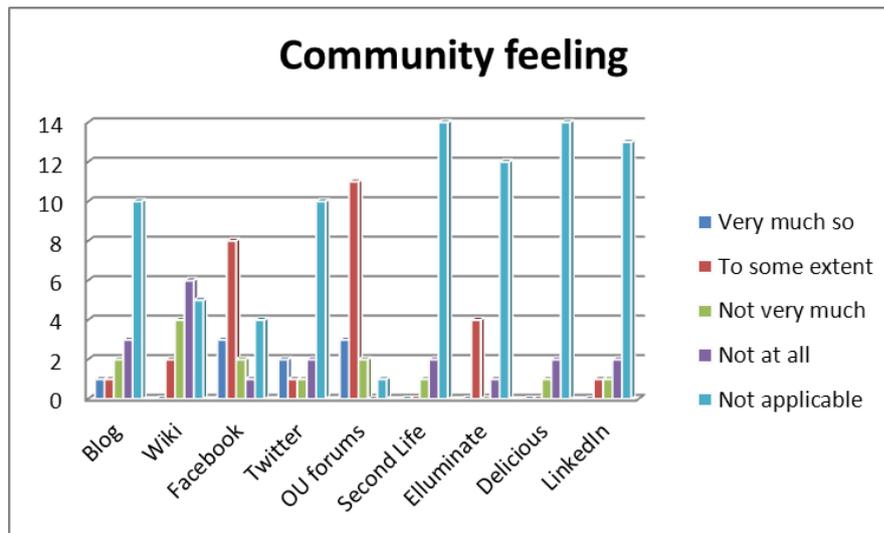

Figure2 – Asynchronous communication with significant 'community feeling' are Facebook and forums

The questionnaire responses helped to shape the interview questions, to explore in more detail why students appreciate particular environments, and also why many students do not wish to interact.

Forums

From the interview data there is evidence that students find the forums, provided by the Open University, a safe space as *'you're dealing with other students, nobody else can access that.'* Enjoying the *'camaraderie'* was also cited. As Figure 2 indicates, many students do value the interactive opportunities provided by the university, yet analysis of actual forums suggested underuse, particularly after initial activity at the start of study.

Reasons given for non-participation included anxiety in posting, difficulty in finding relevant information and sudden closure of the interactive space. For example , one student commented that she was *'afraid of putting a comment on yourself in case somebody came along rubbishing it',* and another noted *'I always mostly never post questions myself unless I'm asking something I know about'.* Further, the student noted that certain comments posted resulted in her leaving the forum entirely, saying *'I didn't enjoy [OU forums]… Not having what they have doesn't mean I'm wrong. So I stopped using that forum.'*

Students also expressed concern regarding the content of messages within the forums. Difficulty was noted in finding relevant information amongst the *'simplistic chit-chat',* and items of academic interest were *'scattered between a whole load of other stuff'.* Again this could lead to infrequent use the forum, as a particular student noted *'You drain through acres and acres of rubbish and occasionally you find a little nugget. I really regard them as a last resort'*

Concern was also expressed about the very abrupt closure of specific forums, noting that *'they shut it down very quickly, so we couldn't share results…yes… you're just cut off'.* A further student expressed a desire for *'… a forum where you could go after an individual course that might give some continuity'.* These difficulties can be partly alleviated via the less formal 'café' type forum, which tend to remain open for longer periods, and have

larger student populations. Students reported appreciating the '*general type discussion forum, not restricted to tutor group*' and a place to '*ask somebody about anything to do with studying*'. Another noted that it was possible to '*sort of pop in just to see if there's something you need to know, rather than something you want to ask*'. However, there is still the restriction of cafes often opening and closing for a restricted time period, something that is not the case with social networking.

Social networking – Facebook

Students tend not engage in collaborative activities unless they see a tangible benefit (JISC, 2008). A possible benefit to linking with fellow students in an informal social networking space is that the network is already well established. Facebook has over one billion global users (StatisticBrain, 2014) and there is potential to form specific groups within that network. One of the interviewees commented '*I do link with other students on Facebook, more socially than work based at present, but it does offer a good platform for both*'.

Analysis of interview data suggested a perception that when compared to forum use, where students are allocated to a specific group, social networking *is 'a natural form of communication with their peers'*. There may be a feeling of increased ownership of learning as '*…it takes it away from being you know, an OU - run forum, the less official nature of it I suppose*'.

Most of the interviewees who did not interact via social networking could see the potential of using an already popular platform, for example one student stated '*If the majority of students on a particular course were also on Facebook, then I could quite well see how I might use Facebook instead of , er, a steady specific forum*'. The simplicity of linking to others was mentioned, and the relative ease to '*sometimes add a group, like people who are on the same OU courses as me*'. The general perception was that this could increase potential networking opportunities, with students valuing '*any way of being able to interact with other students*'.

