

Flexible study – what students do and what they want

JON ALLTREE University of Hertfordshire
NUZ QUADRI University of Hertfordshire

Abstract There is considerable rhetoric about today's students wanting more flexible study options so that their studies can fit in with other aspects of their lives. Furthermore, staff and students increasingly use managed learning environments (MLEs) to support learning. But how great is the appetite for more flexible study options that the MLE could undoubtedly support? This work is based on an online survey, conducted in February 2007 at the University of Hertfordshire. The questionnaire explored the following: students' existing study patterns and how these sit alongside their other commitments (family, work, leisure, etc); students' attitudes to flexible study options and their perceptions of current support for independent study; their appetite for further development in this area; and their technological skills and propensity for greater use of online support for learning.

Introduction

In higher education today, students are increasingly combining their studies with other commitments, such as paid employment or looking after a family. The widening participation agenda has seen an increasing number of mature students in Higher Education, many of whom have family and other carer commitments. Moreover, the introduction of tuition fees has seen an increasing number of students of all ages combining their studies with paid employment, and as many as 36% have money problems (McInis 2001; cited in Samarawickrema 2005). More than ever before, students have to juggle a variety of competing demands with their studies and so universities need to work with students to devise strategies that facilitate studying effectively in this new environment. Ultimately, this means allowing students to have the choice of modes of study, convenient access to learning materials and staff, and responsibility for learning (Honey 2004). As well as these commitments having an impact on students' learning, those students who have a disability may also feel challenged by the traditional learning format, such as face-to-face (F2F) learning where these students may have difficulty in accessing the university and its resources, or have difficulty with the delivery of traditional lectures.

The Blended Learning Unit has a remit to support the University of Hertfordshire's (UH) strategic development of Blended Learning to both enhance the learning experience and increase choice in how, when and where students study. This research is fulfilling part of that brief by helping

inform the university of its students' appetite and aptitude for flexible study options that may enable them to balance the various demands on their time more effectively, and to make learning outside of the classroom more convenient for all students. Guest (2005) suggests that technology is a "key driver for the growing trend of flexible learning" and because technology has allowed flexibility in frequency of F2F lectures and widened the scope of off-campus delivery of courses, Guest insists that flexible learning and applications of technology can be implemented hand in hand. With large and diverse student groups, restricted funding, and advances in technology (King and Kenworthy 1999; cited in Samarawickrema 2005) universities today are implementing flexible learning to accommodate for the change in the student body. In this study, students' views of flexible learning from the results of a survey are presented and discussed.

Method

In May 2006 two student focus groups were conducted to explore their attitudes to flexible study. Although the data was of interest in its own right, the main purpose was to inform the design of a questionnaire for administration to the whole student body. The main focus group finding was an indication that the students were not in favour of fewer hours of F2F contact. In particular, this reinforced the need for the questionnaire to pose questions relating to flexible study in a neutral way – for example, the questionnaire offered an option with fewer hours F2F contact, and also more hours as an option. The questionnaire was devised and put online using www.surveymonkey.com. In the first week of Semester B 2007, all 23000 full time and part time students were emailed a link to the online questionnaire, and the survey was posted on StudyNet, the University of Hertfordshire's Managed Learning Environment (MLE). A prize draw was used to encourage participation.

Results

Demographic data

A total of 2143 students completed the online questionnaire (in addition, approximately 40 students had participated more than once and they were excluded from the draw and their data was excluded from the analysis). Of the 2143 useable responses, 65% were from female students and 35% from male students; 86% were undergraduates and 14% postgraduates; and 75% of students were aged 18-25. The demographic data of students was well represented according to the university norms for age, faculty, level of study, mode of study and disability. Seven percent (150 students) of the sample declared a disability, of which 47% had dyslexia, 11% had an unseen disability, and 9% had mobility difficulties.

