

Northumbria Research Link

Citation: Smailes, Joanne, Gannon-Leary, Pat, Laing, Christopher and Conniss, Lynne (2008) Virtual mentor: An innovation in student support. In: Making Connections Conference 2008, 6 November 2008, London.

URL:

This version was downloaded from Northumbria Research Link:
<https://nrl.northumbria.ac.uk/id/eprint/2828/>

Northumbria University has developed Northumbria Research Link (NRL) to enable users to access the University's research output. Copyright © and moral rights for items on NRL are retained by the individual author(s) and/or other copyright owners. Single copies of full items can be reproduced, displayed or performed, and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided the authors, title and full bibliographic details are given, as well as a hyperlink and/or URL to the original metadata page. The content must not be changed in any way. Full items must not be sold commercially in any format or medium without formal permission of the copyright holder. The full policy is available online: <http://nrl.northumbria.ac.uk/policies.html>

This document may differ from the final, published version of the research and has been made available online in accordance with publisher policies. To read and/or cite from the published version of the research, please visit the publisher's website (a subscription may be required.)



**Northumbria
University**
NEWCASTLE



UniversityLibrary

Virtual Mentor: an innovation in student support

Joanne Smailes, Pat Gannon-Leary, Christopher Laing and Lynne Conniss, Northumbria University

Abstract

Peer mentoring is well established means of support for first year students (Farrell et al. 2004, Green, 2007) which increases student retention and engagement at a relatively low cost (Boud et al, 2001; Hodges and White, 2001). Many of the existing peer mentoring models are based on face-to-face contact between more experienced students acting as mentors and first year students as the mentees. However, research conducted by Northumbria University indicated that although the principles of peer mentoring were welcomed by students they felt access to a mentee was only required sporadically. However, accessing the University's Virtual Learning Environment is a daily activity (Gannon-Leary and McDowell, 2003). Social Networking Sites such as Facebook are now a global phenomenon (Bausch and Han, 2006) and their role within the students' learning experiences is becoming of increasing interest (Licaardi et al., 2007). Therefore, this paper firstly explores the potential for virtual learning environments or social networking sites to complement or replace the existing face-to face models of peer mentoring and secondly, discusses the factors which may inhibit the introduction of virtual peer mentoring.

Introduction

The additional and increasingly diverse range of students now entering Higher Education (HE) means increased pressure on the availability of one-to-one contact time with staff, and students are expected to become more self-sufficient in their learning. This can work against a smooth transition from school to university and the change from a structured learning environment to one where study requirements are less well defined can be particularly difficult. Socially, large class sizes can also exacerbate the transition particularly for students who do not come with a school cohort (Hofmeister, 1998).

Peer mentoring is one method employed by many UK HE Institutions to assist in the integration of first year students into their discipline at university. The basis of the scheme being relatively simple through utilising more experienced students to support new students with elements of academic and personal development. Bournemouth University, through a Funding for Development of Teaching and Learning Phase 3 project, host a comprehensive website reporting on the implementation of peer mentoring based programmes in a number of UK universities.

Amongst Bournemouth University's collection of reviews, research and case studies on peer mentoring it is clear that many universities have found peer mentoring as effective in:

- improving the first year experience of students. (e.g. Watson, 2000; Farrell et al., 2004);
- increasing student retention (e.g. Boud et al., 1999; Packham & Miller, 2000);
- improving achievement; with some suggesting peer mentoring users gain higher mean grades than non-users (e.g. Congos & Schoeps, 1993; Kenney & Kallison, 1994).

Thus peer mentoring has the potential to fulfil a central role as a support mechanism to counteract issues such as high staff: student ratios, the level of resource available and the increasing diversity of today's HE students.

Peer Mentoring as an initiative relies heavily upon active student participation and thus is dependent ultimately upon the students' willingness to engage fully in the process. Peer mentoring is therefore a highly complex, dynamic and interpersonal relationship that requires time, interest and commitment of mentors and mentees. Although successfully implemented by a number of UK Universities, attempts to introduce traditional models at the authors' institution have had mixed fortunes, the most negative aspect being a lack of engagement from mentees. Therefore this research aimed to firstly identify whether there was a demand for peer mentoring from the students, secondly if a demand could be established what were the main student needs which could be addressed by a peer mentoring model and finally, given the previous lack of engagement what potential alternative(s) were there to the traditional face-to-face format?

