

# **'How it was for me...': First steps on our Learners' Journeys through HE**

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## **Abstract**

This paper reports on the early stages of the STROLL project, which set out to document and research into learners' own views of their experiences of learning within what is seen as a technology-rich environment and to consider a range of learners' experiences of learning recorded during their 'journeys' at the University of Hertfordshire (UH) and Hertford Regional College (HRC). Undergraduates reflecting a diversity of race, age, gender and nationality were recruited to the project as volunteers. Creating their own video or audio diaries with webcams or camcorders or using digital voice recorders, the students reflected on questions set by the research team in line with the Learners' Journeys project aims.

The project team will bring to the symposium examples of the early results from the first sets of diaries, including some sample video clips of the students' reflections. These indicate students' enthusiasm for using technology both for learning and leisure and a widespread use of social networking tools in line with findings from the Phase 1 outcomes.

There has been relatively little research into the use of video diaries to capture student reflection on learning and the symposium will provide an opportunity to discuss this methodology.

## **Keywords**

learner experiences, reflection, video diaries, learners' journey

## **1.0 Introduction**

It is now 10 years since the UK National Committee of Enquiry in Higher Education in the Learning Society, better known as The Dearing Report (NCIHE, 1997:13.1), (Dearing, 1997), called for more effective use of information technology in learning and teaching. In the intervening years much progress has been made in embedding technology into the curriculum of Higher Education programmes and we now have a generation of students who have apparently grown up using different technologies with relative ease, the so-called 'Net Generation' (Oblinger & Oblinger, 2006). As UK government funding has been used to provide the technology to support learning in the last decade there have also been various studies into the effectiveness of the new technologies and their impact on changing the pedagogy of the academic (e.g. inter alia (G Conole, 2002; Salmon, 2005)). There has also been a significant growth in the use of managed learning environments (MLE) as a key technology for supporting students in the Higher Education (HE) sector and recent research has started to consider the students' own views of the use made by academics of MLE facilities, as proposed by Beetham (Beetham, 2005). This has been evidenced by a shift from what have been primarily quantitative research studies into the typical uses made of MLEs by students, in terms of pages read and items downloaded, to a more qualitative approach to researching the perceived value of MLEs and other learning technologies. Recent emerging research has recorded and considered students' own views of the use of technology to support their learning by seeking to encourage the students to describe their experiences of using technology, in their own words. One of the first studies to provide the students' view of their learning experience and their opinion of the impact of a changing pedagogic style from the use of an MLE was the Thornton study carried out at the University of Hertfordshire (Thornton et al., 2004) which was complemented by the work of Bricheno and others (Bricheno, Higgison, & Weedon, 2004). Most recently the

work carried out by Creanor et al from Glasgow Caledonian University has provided vivid and rich qualitative data from the students' own descriptions of their use of e-learning tools and personal technologies (Creanor, Gowan, Howells, & Trinder, 2006).

The STROLL project, an acronym for - 'STudent Reflections On Lifelong e-Learning', is currently following a qualitative approach to investigating how students describe their experiences of using technology supported learning over a period of up to eighteen months, covering 2 or 3 academic years of the students' degree programmes. The project takes a longitudinal view of researching the student experience and has set out to understand whether students describe their experiences differently, both as the technology for learning around them changes and develops and as they also mature as learners and in their use of technologies. The main data gathering method for this project has been through students creating their own video or audio diaries over a week during term time on campus, to reflect on their uses of learning technologies and provide personal views to answer the research questions.