Students are busy people

The questionnaire asked students how much different aspects of their lives impacted upon the amount of time they could devote to their studies. The four areas were: looking after family/others, paid employment, social activities and sports activities. The responses, classified in terms of age group, are shown in figures 1-4 respectively.

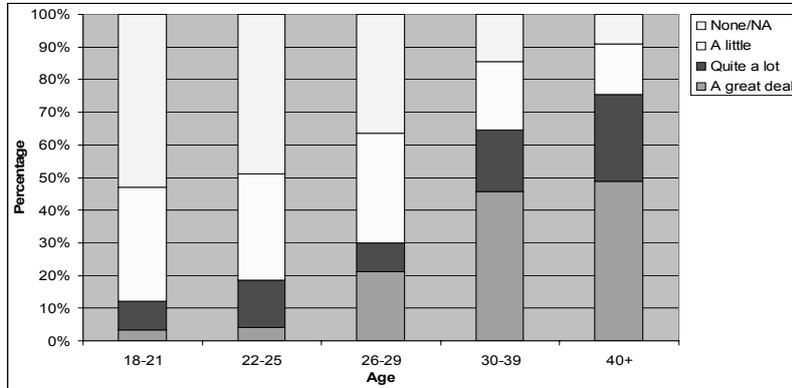


Figure 1 The impact of looking after family/others upon study

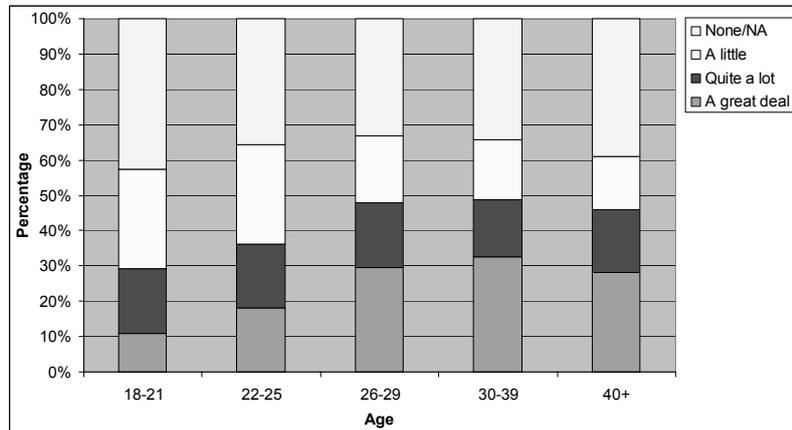


Figure 2 The impact of paid employment upon study

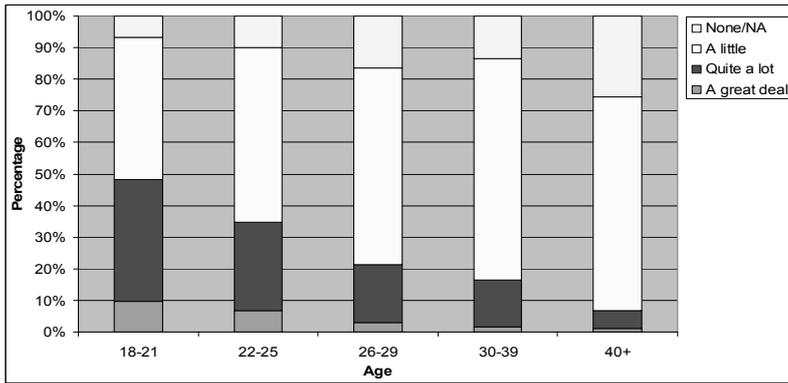


Figure 3 The impact of social activities upon study

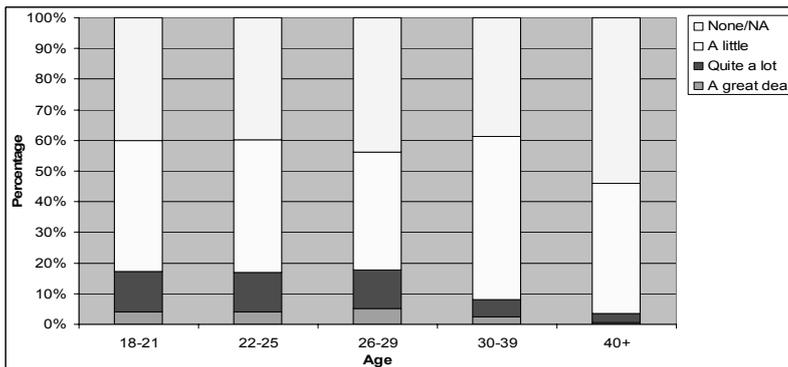


Figure 4 The impact of sports activities upon study

Students’ technological background

This section of the results relates to students’ internet access, ownership of technology and use of various Web 2.0 technologies.

These respondents had a very high level of high-speed internet access. 93% either had broadband at home or were living in UH accommodation with their own high-speed UH connection. Only three percent relied on dial-up at home and only four percent had no home internet connection.

Students were asked about the technology they owned, with the following outcome:

- 92% have mobile phones
- 64% have laptops
- 46% have music players (no video capability)
- 13% have music players (with video capability)
- 14% have digital voice recorders
- 29% have webcams or digital video cameras

They were also asked how often they used Web 2.0 social software technologies and whether they used them for more than just browsing (for example, they might be engaging in discussions or uploading resources onto the websites). Table 1 summarises the responses. The percentage of students using these technologies 'quite often/ very often' is very similar to the percentage of those 'uploading/ sharing/ adding something' which potentially means that these are the same students.

Table 1 Use of Web 2.0 social software

	Use it 'a little', 'quite often' or 'very often'	Use it 'quite often' or 'very often'	Upload/ add/ share