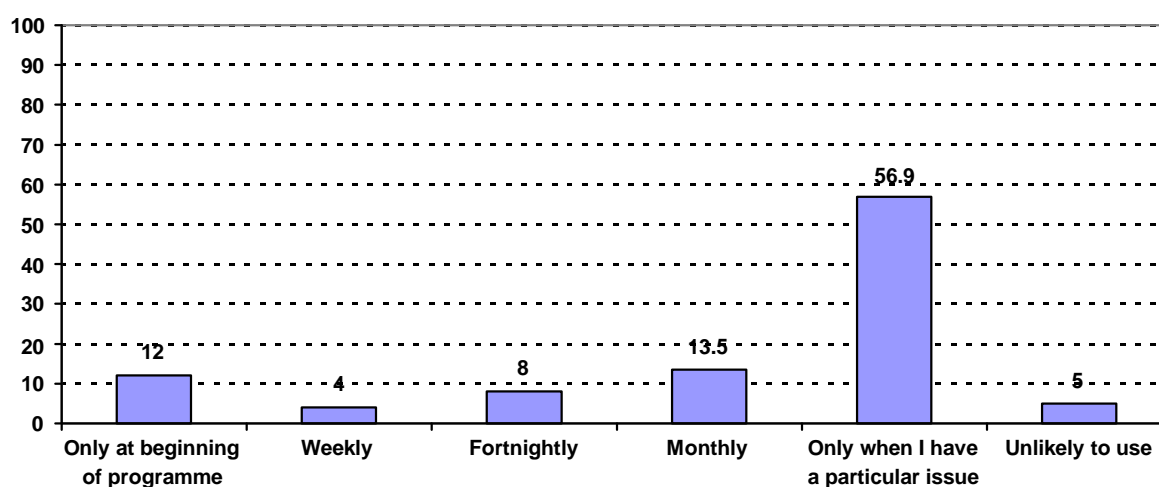
Methodology

Following a relevant literature search, key statements pertaining to mentoring were derived and incorporated into a short questionnaire. Over 300 questionnaires were returned from 232 females and 77 male students, 50% of the students were from the North East of England, 32% were from other parts of the UK; 13% were international students from outside the EU; and 4% were from EU member countries. 42.4% of the respondents were first year students. Ten students volunteered to be interviewed. Of these, one was an international student and one was a student with disabilities. Nine were undergraduates and one a postgraduate. Questionnaire returns and interview data was considered to be a good representation of a typical Northumbria student body.

Demand for Peer Mentoring

It was immediately evident from questionnaire responses there was a clear demand for peer mentoring as a concept. However, it was also apparent that the traditional face-to-face contact model was not viewed as being necessary, with only a third of respondents feeling this was required. Furthermore, questionnaire respondents indicated that access to a peer mentoring model would likely to be piecemeal (Figure 1).

Figure 1: Frequency of contact with peer mentors



In one model researched by Freeman and Kelton in 2004, face-to-face meetings with mentors were supplemented by email contact with either a mentor or fellow mentees. In addition new students could access the entire cohort in the peer mentoring programme via an online discussion forum should they wish wider access to students who might know and help them sort through issues of orientation i.e. virtual support.

We explored with respondents the idea of the main peer contact, being on a virtual basis rather than the supplemental basis outlined in Freeman and Kelton's study, over three quarters of respondents (77.2%) felt that this would be satisfactory. However, as clearly expressed by a number of respondents some form of initial face-to-face contact was still seen as very desirable element.

If somehow at the beginning, say there was a room where it would just be people from your course and from the year above, and you could just go along and there would be a handful of people, and you could just chat to them once, and they would hand out a list of say their mobile numbers...and it would then be up to you if you ever had a problem, if you gave them a ring... it should...be kept like that, on a fairly informal basis.

Participants were presented with a brief definition of peer mentoring as part of the questionnaire and the role of the mentor was explored by a number of statements such as, whether:

- a peer mentor should be on the same programme as themselves;
- it would be useful to have a mentor for each module;
- one or two mentors who could be contacted about anything would be sufficient;
- they would prefer to select their own peer mentor;
- they would need to meet face-to-face with any peer mentors on a regular basis;

- the sessions with a peer mentor should be part of their programme's timetable.