## **2.0 The Methodology of the STROLL project**

The STROLL project has used a mixture of qualitative and quantitative methodologies to capture and analyse both the different learners' experiences and information about the learners themselves. A discussion of the use of video and audio diaries to capture the data is given below, and here the students own backgrounds are examined. The University of Hertfordshire has a diverse intake of students of up to 90 different nationalities, studying campus-based and online programmes based in 6 separate faculties (Engineering and Information Sciences, Creative and Cultural Industries, Health and Human Sciences, Interdisciplinary Studies, Humanities, Law and Education, and Business.). Students were recruited to the STROLL project from among those who were campus based and were likely to spend another two years studying at the university and thus to be available for the data gathering exercises from May 2007 to October 2008. They were invited to take part in the project through tutors based in each faculty sharing an open invitation to participate. In addition students at Hertford Regional College were invited to take part so that possible differences between the use of technology for learning and access to e-learning for students at an FE college could be measured. In May and October 2007 the volunteer students were invited to record a 5-day diary of their learning experiences during a typical teaching week. Prior experience had suggested to the project team that focussed instructions and suggested questions for each day would help the students to answer questions to support the research project. A launch event was held at both the University of Hertfordshire and Hertford Regional College to explain the project to the student participants and detailed instructions about the project, the questions to answer for each day and the use of the technology were given out. Students were asked to spend a few minutes at the beginning of each day saying what they were planning to do and then to spend a further 5-10 minutes at the end of the day reflecting on their learning, their use of technologies to support their learning and answering an additional question on their learning environment for the project team.

Telephone interviews were also used after the first set of data collection and analysis to clarify comments made by the students in their diaries. Face to face recorded interviews will be used at a later stage of the project, using the transcripts of the original diaries as a variation on Beetham's Interview Plus methodology as described by Creanor (Creanor et al., 2006). From January 2008 focus groups will be used as a further means of engaging with the learner group to draw out their views and experiences and this data when analysed will be further shared with the research community.

The primary data gathering mechanism is through the students' own use of personal video or audio diaries, gathered on four occasions during the timescale of the project and at roughly 6 monthly intervals. The questions used and a justification for them are given below under the project findings. These data gathering exercises have already and will continue to provide information in the form of learners answering specific questions in the narrative of their descriptions of their daily uses of technologies to support their learning. The textual content of the May 2007 diaries was first transcribed to produce a Word file and then coded by hand to produce a personal mind map for each participant according to their answers to the first set of research questions. From December 2007 and January 2008 the original data was recoded using NVivo 7 and the impact of further results from this analysis will be made available at a later date to the wider research audience.

## 2.1 Using video and audio diaries

Video case studies have already been used to share examples of e-learning practise between academics in recent years, for example the JISC innovative e-learning pedagogy project, (Smart, 2005). Video Diaries are defined in the New Media Dictionary as:

Video work in which events are related in a coherent manner. Inspired by written diaries, the video diary can be a personal diary, a travel diary or a diary that tells about a specific event in the author's life.

Video diaries and similar personal technologies have been used to provide an innovative opportunity to study the learners' reflections on their experiences in a private space and at a close point in time to the original experience. This technology had been employed by both Conole in her 'Learner experiences of e-learning project' under Phase 1 of the JISC projects (G. Conole, de Laat, Dillon, & Darby, 2006), and in 2007 at the University of Hertfordshire (Quadri, Bullen, Kornbrot, & Jefferies, 2007).

Conole noted that:

Diaries can provide rich data about the day-to-day events and contain a realistic account of the activities undertaken by the learners.

The use of e-diaries and video diaries has been reported in the last decade largely for their use in medical trials and as a means for patients to record their regular use of e.g. asthma drugs and their daily readings and reactions (Antoniou, 2003). At the same time the use of video diaries has also become mainstream in popular culture with audiences in their millions tuning into so-called 'reality' TV programmes such as 'Big Brother' which is aired in almost 70 different countries (source (Wikipedia, 2007)). Another social use of personal videos and video diaries has been through broadcasting on YouTube, an Internet site where people can upload and share videos. YouTube has in excess of 100 million clips viewed each day, and 65,000 new videos are uploaded every 24 hours (ibid, 2007). With such high figures of viewing and uploading videos on the Internet- within which University of Hertfordshire students were already included - the University originally piloted its own video diaries as a method for students to provide feedback (Jefferies, Quadri, Bullen, Kornbrot, & Alltree, 2007). This experience was used as a preparatory resource prior to the STROLL project.

For educational research, the use of video diaries was previously noted by Noyes (Noyes, 2004) as 'an innovative method for qualitative research in education'. Noyes' method in his study with primary school children was to use observations and semi-structured interviews to understand how they felt about the transition from primary school to secondary school. Due to 'the initial lack of rapport' and the 'unequal status' of Noyes with the children, Noyes decided to use video diaries as a method which would allow the children to talk more "freely". Throughout this paper, Noyes comments on how written data cannot account for what the children communicate in front of the camera, and when giving a quote from one of the pupils, he states:

...this [comment] is incommunicable on paper and demonstrates... a strong case for employing video methods.