Social networking site (e.g. Myspace)	66%	44%	46%
Video sharing site (e.g. YouTube)	58%	31%	27%
Photo sharing site (e.g. Flickr)	36%	12%	13%
Blogging site (e.g. Blogger)	25%	9%	8%
Virtual world (e.g. Second Life)	16%	4%	3%

Timetabling, communication and independent study

Due to the highly variable study patterns of part time students, the section on timetabling relates only to full time students as it explores their current pattern of timetabling and their preferences for timetabling.

Currently four percent of these full time students are timetabled on one day per week only, 44% on two to three days per week and 53% are timetabled for four or five days per week.

However, as figure 5 indicates, when students were asked what their preferred pattern of timetabling is, there was an overwhelming preference (in a ratio of approximately 4:1) for being timetabled for two to three days a week rather than four to five. Figure 5 shows these values in relation to faculty.

Students were asked how useful they found StudyNet for communicating with each other. StudyNet includes discussion fora, email and group areas to support student-student (and student-staff) communication. The results are shown in Figure 6. Around 38% of the full time undergraduates, regardless of year of study, found this conduit for peer-to-peer communication 'extremely useful' or 'very useful'. However, the part time students, who often cannot meet F2F in the way that the full time undergraduates usually can, found it less useful.

Students were asked whether they received guidance on how to use their independent study time. Thirty percent reported getting no guidance at all and of the 70% that did report getting guidance, only 20 percent rated it as 'extremely useful' or 'very useful' (80% rate it as only 'quite useful' or 'not useful at all'). In a separate question, 45% of students ranked 'more guidance on independent study' either first or second on a 'wish list' of possible enhancements (heading the list, at 64% of students, was 'better feedback on progress').