It is the operational factors such as those above which, within existing literature, cause the greatest concern (Long, 1997). For example, Lacey (1999) noted that matching of participants is an important issue in initiating a mentoring scheme. In addition, Lacey (1999) along with Armstrong et al (2002) advocate partners' self-selection, indicating that where there is freedom to choose, the outcome will be more successful; assigned relationships are "superficial alliances" at best. In Northumbria University's research, respondents appeared to be slightly undecided as to whether module specialists and their own personal selection of a mentor was necessary where percentage of respondents agreeing with the statements being 46.6 and 49.8 respectively.

Matching and self selection of mentors was also a minor issue for the interviewees with only one or two mentioning choice and this was generally based on gender or ethnicity:

I'm a girl, so I would want my mentor to be a girl, to feel safe, and also, the same nationality as me would be best, because when students first arrive, they don't really know much about English. If someone can speak the same language as them, maybe they can help more.

However, it was clear from the responses that students felt that it was very important for the peer mentor to come from the same programme as themselves with 82.3% (36% strongly) agreeing with this statement. In addition a high proportion (84.9%) indicated that a small number of mentors whom they could contact about anything would be useful.

The strong preference for a programme connection was expanded upon by volunteer interviewees:

"I would appreciate somebody who was on my course, because they differ so much ... it wouldn't really have been much use if it had been say in Sciences, when I do English and after that, its kind of a complex thing... there are people who are at University to have fun, and there are people who are at University to do work. And the people who are there to work wouldn't necessarily appreciate a mentor who was there to have fun and vice versa...they're not going to know the right things. It's a very difficult thing to match up.

When asked whether sessions with a peer mentor should be part of their programme's timetable [i.e. formalised], a slight majority agreed rather than disagreed (55% vs. 45%). Contradicting to some extent their own views on anticipated contact as illustrated in Figure 1. Similar splits of opinion were apparent in the interviews:

It would work, but I think it either needs to be done fully, or not at all... needs to be supervised as opposed to just being casual. Otherwise you get into a situation where a student comes to rely on his mentor to submit an assignment or finish his assignment to the best of his ability. The mentor is not available, or can't be bothered, because there's either not enough motivation for him to be there, or there are time limits or whatever. It needs to be almost as if the mentor is a tutor, and there's a set date every couple of weeks or every week, when he is made available.

I think more informal, because it's more friendly, and you basically just want someone to talk to about things you may be worried about. I think if it's more formal, you would maybe feel a bit silly if you've just got a few little problems, so I'd definitely prefer the informal.

I'd prefer it to be fairly informal, like contacting your peer mentor through e-mails. Just when you want to talk to them, and not have to meet them like once a week. It would be better just to e-mail them if you had a question you wanted to ask them, rather than have to meet them, like at a certain time each week or each month.

The findings above establish that there is a demand for peer mentoring as a support model. However, it is clear that within this the notion of programme identity was strong but apart from an initial meeting face-to-face contact was not deemed necessary and a mainly virtual model able to be accessed on a "needs" basis would be sufficient. Therefore for the study's second aim the desired content was explored.

Peer Support Needs

Included at the beginning of the questionnaire was one open ended question

"One thing which would have been most useful for me to know about University life when I started was..."

Uncharacteristically for questionnaire based surveys, the majority of participants provided full responses to this question the quality of which will richly inform the content development of future peer mentoring models.

The social issues of university life was clearly the most popular focus to the open-ended question responses. This was also covered by a couple of close-ended questions, one of which asked if they would like a more experienced student to help them learn more about social activities. Three-quarters of students agreed (27% strongly) with this. Comments arising included:

"Being an international student it would have helped to know what kind of activities were possible plus getting to know how to join and what societies were there for all of us"

"A map made for students showing things like where taxi ranks are, bars, nightclubs, Primark, Munchies and best ways to get home on a night out"

"Help to find a local church that is student friendly"

"How going home even once a fortnight can ruin your 1st year experience. Bonds are harder to form"

"Don't bring a TV. A really good way to make friends is to sit watching telly in a communal area instead of locking yourself up in your room"

