Exploring Learning Trajectories

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Older learners and computers: identities and challenges

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Abstract

Research in e-learning is usually focused on technological or pedagogical issues and learner perspectives are under-represented in the literature. Particularly in widening participation, course-designers would benefit from an understanding of learner perspectives such as identity and control, and how these affect student choices about computer use. Using a qualitative grounded theory approach, this paper is part of an ongoing project to explore students’ study experiences. The participants are distance education students of The Open University, on short introductory courses in Mathematics and Arts with optional use of computers. The courses are designed to reach a widening participation audience. The paper focuses upon detailed thematic analysis of transcripts of five semi-structured telephone interviews about use of computers for study. All five older learners had home internet access. Results suggest that learners’ use of computers is affected by factors such as identity, access to informal computer support and need for control over the study environment. A model is suggested that links the major themes from the data. Educators need to recognise these affective issues, to provide effective support for computer-mediated learning in widening participation.

1951 words not including title page with abstract.
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1 Introduction and aims
This paper builds upon Peasgood (2007), which was concerned with the distance education of adult students at the Open University. That paper discusses the context for the research in more detail, and provides references for some of the techniques and underlying ideas. The research explores students’ everyday experiences of new technologies, and how they apply those to their learning. The students are adults within a widening participation suit of distance education courses (Openings courses). In this context, ‘widening participation’ broadly refers to opportunities for students from demographic groups that are under-represented in Higher Education. Openings courses are designed for adults with previous educational qualifications below traditional university entry requirements. The courses have high study-skills content, and one-to-one tutor support over the telephone.

2 Data collection and analysis
The overall project combines quantitative (survey) and qualitative (interview) methods, to explore students use (or non-use) of computers. This paper discusses some interview data from older learners, who are likely to have less experience of ICT. There were two stages of data collection:
1. A postal survey, sent to the students after course completion.
2. Semi-structured telephone interviews with six students. The interview provided space to describe personal contexts and reflect upon issues. Prior completion of the questionnaire enabled the interviewer to ask for clarification or explanation of choices expressed in survey responses. Each interview lasted about 20-30 minutes. The interview transcripts were analysed using a qualitative approach, coding specific words and phrases as underlying patterns and themes were identified.

3 Characteristics of interview participants
Before discussing the interview transcripts, it would be helpful to introduce the interview participants, known as A, B, C, D and E. Table 1 is from Peasgood (2007).

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Characteristics of interview participants</th>
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<tr>
<td>Gender</td>
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<td>Student A</td>
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<td>Student B</td>
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<td>Student C</td>
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<td>Student D</td>
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<td>Student E</td>
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Questionnaire results for the interview participants: use of internet/computer

All five interviewees had home computer and internet access (mostly broadband, but Student D had dial-up). According to questionnaire responses, four of the five interviewees used email and the internet in their daily lives. Student C was the exception, reporting no internet or email use in the week before completing the survey. During the interview, she revealed that she did use email to contact friends, but her internet use was more limited.

4 Discussion

4.1 Some patterns

The first stage of analysis identified some issues:

- Communication with the tutor – whether to use email or telephone, and student choices about which was most appropriate, depending upon the situation
- Anxiety about technology – is it reliable, do I trust it?
- A sense of personal or impersonal situations or media – the tutor was regarded as a personal link to the university, but the OU website might be seen as impersonal
- Student choices about the study environment. This may involve, for example, sitting in a favourite armchair, rather than at a computer, because it is more comfortable.

4.2 More in-depth themes

The second stage of analysis looked at the same transcripts, to identify deeper themes. Although this work is still in progress, the following themes have been identified:

- Anxiety: anxiety, worry or fear (or the lack of it, although this theme tended to be expressed in one direction). Note that confidence-anxiety may form a continuum, which is still being explored within the data
- Control: control, choice or the lack of them as experienced by the student
- Independent: expressions of a need for independence, or ‘doing it for myself’. Note that independence and control are closely related, so these themes may change as analysis progresses.
- Personal/impersonal: any experience that feels specifically personal or impersonal
- Support: mention of support or the lack of it from any source, including tutor, other OU staff, other students, members of the household etc.

The following sections illustrate some of these themes.

Control, independence and a sense of the personal can often overlap within the same paragraph of the transcripts

This indicates motivation for students to want to do their own way, to have control, but also to choose personal contact when they need it.
Revisiting this quotation from Student D, the ‘beating the machine’ phrase reveals a need for control. The student is also describing how he has taught himself how to use Equation Editor, indicating a strong tendency towards independence in his studies.