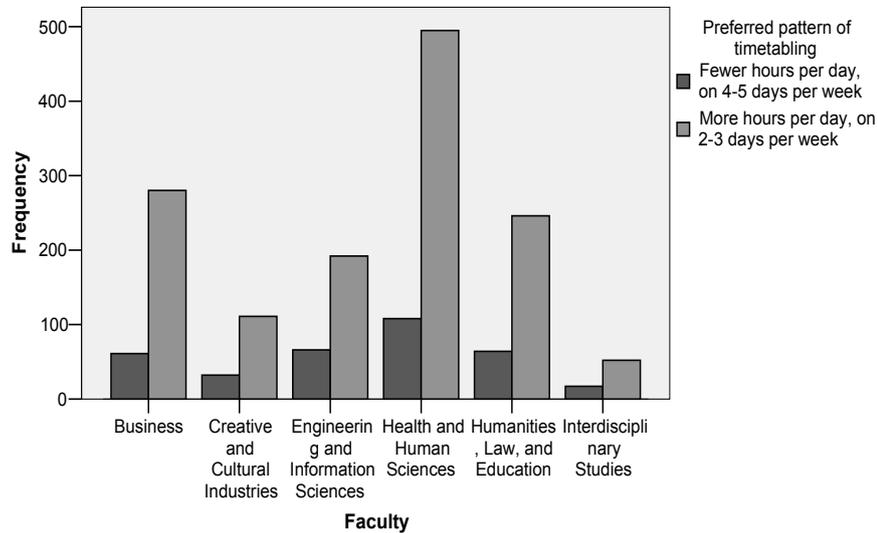


Figure 5 Preferred pattern of timetabling (full time students only)

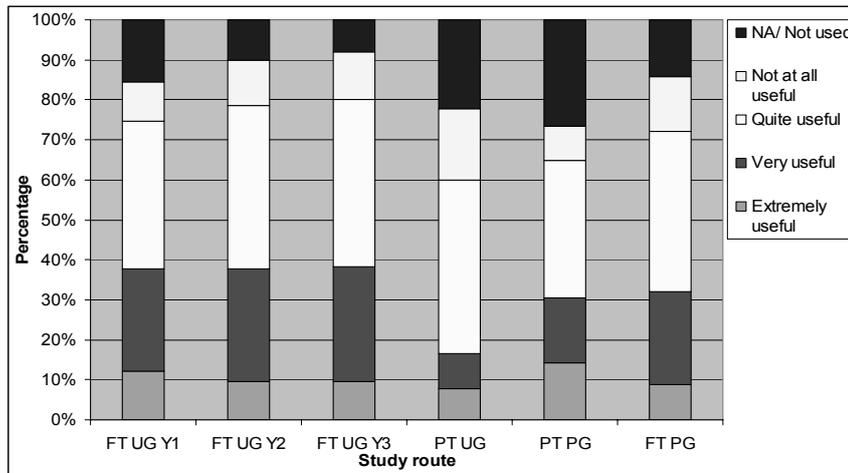


Figure 6 The usefulness of StudyNet for student-student communication (all students)

Appetite for flexible study

In order to explore the students' appetite for more flexible study options, the full time students were asked whether they would like:

- More F2F/less independent study?
- The existing balance between F2F and independent study?
- Less F2F/more independent study?

The results, categorised by faculty, are shown in Figure 7.

Students were asked to say whether or not they agreed with the following statements. The percentage agreeing is shown below:

- If I had fewer timetabled hours per week, I would lose motivation to study - 63%
- If I had fewer timetabled hours per week, I think I would learn just as effectively - 37%
- I would not like fewer timetabled hours per week - 69%
- It would suit my lifestyle to have fewer timetabled hours - 44%