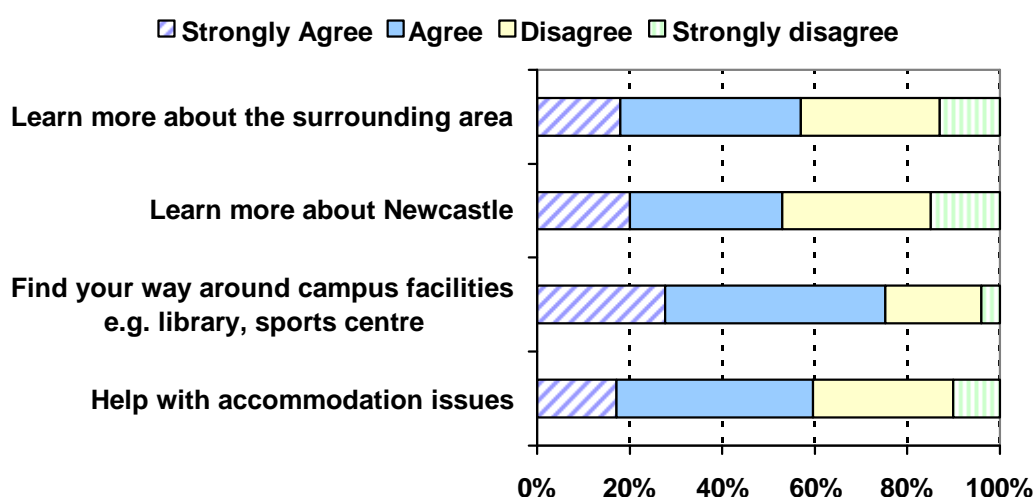
The above comments, along with others received were heartfelt. Many echo responses in Jarkey's (2004) study where students, asked to describe their experiences of the first few

weeks of first year, responded expressively: “Nightmare”, “LOST LOST LOST”, “awkward”, “isolating”, “impersonal”, “fearful” and “confusing”. Many of these students said they were overwhelmed and unsure of the best choices for them and how to get the support they needed.

As Jarkey (2004) reports, in the first week of a semester students are inundated with course information also coping with accommodation and transport arrangements, campus orientation, figuring out their timetables and classrooms, purchasing textbooks and finding out about clubs and societies. It is unsurprising that they feel overwhelmed and confused and that little of what they are told in the early weeks of the first year is assimilated by them.

Accommodation and or location issues as a social subset were considered as closed questions on the questionnaire (Figure 2)

Figure 2: Student responses relating to assistance with accommodation and location



It is clear that students felt that they would have benefited from finding their way around the campus:

“Where all the buildings etc were that you'd be using most so there. How the room numbers were abbreviated on university timetables, particularly when dealing with classroom numbers preceded by several zeros”

“Where each of main buildings were & what facilities they had on offer, e.g. 24 hour computer access, how to print out. it's not easy at first”

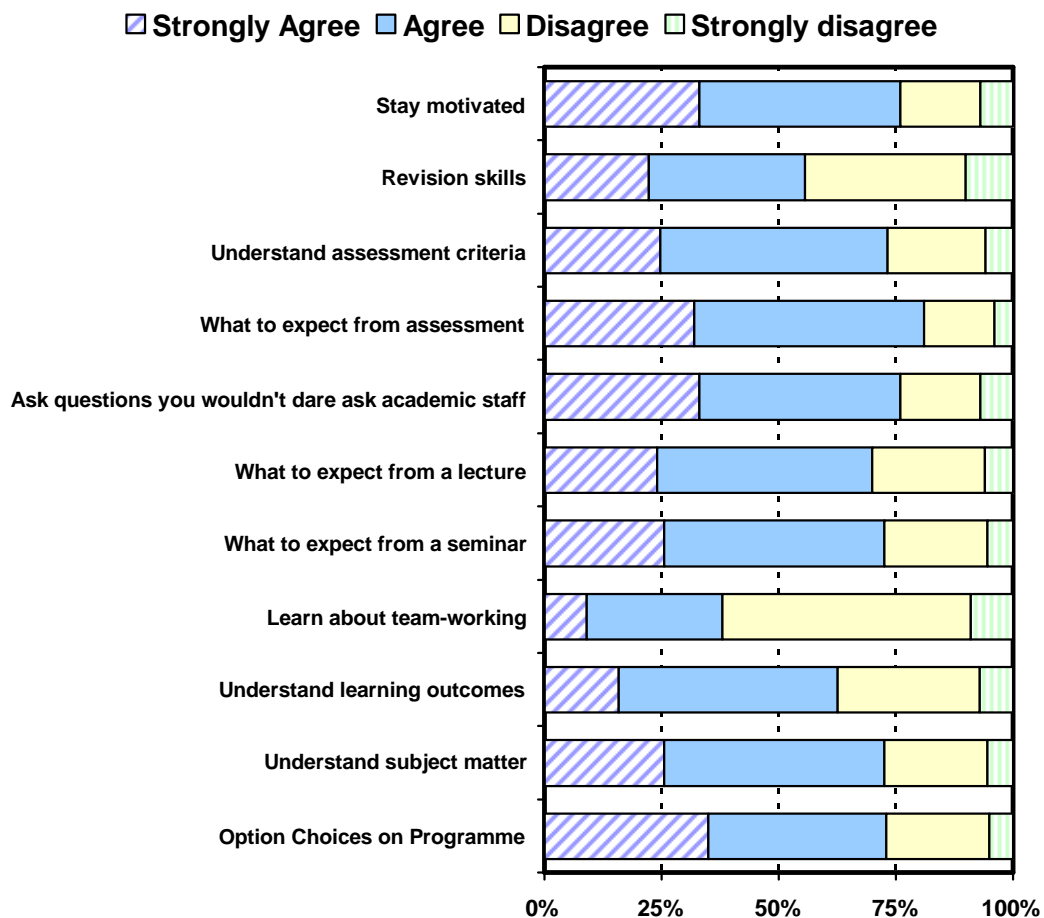
“How to access emails, Blackboard and journals efficiently”