While this means of gathering qualitative data to record students' experiences of their learning experiences has previously been less common in education, if the lessons suggested by Noyes are valid then they may offer a method that is typically more reliable than self-reporting on paper of attitudes and activities. Students at the University are very often given surveys to complete both throughout the year and at the end of a module. Quantitative data from survey questions with a limited set of answer possibilities has many uses from a statistical point of view but there are inherent disadvantages of it as a form of qualitative data gathering. One disadvantage of this form of data gathering is that it constrains the participants since the opportunity for free form answers is generally very limited because of the methods employed to analyse the data. One of the benefits perceived by the STROLL research team for using video and audio diaries is the opportunity it offers to students to be more open and expressive, and portray opinions and ideas, which cannot be determined within a 5-point scale.

What further advantage might there be in using video and audio diaries instead of an experienced interviewer? Noyes contrasts the possible inequality of the position of the interviewer and the participant as a reason for encouraging personal use of the diary form. While the STROLL project might have less of an age and experience barrier than his example of using primary to secondary transfer school children, the presence and potential influence of an interviewer in a situation needs to be considered. There is also the formality of organising an interview and the time space constraints of the participant needing to be in a particular time and place for the interview to take place. The experience of both the original video diaries at the University of Hertfordshire, (Jefferies et al., 2007) and the first set of STROLL diaries in May 2007 showed that students would record whenever and wherever they felt comfortable; on the bus, in their homes, on their way to classes, preparing food etc.. This created an atmosphere of immediacy and intimacy between the subject and the reviewer of the recording. The authors would suggest that it is the very immediacy of these students' reflections on their learning experiences which has provided both the earlier and current research with such a rich source of data and one which could not be replicated in the interview room.

There will be however a future use of one to one interviews with the STROLL participants later in the project. Focus groups are also planned as a means of eliciting further qualitative data about their experiences. The role of the later interviews will be to determine the individual relevance of participants' comments and to build a more rounded picture of the individual learners as case studies are built up and to draw out any clear strands of comparable experiences which emerge. The STROLL project with its limited group of participants is not offering to other HEIs a completely generalisable set of outcomes but rather:

...there will be sufficient diversity among those students chosen to participate, to offer examples for comparison in other domains. (STROLL)

This type of qualitative study with an ethnographic basis from a shared university culture provides a large amount of data from the small subset of students who are part of the student domain under consideration, for review and comparison alongside findings from data gathered through other research studies with students in Higher and Further Education.

## **2.2 Student choices of technology for the STROLL project**

The original aim of the STROLL project was to offer the use of webcams to all student participants as being, what the project team considered an easy method for recording their diaries. This was after all a group of students primarily from the so-called 'i-Pod generation' and their use of 21<sup>st</sup> century technologies such as webcams for leisure purposes was thought to be ubiquitous. Additionally at the time that the project was launched the opportunity for limited use of camcorders loaned from the Blended Learning Unit at the University of Hertfordshire was offered to the project group and taken up enthusiastically by some of the students. The benefit of the camcorders was a better quality of audio and visual recording. However the project team also offered students the alternative of digital audio recorders. Of the 31 students who took part in the May 2007 diaries 32% used camcorders, 29% used webcams, 13% produced a written (word processed) document, and 26% used digital audio recorders. The latter were taken up by students for a variety of different and interesting reasons. When asked why they wanted to use the audio recorders they stated that this was because of their preference either for not showing their face when recording, or a worry over using what they perceived to be '*complex technology*' or of adding the webcam software to their computer. One student with cerebral palsy found the fine motor skills required to use the webcam and camcorder meant that these were difficult to use with accuracy and for her the audio recorder was a better choice as she was '*more in control of it*'. The latest set of diaries compiled by HRC students in November 2007 saw 2 mature students opting for the audio recorders as their perception of an 'easier to use' technology instead of a webcam.