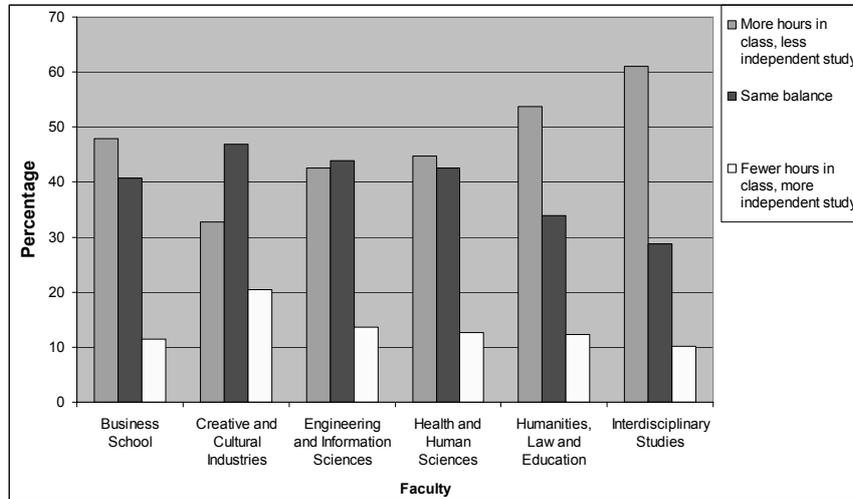


Figure 7 Appetite for flexibility (full time students only)

Discussion

The sample

This was a substantial sample which amounted to approximately nine percent of the total student body. As 65% of the sample was female, it did not accurately reflect the university's gender profile (56:44 F:M); in fact the reason for such a good response from female students might merit further exploration. Students with disabilities were well represented in the sample as

the university's statistics show that 5.4% have a disability; there were 7% in this sample with a disability. Also the proportion of each disability was well represented as the percentages were higher than or equal to the university norms. The considerable proportion of students with disabilities is a useful reminder of the importance of meeting the needs of a varied population. Many of the adjustments or strategies that can be implemented to support students with disabilities such as dyslexia (for example, auditory, multimedia and customisable resources) are often very useful to students without disabilities.

Students are busy people

The data supported the notion that a higher proportion of the older students are likely to have additional responsibilities that impact upon the time available for their studies, with 76% of the oldest group (40+ years) noting that family or carer responsibilities impact 'a great deal' or 'quite a lot'. Even 12% of the 18-21 year olds reported this level of impact, so it is important not to stereotype individuals from group data. Other data also indicated that the older students were most likely to be studying part time – around 70% of part time (undergraduate and postgraduate) students were 30+ years.

The trend for older students having commitments that conflicted with their studies continued with their paid employment, with 46-49% of the students over 26 years reporting that work impacted 'a great deal' or 'quite a lot'. Nevertheless, even approximately 30% of 18-21 year olds were similarly affected. The adverse effect of term time working upon performance and the potential social inequalities that accompanies it has been demonstrated elsewhere (Humphrey 2006).

The demands of sport and social activity reversed this trend, with 48% of 18-21 years olds finding that social activities impacted 'a great deal' or 'quite a lot' against 7% of students over 40. It seems apparent that students of different ages have different interests, and Figures 1 and 3 reflect this very well. The younger students are engaging more in social activities because they have less family commitments compared to older students, and vice versa. This trend is expected of different age groups and shows that the data is representative of general student behaviours outside of class time. The important point is that all students, irrespective of age, have commitments alongside studying, where some are more essential than others. It is also important to remember the socialisation function that a university fulfils and to recognise the value of an active social life for our younger students.

Students' technological background

So if students are given greater choice in how, when and where they study, would this help them balance their lives more easily or effectively?

This section attempts to discern, in part, how well equipped students are to thrive in an online environment. It is different to a 'competency checklist' or

'skill audit' because students can use technology in their everyday life that may have potential to support learning, but they don't always see it in that light. Also, many academic staff are only now developing an awareness of the educational potential of Web 2.0 social software.