So if you said to me, ‘what can I do on a computer?’ I would say, ‘it’s mostly been based around Word for Windows, and I’ve used it more as a sort of a typewriter extension, but I’ve moved on from the Openings course, and I’m on Maths now, and I’ve taken the trouble to use the Maths Equation stuff within Windows to type for example the Maths answers. It’s very time consuming but at the same time I was interested in beating the machine.

Student D

The same student then describes a situation where he seeks personal contact, and indicates that he sees computers as impersonal:

I live within walking distance of the library again, so it gets me out. On the way to the library you meet people. I know one or two people that work in the library and I have a chat. It’s the social context as well, and I think of course that the computerisation militates against that social context

Student D

When asked further about potentially social aspects of computing, he emphasises the independence of his studies, but still refers to the need for personal contact when he chooses. Note that, although he is willing to learn a computer package that directly relates to the subject (Equation Editor), he is less willing to learn to use a computer technology that is about ‘chatting’ to other people:

I suppose I’m resistant and I’m perhaps now the wrong age to worry about chat rooms and stuff like this. I’m happiest when I’m beavering on in my own little corner, getting out of the course what I feel is what I want to get out of it rather than worrying about too many other people, which isn’t to say that I wouldn’t benefit from that contact. I’m not saying that at all. I’m just saying that it’s not something that I would instinctively turn to.

Student D

In contrast, Student C, who expressed anxiety about computers in general, but has learned to carry out specific tasks, such as word-process an essay, still feels very anxious about the ‘impersonal’ aspects of computing. Here she has been talking about word-processing and saving an essay, and then goes on to say:

I’ve done that and recently I’ve learnt to send attachments. That’s fine if I’m sending it to someone that I know because I know they’re going to say, ‘Oh yes, I’ve got it’, but I was thinking about the fact that the OU looked like they’re going electronically inclined, writing an essay and then you’re worried that I’ve done all this work. Is it actually saved, is someone actually
This could be interpreted simply as an anxiety about trusting the technology, but this student states elsewhere that she sends emails and attachments to her friends in the same village, so there is another factor involved. If the student knows the recipient, and can check that the message has arrived, she feels confident to use the technology. When faced with an web-page or situation that feels impersonal, she has no sense of connection with the recipient and thus feels less confident in using the system. So this is about control, in the sense of feeling able to cope with the system, rather than getting overwhelmed by it.

**The need for personal contact and support was expressed by most of the interview participants, in different ways.**

Here, Student A discusses her feelings about email. Since studying Openings, she has moved onto a course that has face-to-face tutorials. Here, she has been talking about why she finds the phone conversations with her tutor so valuable, then discusses other forms of contact:

> Probably because I’m a people’s person, and I react to people. E-mails would be so impersonable unless I knew the person at the other end, and one cannot unless one comes face-to-face. I’m glad that I go to tutorials at the moment because my tutor from my point of view is bad at responding to e-mails. [...] he’s the sort of person that I respond to, but that would not come out in the e-mails.

Student A

Student C also valued the phone contact with her tutor, and makes some interesting points about email. She sees the tutor as ‘personal’, in contrast to the impersonal ‘OU system’:

> I think I did once because he did say to me ‘look I’ve got an e-mail, if there’s a problem, and I think I did e-mail. To me that’s like e-mailing someone in the village. That I can comprehend, cos I wasn’t e-mailing the OU system I was e-mailing his home, it was a personal thing and I could cope with that, [...]

Student C

Student D, who emphasizes his motivation and need for independence elsewhere in the interview, also recognizes his need for personal contact. He has also moved on to a course with face-to-face tutorials:
I’m not so sure that I learn such an awful lot from the tutorial but it’s so important it seems to me to go along and meet other people, and establish this human contact with your tutor. That’s where I perhaps then would start criticising the computerised systems.

Student D

Student E, also valued timely personal support, in this case by telephone, but note the comment about speaking more frankly over the phone than in writing.

That personal contact was enormously important because I rather sagged in the middle of the course. I lost control of the timekeeping and so on, scheduling, and I was greatly encouraged by the phone calls cos one can speak more frankly and openly than one is able to in writing, so it was a tremendous support, and I would have thought invaluable.

Student E

5. An emerging model

Although in the early stages of formation, the model indicates relationships between the emerging themes. Figure 1 represents some of these, in a rough schematic.
6. Conclusion

This paper has highlighted the need to consider the contexts in which students use computer technologies, in addition to access to hardware and skills. Affective and motivational factors can be a major influence upon students’ use of technologies. Peasgood (2007) indicated that students adapt their study environment to suit their needs, and this may influence their choices about whether or not to use a computer. They also make quite subtle and strategic choices about what form of communication to use under which circumstances. The need for personal contact, as perceived by the student, indicates the crucial role of the tutor as a motivator for students who are less confident with ICT.

These finding have implications for course design, policy and practice in supporting older students who are new to ICT.

References