The option for a written diary using Word™ was taken up by three students, one stated this as their preference over using any other form of 'technology', and the other two had problems setting up their webcams and opted to continue with developing a written record of their experiences, in spite of the availability of software support. This may point to the perceived ease of use and general familiarity with 'baseline' technology products such as Microsoft™ for today's students.

### 3.0 Findings

In total 31 students were recruited for the May 2007 video and audio diary data gathering exercise. 26 of these were from UH and 5 from HRC. Two students finally failed to submit the data from their diaries. The gender mix was 54% female and 46% male. Quantitative data is currently being analysed to provide further background information about the participants.

In May 2007 students were asked to answer questions around the themes of barriers to e-learning, their use of technologies to support their learning and their use of social networks:

- Do you enjoy using technology for learning or leisure?
- Do you have any difficulties using technology in every day life and in your studying? What would make e.learning technology easier to use?
- Have you used any social network technologies this week? How do you use them? What do you like/dislike about them?
- How can your lecturers use technology (including StudyNet) even better to improve your learning? What tricks are they missing or what ideas could they use?

The questions for the October 2007 data gathering exercise were refined to focus on other research questions for the project and specifically to start to pick up on the longitudinal aspects of the students' changing experiences of using technology over the course of the project.

#### 3.1 Do you enjoy using technology for learning or leisure?

There was general enthusiasm from the students for using materials provided by lecturers and posted on the managed learning environment (MLE). The university has had its own institution-wide MLE known as StudyNet since 2001 and each student and member of staff has their personal portal. This is accessible 24/7 and provides information relevant to all programmes and their modules and also provides access to social areas. Within each module there is provision of a variety of electronic resources and opportunities for communication between academics and students and for students to belong to virtual online groups for assignments. From the first set of data it became clear that the student volunteers were enthusiastic users of StudyNet. This confirmed previous research into the use of StudyNet with students at UH (Thornton et al., 2004). This enthusiasm for the MLE was regardless of the programme they were registered on or any other potential differentiating factors such as gender or ethnic background.

StudyNet is just brilliant. I use it all the time.

I feel Study Net is a great inspiration in the learning process.

Students typically reported a daily reliance on technology 'being there'. The following student's comment was typical of many in the group.

Technology is a big part of my life, both in working and playing, the first thing I do in the morning is to switch on my TV and my computer because I have to check my e-mails.

I get up in the morning and turn my computer on and it stays on until I go to bed. It's just always there.

...having all the work on-line inspires me to just access it and get on with it.

I tend to use technology all day every day.

The more technically competent students recognised and commented that technology was an essential and ubiquitous part of their daily life. If it was not available or there was a power cut they claimed that they would be 'lost'.

### **3.2 Do you have any difficulties using technology in every day life and in your studying? What would make e-learning technology easier to use?**

Students did not report many problems with using technology for learning and reported instead generally high levels of proficiency with different technologies whether as part of the university's provision or not. This was among students recording both video and audio diaries. There was some frustration among students when the technology should work but the connections prove unreliable and for those who confirmed that they were less confident they generally relied on the use of 'human' support when things went wrong with technology (e.g. asking friends for help first). One student who had admitted she did not feel confident using technology had asked her children to download the podcasts of lectures onto her MP3 player so she could listen to them during her journey to and from the university and work.

I will be doing studying on the bus and the train.

I thoroughly enjoy the learning using technology it does make it more fun, it also makes it a lot easier for me as I'm not a fan of books.

Students from the FE background were a much smaller group and they reported less frequent use of technologies such as podcasting or online discussions. They were less likely to report a close daily reliance on technology for learning or to be e-competent. While these students have access to StudyNet and to a local version of their materials on Blackboard™ there appears to be less use made by their lecturers of electronic forms of communication. This issue will be followed up in the later discussions in focus groups.

### **3.3 Have you used any social network technologies this week? How do you use them? What do you like/dislike about them?**

Widespread use was being made in May 2007 by students of the social networking sites aimed at young adults such as Facebook and My Space and many students 'confessed' to spending much of their time catching up with their friends online. A later survey carried out by a research team at the University of Hertfordshire is investigating the depth and breadth of students' enthusiasm for specific sites.

I spend far too much time using Facebook...