However, the statements about learning more about Newcastle and the surrounding area appeared to be of less concern. Since half of the respondents originated from the North East of England, further demographic analysis was undertaken. It was clear that amongst the student cohort not originating from the North-East, that there was a much greater desire to learn more about Newcastle and its surrounding area with two-thirds of respondents agreeing with these statements. Furthermore, a much higher percentage of international

students, approximately 80%, responding in the similar fashion. Hence getting to know the campus and its surrounding area was established as one essential element of content.

The academic needs of peer mentoring were the main focus of the questionnaire (as well as being the third most popular response made to the open-ended question). Questions covered areas such as option choices, subject matter, seminars, lectures, learning outcomes, assessment (& criteria), revision, teamwork, motivation and questions (possibly academic) that they could ask a mentor but that they would be afraid to ask academic staff. Responses to these statements are illustrated in Figure 3.

Figure 3: Students responses to peer mentor assistance on academic issues



In all but one case, concerned with team working, the majority of respondents agreed that assistance from more experienced students would be useful. In some areas such as staying motivated and assessment expectations more than three quarters of students would appreciate the input of experienced students. Notably, 76% of students (33% strongly) had questions they would prefer to ask experienced students rather than to academic staff. This was something picked up on in a peer mentoring scheme at Manchester by Coe (1999) where students welcomed a forum in which to discuss problems they would feel uncomfortable talking to a personal tutor about.

Therefore it was clear that many of the aspects already covered in traditional models are indeed desirable to continue providing within any virtual model proposal.

Although traditional models piloted at Northumbria enjoyed limited success, it is clear from both the interviews and questionnaire responses that there would appear to be a place for peer mentoring programmes to be run at the University. There is a clear indication that it is preferable to retain some aspects of the traditional models such as recruitment of mentors from within the same programmes as the mentees. The academic aspects of student life often covered by such programmes along with social factors are still regarded as being useful. It would appear that many of the social and campus orientation issues which would have been useful to learn from the experience of 'older' students occur very early in the programme. In Briguglio's study (2000) it became evident that there was a need to disseminate more information about services in a variety of formats and on an ongoing basis, since induction/orientation programmes alone were inadequate.

There are some obvious advantages to introducing peer mentoring during freshers' week as indicated by the following interviewees

There would obviously be a lot of opportunities to link it in with Freshers' week...If they meet their mentor before they come, via e-mail and things, then they're not going to be in a group situation, where people are going to see them do it. It's kind of secret, and by the time they get there, they'll be used to contacting that person, and they might just carry on.

One student volunteer interviewee suggested the whole mentoring process needs to be started at an earlier stage than during the first year:

I had a lot of questions at the point when I actually had my exam results, but before I came to University...when you're filling in all the forms, and it says: 'Which housing would you like to live in'... its very difficult to know without talking to someone who lives in the houses. So it could go back even earlier, perhaps to Open Day. That's a long way back to take it, but you could even make it optional at that point.

Virtual mentor models

The first obvious alternative model for consideration is whether a Virtual Learning Environment (VLE), commonly used to support learning and teaching, could be utilised. Evidence from a concurrent study at Northumbria which established an informal student feedback group on VLE use suggested some potential

I use eLP (the VLE) to allow me to interact with other students and lecturers via the discussion boards and it often helps when I am struggling with work especially when I know others are also finding it difficult.