It was clear from these results that the respondents in this sample have excellent access to the internet (93% on broadband or equivalent), have a high level of ownership of a range of technology (e.g. 64% own laptops, 46% own music players) and are active users of Web 2.0 (e.g. 46% are active contributors to social networking sites). Although the ownership and use was skewed towards the younger students, it was not confined to them (e.g. 53% of the 40+ group had their own laptop). Also, the use of varied Web 2.0 social software was not confined to the younger students: 30% of students aged 30+ reported using social networking sites for more than browsing, i.e. uploading and sharing something. In addition, 30% of the 30-39 age group use video sharing sites for more than browsing, and 30% of students aged 40+ use blogging sites for more than browsing. These statistics show that, although not the majority, older students are using such technologies.

Timetabling, communication and independent study

This section covers a range of factors that might impact on the flexibility of the students' learning experience. For example, half of the students (53%) were timetabled for four or five days per week, yet the majority (80%) would prefer a pattern of two to three days per week. Reasons for this might include less travelling time overall (commuting to the university was one of the most prevalent factors when asked what else has a significant impact on the amount of time allocated to your studies), better availability for employment, and facilitation of childcare arrangements. This does seem a clear message that should be explored further by staff and timetablers.

Many of the full time undergraduate students were making good use of StudyNet to support communication between themselves. Nearly 80% were finding it 'quite useful' or better, yet only 60-64% of the part time students were similarly enthusiastic. As these students cannot meet so readily, it would seem particularly important to ensure that they could exploit this conduit for peer-to-peer communication in order to compensate for the relative isolation in which they study – in an ideal world this group would find greater value than the campus based students. Reasoning behind these students not making use of StudyNet facilities would need exploration as studies have shown that the anonymity of online discussions has resulted in students who are normally shy, to contribute to class discussions or contact the lecturer (Smith, Ferguson and Caris 2001). One explanation could be that the online postings on StudyNet are not anonymous therefore students don't want others to read their comments.

In part this would be constructing learning activities that encourage interaction between peers, but most importantly making sure that students can have access to the technology, can use it and gain confidence in using the technology in a purposeful way. Gilly Salmon's (2002) five step model of teaching and learning online provides a good framework for such a process. The model's five steps incorporate access and motivation; online socialisation; information exchange; knowledge construction; and development. Of course staff themselves will need to develop the requisite skills to facilitate and moderate this activity effectively.

From looking at the figures regarding guidance for independent study, it is clear that many students have a perception of either receiving no guidance on independent study, or rated the guidance they did receive as poor. Only 3% of students reported that they received 'a lot' of guidance, and of those that said they received guidance, again only 3% said it was 'extremely useful'. It seems unlikely that these students receive so little guidance and it may be that they did not actually recognise information such as recommended reading as guidance. This finding can be of concern because students not recognising the guidance that they do receive, and not wanting more independent study, could mean a heavy reliance on the lecturers to help students through the course. Perhaps by making it clearer to students what guidance they are being given will help them to learn independently, as independent learning is a fundamental skill expected of graduates.

Appetite for flexible study

Classroom attendance places constraints on students in terms of when and where they study. Timetabling practices can compound the effect of these constraints, particularly when they don't mesh with students' preferences. Providing better opportunities for learning outside of the classroom can mitigate these constraints and the notion of reducing the contact time and increasing independent study appears a reasonable one.

The last set of results relate to the full time students' appetite for flexible study in terms of the balance of F2F and independent study. An inspection of the raw data suggested that there was little difference in the results in relation to gender or age group. From a faculty perspective, there was a suggestion that there was slightly more appetite for reducing F2F in the Faculty of Creative and Cultural Industries and a greater appetite for increasing F2F in the Faculty of Interdisciplinary Studies. But overall, the picture that emerges is a greater preference for either the *status quo* or increased contact time. This preference for contact was a finding of a recent HE Policy Institute study (Bekhradnia, Whitnall, and Sastry 2006). One possible reason for this – 62% of our students feared that less contact would reduce motivation – has also been found elsewhere (Samarawickrema 2005).