However, as with forums, certain problems with social networking sites were noted, such as '*in social networking you can put what you want and not what is actually true*', with a suggestion that '*…these things must be monitored because you need to know what sort of information is put on there*'. As social networking spaces tend not to be formally moderated by the Open University there is a real danger of errors not being corrected. Distractions could also be viewed as a threat '*because to try and study and to try to connect to these social networking sites, and these things in general, you'd never get any study done (laugh)*'. There were also reservations regarding the necessity of a separate Facebook page, as one student '*thought what's the point*'. Another noted privacy issues, saying ''*I'm very reticent about releasing information*'. Unlike forums, where membership, but not participation, is often compulsory, social networking is entirely a student's personal choice.

Conclusions and implications for practice

- Not all students want to interact, but few have any objections or concerns if others do- and this extends to social networking sites.
- Although the questionnaire data suggested forums are valuable, observation of actual forum activity indicates that they are underused.
- Forums, as provided by the university, are valued by the students but tend to be underused. Forums work well in a formal monitored environment, but there should be a social space to encourage participation.
- Interview data revealed that forums could be seen as controlled, driven by the module content and have an obvious tutor presence.
- These factors could inhibit the more emergent type of learning that would enhance the social learning experience.
- Social networking can help promote student ownership of their learning.

There is potential for networking and dynamic group forming, possibly less anxiety in posting about study-related issues. Those students with reservations about this joining social networking sites, such as privacy issues, could see no particular reason why this should not be an option for those who wish to study in this way.

References

1. ANDERSON, T. (2003). *Getting the Mix Right Again: An Updated and Theoretical Rationale for Interaction* In The International Review of Research in Open and Distance Learning, [S.l.], v. 4, n. 2, Oct. 2003 available online at http://www.irrodl.org/index.php/irrodl/article/view/149/708

2. BARNES, C. AND TYNAN, B. (2007). *The adventures of Miranda in the brave new world: Learning in a Web 2.0 millennium* In ALT-J, Research in Learning Technology, 15(3), 189-200.

3. BATES, T. (2010). *Understanding Web 2.0 and its implications for e-learning* In M. Lee, & C. McLoughlin (Eds.), Web 2.0-Based E-Learning: Applying Social Informatics for Tertiary Teaching (pp. 21-42)

4. CALLENDER, C. & FELDMAN, R. (2009). *Part time undergraduates in higher education: a literature review* available online at http://www.hecsu.ac.uk/assets/assets/documents/research_reports/part_time_undergraduates_in_he_0509.pdf

5. DUFFY, P. (2010) *Facebook or Faceblock: Cautionary Tales Exploring the Rise of Social Networking within Tertiary Education* In M. Lee, & C. McLoughlin (Eds.), Web 2.0-Based E-Learning: Applying Social Informatics for Tertiary Teaching (pp. 284-300).

6. EISENSTADT, M. & VINCENT, T. (1998). *The Knowledge Web*

7. HAYTHORNTHWAITE, C., KAZMER, M., ROBINS, J. & SHOEMAKER, S. (2006). *Community Development Among Distance Learners: Temporal and Technological Dimensions* In Journal of Computer-Mediated Communication, vol. 6, no. 1

8. KEAR, K. (2001). *Following the thread in computer conferences* In Computers & Education, Volume 37, Issue 1, August 2001, (pp. 81-99)

9. LAVE, J. & WENGER, E. (2002). *Legitimate peripheral participation in communities of practice* In Harrison, R., Reeve ,F., Hanson, A. & Clarke, J. (2002) Supporting Lifelong Learning Volume 1 – Perspectives on Learning

10. LEECH , N. & ONWUEGBUZIE, A. (2011). *Beyond Constant Comparison Qualitative Data Analysis: Using NVivo* In School Psychology Quarterly 2011, Vol. 26, No. 1 (pp.70–84)

11. MINOCHA, S. & THOMAS, P.S. (2007). *Collaborative learning in a wiki environment: experiences from a software engineering course* In New Review of Hypermedia and Multimedia, vol.13, no.2 (pp.187–209)

12. OATES, J. (2006). *Ethical frameworks for research with human participants* In Potter, S. (Ed.) Doing Postgraduate Research, 2nd edition

13. OBLINGER, D. (2012). *Game Changers: Education and Information Technologies* available online at http://www.educause.edu/research-and-publications/books

14. SHARPLES, M., TAYLOR, J. & VAVOULA, G. (2010). *A Theory of Learning for the Mobile Age Learning through Conversation and Exploration Across Contexts* available online at http://www.springerlink.com/content/n63371242l33rl73/

15. STATISTICBRAIN (2014). Available online at http://www.statisticbrain.com/facebook-statistics/

16. TINTO,V. (1988). *Stages of Student Departure: Reflection on the Longitudinal Character of Student Leaving* In Journal of Higher Education vol.59 no.4 (pp.438-455)