However, a number of negative comments were received

I found that the eLP was not very exciting to the typical student that feels they have better things to do with their time.

Students use the eLP just because their tutors ask them to do it. They do not use it on their own initiative ...

Conventional VLEs are more concerned with content and consumption (Downes, 2007) – institutional control being unable to facilitate or engage with social communities of informal and impromptu learning (O’Hear, 2008).

However, evidence suggests access to social networking sites is a day to day occurrence (Bausch and Han, 2006). A social networking site is defined as one with profiles, regular commentary on those profiles with a varying but publicly available social network (Boyd 2006a). As noted by Tufekci (2008) multiple US studies have found that significant proportions of students (>80%) have a profile on such sites, with Facebook and MySpace being the more common examples. Tufekci’s own research, carried out on a diverse population of first year undergraduates, found that around half considered themselves to be heavy users of such sites.

Social networking sites and their role within the students learning experiences are becoming of increasing interest due to the perceived alignment with social-cultural theories of learning (Licaardi et al., 2007). Many commentators (Cain, 2008; Phipps, 2008) have noted the potential for social software applications to create social learning environments that offer ‘social communities of practice’ – and a recent JISC project has begun investigating the potential of such social software applications in supporting student learning and engagement. When considering what drew students to such sites one of Tufekci’s (2008) interviewees noted how social network sites took *‘the work out of meeting people’* as students were busy people and this cuts out one thing to do whilst *‘giving you the benefit you desire’*. Thus suggesting social network sites e.g. Facebook have a popular appeal where peer mentoring models could be established.

However, Kolek and Sauders (2008) note how a number of US University’s have increasing concerns in relation to Social Network Sites. In their own study which analysed student use of Facebook, it was revealed that only small proportions of students restrict access to their individual postings on the University Network. Many students gave full disclosure of personal information including photographs. It was observed that many of these individual postings could have *“potential negative consequences for individual students”* amplified by US media cases of sexual assault, stalking etc. and a number of photographs displayed i.e. alcohol fuelled could cause *“potential damage to an institution’s image.”* In a separate study Lipka (2007) additionally comments on the complex difficulties which can arise through Facebook relationships, in particular staff : student connections. Firstly, it was noted how students expressed the view that the site was their domain and as such needed free expression without worrying what “professors” might think and secondly, staff noted instances where students expect special privileges in the name of being a Facebook “friend”.

In terms of using Facebook for student support, Miller and Jensen (2007) considered the ways in which libraries have been utilising Facebook. Generally, the approach used was to form groups with the intention that users shared ideas and debated how the resources created could be used. Their research found that students generally did not seek out this information and concluded that they needed *“to put information in front of the facebook user”* and suggested My Profile; Notes and Posted Items; Albums and Events were four key aspects of Facebook which need to be utilised to *“grab the students’ attention”*.

In order to offset potential personal dangers and the reflection of some student entries on an institution, Kolek and Saunders (2008) recommend that institutions at the very least “*should develop clear policies and procedures for the use of Facebook and other social networking sites in (the name of) official institutional business*” as well as use the induction process to warn students of the dangers of personal disclosure.

If institutions begin to consider policies in relation to social network site use, students may begin to view the legitimate educational uses the university does support as imposed and hence suffer from the same negativity as the increasing current view of VLE use.

In addition, Carnevale (2006) warns that one US college fell foul of Facebook’s terms and conditions which excludes an organisation setting up a “User account for a group or entity”, thus possibly excluding the potential for utilising Facebook as a virtual mentor model, if created in the name of the institution.

The group basis on which social networking sites like Facebook operate, as suggested by Miller and Jensen (2007), focus on predefined activity as opposed to learning within a community. In traditional models of peer mentoring, the mentors have at least one full year of experience at University. However, if considering a basic dictionary definition of a mentor as a wise giver of advice, a student could pass on advice arising from their own personal discoveries at any time. Could a ‘personal learning environment’ (Downes, 2007) be a more appropriate platform for a peer mentoring model, and could the Second Life Grid offer a suitable community based ‘personal learning environment’ able to create a ‘learning network’ (Downes, 2007) that enables social and collaborative peer support.