I am always on social networks because I think they are absolutely amazing

The social networking sites were liked for their easy accessibility and none of the group claimed to dislike them, except in terms of the amount of time that they absorbed. There was some use of online games reported by male students, which they saw as being a social online activity. YouTube was reported as being watched and used extensively by both male and female students.

### **3.4 How can your lecturers use technology (including StudyNet) even better to improve your learning? What tricks are they missing or what ideas could they use?**

The use of podcasts by lecturers was widely reported as being useful. Many lecturers record podcasts during their lectures and classes and make them available from StudyNet so that students can either listen online or download them to an MP3 player. The opportunity to '*listen again*' was appreciated and one student reported her use of podcasting to grasp '*complex arguments*,' by listening as many times as needed to understand the issues.

Podcast continues to be a great inspiration to the way I learn, I find it so helpful to listen to again and again, and to stop and look things up and go back.

I would like all my lectures to be podcast so I can go back and listen to them again.

The use of podcasts was described as being supplementary to attendance at lectures rather than as an alternative to attending. There was wide use of Web 2.0 technologies to support their learning, including the use of a home-grown type of 3D virtual discussion group known as SMIRK Board, for supporting Business

School students. Frequent use was made of wiki technology and some students reported the use of blogs to aid their reflection for learning. A benefit of StudyNet was that it supports their reported learning patterns that extended into the evenings and early hours and across weekends, where learning was mixed in with a variety of other social and sporting activities. Most students did not partition their day into long study or work periods unless they had paid employment. Instead they described how they fitted in a variety of activities of which one was studying, either alone or with friends.

## 4.0 Discussion

Investigating students' own reflections of their experiences of learning was proposed by Boud and Keogh (Boud, Keogh, & Walker, 1985) over 20 years ago when they contended that :

...only learners themselves can learn and only they can reflect on their own experiences.

The aim of the STROLL project is to investigate student reflections on their use of technology to support their learning over a period of eighteen months, by pursuing the following research questions:

- How do learners experience change through their learning journey?
- How do students use and make choices about their time?
- How do students use e-learning tools to support their learning?
- How do students use their personal technologies?

Students have already reported study patterns where their time is often split into very short chunks and where technology is both essential to their life style for learning and leisure and frequently used while they are on the move. This has been reported elsewhere as typical of the current generation of students in HE. (Oblinger & Oblinger, 2006).

These students whether they regarded themselves as technically competent or not, typically showed a widespread enthusiasm for the use of some personal technologies for learning, with for example podcasts being downloaded to MP3 players by many students based at UH. This was in contrast to some initial unwillingness by over a third of the students to use a webcam to record their diary, as it was a new technology to some of them. This points perhaps to a certain dichotomy among the students, which reflects their diverse backgrounds and programmes of study; many are enthusiastic users of technologies on one hand while others are more reluctant and seek human support to show them how to use a new technology at least initially.

Students in the project have reported a general notion of the 'ubiquity' of technology, although none have actually phrased it as such. The computer and the Internet are described as 'always there' and for many of those reporting, technology is seen as an integral and essential part of their waking hours, mixing social and academic activities. Several students commented on how they have grown very dependent on their computer as a lifeline and could not imagine life without it or if there was a power cut.

...this week it has really enlightened me[sic] that I am very, very highly dependent on the Internet and networks that the university runs.

I find that I am now dependent on technology especially my phone because I use it every day, like I say I use it to record my lectures, and seminars.

Those students in the health care professions in particular reported how useful they found the MLE with its 24/7 availability, for both catching up with other students socially and with their studies while away from the university on placement, where facilities were typically less advanced technologically.

The initial findings have reported some of the outcomes from the first set of video and audio diaries and the students' choices of technology for recording them but with the nature of a longitudinal study there is plenty more to examine and future reports will discuss the later sets of data gathered, especially the students' reflections on their changing use of technology to support their learning. The findings to date largely confirm those reported earlier under Phase 1 of the LEX projects and similar research but additional information is coming to light which suggests a heavy daily reliance of students on their chosen technologies and a certain

shallowness in the competency of some of them in their choices of technology to support their learning. The research team for STROLL look forward to debating the findings so far and to further opportunities for dissemination.

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