However, it is important to delve a little deeper. Overall, just over 11% were actively in favour of reducing contact time and increasing independent study – if this was extrapolated to the whole 23000 student body, it would be a group of some 2700 students. A group this size is substantial enough to consider implementing changes that would meet their needs. A further 14.6% were undecided (3500 extrapolated across the institution) suggesting that maybe even more than the 11% might benefit from greater flexibility. In fact this is likely because although 70% of the sample said that they did not want less F2F contact, 44% (9700 extrapolated across the institution) felt that less contact time would suit their lifestyle better.

This disconnection between what would suit their lifestyle and their reluctance to study more flexibly/independently could be resolved through good curriculum design and technology. Many of the respondents might be subject to a 'Rumsfeld effect' (paraphrased as 'we don't know what we don't know'). New technologies such as virtual classroom technology (e.g. Elluminate or Macromedia Breeze), virtual worlds (such as Second Life) or easy-to-use videoconferencing software (e.g. Skype) can provide effective, synchronous alternatives to attending some classes. It is likely that the more these are available, the more familiar students become with them and the more skilfully they are used, the greater the number of teachers and students that will incorporate them into their learning. Trials of all these approaches (e.g. Skype for supporting work based learners, Second Life for creative collaboration and Elluminate for out-of-hours group tutorials) are currently underway at the University of Hertfordshire.

Current pressures on students' time and the growing affordances offered by technology mean that, in the long term, the *status quo* is unlikely to remain an option. Designing Blended Learning curricula to facilitate flexibility could make a valuable improvement in many students' learning experiences and lives. Bekhradnia *et al* (2006) have already demonstrated a marked variation in contact time between similar courses across the sector, so clearly students do manage on different approaches. Furthermore Bekhradnia *et al* reported that, overall, the students wanted better quality contact and better teaching resources rather than increased contact hours *per se*. So maybe the challenge for curriculum design is to provide effective/high quality contact (which could include an option of either attending F2F or attending online) and complement this with good resources, good guidance for independent/out-of-class study and good mechanisms to identify and support students who are struggling – including those who have made poor choices in how they address their studies.

Limitations to the study

Whilst this was a large sample of students, the online questionnaire methodology will inevitably skew the sample towards students with access and willingness to use the technology. The exact magnitude of this effect is not known but usage statistics suggest that 95% of students use StudyNet. Whilst one study suggested around 10% of students are likely to be reluctant to use computers (Nachmias *et al* 2001), other work has suggested as many as 50% of individuals suffer from computer anxiety (Rosen and Maguire 1990; cited in Wilfong 2006).

The questionnaire was not set up so that question completion was compulsory and there was a drop off in the numbers completing the latter stages of the questionnaire (about 150 students didn't complete all of the last few questions). Two such questions related to ownership of technology and use of Web 2.0, but the percentages presented are based on the entire sample of 2143 students. Accordingly, they are likely to be underestimates of these attributes.

Conclusion

The key points that have emerged from this study are as follows:

1. Many students are very technologically aware with high levels of ownership of equipment and good internet access. They are well placed to benefit from better online learning support.
2. Full time students generally prefer block timetabling (i.e. 2-3 days per week). This would fit with other commitments better and will reduce the need to travel to university so frequently.
3. The appetite for sustaining present levels of F2F is strong, but it is not universal. Less F2F contact would suit 44% of this sample, although only 11% would actively prefer this. However, new technology offers new opportunities to offer a high quality interactive alternative to F2F contact. This could either replace some F2F contact or be offered as an alternative. It is likely that an increasing number of students will find this an attractive avenue to pursue in future.

There is potential to enhance various other areas. For example, providing better guidance for independent study for all students and positively developing the online communication skills of part time students so that they can benefit from better peer-to-peer communication and better communication with teaching staff.

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Biographies

Jon Alltree was Deputy Director of the Blended Learning Unit, University of Hertfordshire and has recently been appointed Director of Learning and Teaching at the University.

Nuz Quadri was Student Consultant at the Blended Learning Unit, University of Hertfordshire until July 2007.