Cheal (2007) has pronounced “ *that Second Life is not simply the latest online fad, but part of a continuum of instructional technology tools that corresponds to twentieth and twenty-first century developments in educational theory.*” Several UK Universities have purchased land within the Second Life Grid to host their own support and learning environments (Shepard, 2008), the basis of purchase being that the fantasy environment will allow real academic freedom for discussion. As quoted by Shepard (2008), Gilly Salmon, Professor of e-learning, University of Leicester believes that with the use of Second Life avatar characters , “ *there are not going to be the usual discrimination issues of the face-to-face environment...the student and the teacher are on the same level.*”

Conclusion and Future Research

The traditional face-to-face peer mentoring model has had limited success at Northumbria. However, as this paper reports, research with students established that there was a demand for peer mentoring but that such demand was for ‘needs-based’ access to a mentor and that virtual contact with a mentor would be readily accepted although initial face-to-face access was desirable. Whilst, social issues and issues around accommodation and location were raised by students as mentoring topics, they also referred to academic needs for advice from more experienced students on option choices, subject matter, seminars, lectures, learning outcomes, assessment (& criteria), revision, teamwork and motivation.

The virtual learning environment, known as the eLP, at Northumbria, offered one virtual platform for mentoring since it is used regularly by students. However, it lacks excitement

and its use is directed by tutors and focussed on a repository role rather than that of a learning community.

Social networking site such as Facebook are heavily used by first year undergraduates – the target group for peer mentoring – and have popular appeal. Whilst they are used for social activities, they do align with social-cultural learning theories. However, their potential for misuse and abuse indicates a necessity to introduce policies regarding usage. The introduction of rules and regulations to the use of Facebook are likely to have a negative impact on students who may resent the appropriation of one of their mechanisms for socialising by the institution.

Personal learning environments such as Second Life are increasingly being used by academic institutions. They offer a fantasy environment which has the potential to afford users academic freedom and break down barriers between academic staff and students, mentors and mentees. Currently Second Life is less familiar to students than Facebook so there is potential for academic staff and student mentors to introduce the facility to mentees rather than for students to feel that their social environment has been trespassed upon.

The authors intend to further explore these alternative models of virtual peer mentoring to establish which has the greatest potential for supporting students at Northumbria. Research will involve setting up pilot mentoring models based on the different platforms and analysing the resultant communications.

References

Armstrong, S. J., Allinson, C. W., & Hayes, J. (2002). Formal mentoring systems: an examination of the effects of mentor/ protege cognitive styles on the mentoring process. *Journal of Management studies*, 39(8), 1111-1137.

Bausch, S, and Han, L. (2006) *Social Networking sites grow 47 percent, year over year, reaching 45 percent of web users* http://www.netratings.com/pr/pr_060511.pdf [Last Accessed 25th June 2008]

Boud, D., Cohen, R. & Sampson, J. (1999) Peer learning and assessment, *Assessment and Evaluation in Higher Education*, 24(4), 413–426.

Boud, D., Cohen, R., & Sampson, J. (2001). Peer learning in higher education: Learning from and with each other. *Adult Education Quarterly*, 53 (1): 65-66.

Boyd, D. (2006a) *Social Network Sites: my definition* http://zephoria.org/thoughts/archives/2006/11/10/social_network_1.html [Last accessed: 26 September 2008]

Briguglio, C. (2000) Language and cultural issues for English-as-a-Second/Foreign Language students in transnational educational settings. *Higher Education in Europe*, 25 (3) 425-434

Bournemouth University (no date), *Academic Support – Peer Assisted Learning* <http://pal.bournemouth.ac.uk/> [Last accessed: 26 September 2008]

- Cain, J., Online Social Networking Issues within Academic and Pharmacy Education, *American Journal of Pharmaceutical Education*, Vol. 72, No. 1, 2008
- Carnevale, D. (2006) College Tries to Be Cool but Runs Afoul of Facebook *The Chronicle of Higher Education* 153 (14) p39.
- Cheal, C. (2007) Second Life: hype or hyperlearning? *On the Horizon* 15(4), 204-210
- Coe, E., McDougall, A. & Mckeown, N. (1999) Is peer assisted learning of benefit to undergraduate chemists? *University Chemistry Education*, 3(2), 72-75.
- Congos, D.H. & Schoeps, N. (1993). Does Supplemental Instruction really work and what is it anyway? *Studies in Higher Education* 18: 165–176.
- Downes, S. (2007), Learning networks in practice, National Research Council of Canada, Emerging Technologies for Learning, Vol. 2, 2007, Becta
- Farrell, H., Pastore, C., Handa, N., Dearlove, J., & Spalding, E. (2004). Initiating the battlers. *Proceedings of the ISANA Conference 2004*. December 2004, Melbourne.
- Freeman, M. & Kelton, J. (2004) 'Peer mentoring programs : enhancing the learning experience in economics and business.' *Synergy*, (20), np.
- Gannon-Leary, P. and McDowell, L (2003) *ENABLE: an evaluation of Northumbria's Adoption of the Blackboard Learning Environment*. Newcastle, Northumbria University
- Green, A, (2007) *Peer Assisted Learning: empowering first year engagement with a formal curriculum through the educative*,
<http://pal.bournemouth.ac.uk/documents/Alison%27s%20PAL%20research.pdf> [Accessed 23rd June 2008]
- Hodges, R., & White, W. (2001). Encouraging high-risk student participation in tutoring and Supplemental Instruction. *Journal of Developmental Education*, 24, 2-10, 43.
- Hofmeister, J (1998) *Evaluation research findings of the pre-university project on transition and student mentoring into University*. In S. Goodlad (ed) *Mentoring and tutoring by students* London: Kogan-Page 107-120
- Jarkey, N. (2004) Orientation as an ongoing learning experience : student focused and holistic. '*Transforming knowledge into wisdom : holistic approaches to teaching and learning : proceedings of the 2004 Annual International Conference of the Higher Education Research and Development Society of Australasia* 4-7 July, Miri, Sarawak' edited by F Sheehy and B Stauble, pages 185-193. Milperra NSW : HERDSA
<http://herdsa2004.curtin.edu.my/Contributions/RPapers/P063-jt.pdf> [Accessed May 2006]
- JISC, In Their Own Words, www.jisc.ac.uk/elp_learneroutcomes [Last accessed 25th May 2008]
- JISC Invitation to Tender: A study of the effective use of social software by Further & Higher Education in the UK to support student learning and engagement, June 2008

Kenney, P.A. & Kallison, J.M. (1994). Research studies on the effectiveness of Supplemental Instruction in mathematics. In D.C Martin & D.R Arendale, eds, *Supplemental Instruction: Increasing Achievement and Retention. New Directions in Teaching and Learning*, Vol. 60 (Winter). San Francisco: Jossey-Bass.

Kirriemuir, J., A July 2007 "snapshot" of UK Higher & Further Education Developments in Second Life, 16th July 2007, Eduserv Foundation (www.eduserv.org.uk/foundation)

Kolek, E. A. and Sauders, D. (2008) Online Disclosure: An Empirical Examination of Undergraduate Facebook Profiles *NASPA Journal* 45 (1) 1-25

Lacey, K. (1999). *Making mentoring happen : a simple and effective guide to implementing a successful mentoring program*. Mona Vale, N.S.W.: Business and Professional Publishing.

Liccardi, I., Ounnas, A., Pau, R., Massey, E., Kinnunen, P., Lewthwaite, S. Midy, M., Sarkar, C. (2007) The role of social networks in students' learning experiences, *ACM SIGCSE Bulletin* 39 (4): 224-237

Lipka, S (2007) For Professors, 'Friending' Can Be Fraught, *The Chronicle of Higher Education* 54(15) p1

Long, J. (1997). The dark side of mentoring. *Australian Educational Research*, 24, 115-123.

Miller, S. E. and Jensen, L. A. (2007) Connecting and Communicating with Students on **Facebook** *Computers in Libraries*; 27 (8) 18-22

O'Hear, S. (2006) e-learning 2.0 - how Web technologies are shaping education http://www.readwriteweb.com/archives/e-learning_20.php (last assessed 9th October 2008)

Packham, G. & Miller, C. (2000) Peer-assisted student support: a new approach to learning, *Journal of Further and Higher Education*, 24(1), 55–65.

Phipps, L., Web 2.0 and social software: An introduction, *JISC Briefing Paper*, September 2007 l.phipps@jisc.ac.uk [Last accessed 20th May 2008]

Shepard, J. (2008) It's a world of possibilities, *The Guardian*, 8th May 2008 <http://www.guardian.co.uk/education/2007/may/08/students.elearning> [Last accessed: 29th September 2008]

Tufekci, Z. (2008) Grooming, Gossip, Facebook and MySpace, *Information, Communication and Society*, 11(4) p544-564

Watson, J. (2000). A Peer Assistance Support Scheme (PASS) for first year core subjects. Paper presented at The Fourth Pacific Rim- First Year in Higher Education Conference: Creating Futures for the New Millennium, Queensland University of Technology, July, Brisbane.