



Scope

- The Learner Experiences of e-Learning theme of the JISC e-Learning programme funded a total of ten projects from 2005 to 2009, to explore learners' perceptions of and participation in technologyenhanced learning in a digital age
- Earlier research addressed learners' experiences
 of single modules, technologies or curriculum
 interventions; the Learner Experiences of
 e-Learning theme covered the holistic nature of
 learners' experiences of learning, with a focus on
 learners' own words
- The projects piloted a range of innovative methodologies and techniques for eliciting the learner voice
- Nearly 3,500 learners responded to surveys, and around 260 were involved in a sustained way

Audience

This guidance is designed for:

- Educational researchers
- Practitioners with an interest in investigating their learners' experiences of technology

A guide for researchers

What have we learnt?

Mixed methods

Mixed-method approaches are recommended for learner-centred investigations. While a very small-scale evaluation of a particular learning activity may find one data-collection method quite adequate, it is unlikely that a single interview with learners or a single survey can gather the rich descriptions of learners' uses of technology required to understand their technology use in a holistic way.

A key principle in carrying out investigations of this kind is sustained engagement. It is much easier to gather detailed information about practices, beliefs and intentions when there is ongoing communication between participants and researchers. Relying on a single method restricts the flexibility of a project, which may need to refine and reorient its aims through its engagement with learners. Some form of interviewing or diary keeping is often the primary data-collection method for learner-centred studies, but breadth, depth and triangulation are best achieved by using a variety of methods, each serving a different purpose.

When planning learner-centred evaluations, researchers can consider:

Using more than one form of rich data collection, for example both individual interviews and diaries or logs, or both individual and group interviews. Diaries can capture, in a timely way, incidents that might otherwise be forgotten; interviews can give access to intentions and beliefs; group interviews can scope a range of views and find the prevailing ones

This guide forms part of *Responding to Learners*, a synthesis of outcomes of the Learner Experiences of e-Learning theme of the JISC e-Learning programme. For further information on the other guides in this series, the projects and their findings, and downloadable resources for practitioners, researchers and managers, visit: https://mw.brookes.ac.uk/display/JISCle2

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■ Incorporating surveys, even when the emphasis of the study is on rich description. Some Learner Experiences of e-Learning projects conducted large-scale surveys, showing how to successfully integrate quantitative and qualitative data to achieve breadth and depth in findings or add to theory

Recruiting learners

Participants in studies such as these make a significant investment of their own time. It is therefore important to plan how the recruitment process can inform participants of the sustained engagement that is expected of them and how participants will be compensated for their contributions.

When planning to recruit learners, researchers can consider:

- Using data-collection tools such as surveys to recruit participants by including a form to register interest in further or other involvement
- Securing buy-in from course leaders who are willing to promote the study to their learners
- Advertising through commonly used student services such as the employment service, library and computer services notice boards, or news feeds

 Using posters, leaflets and flyers including small, attention-grabbing incentives, for example small chocolate bars taped to the back of instructional postcards about the project

Retention of learners

Retention is aided both by rewards or compensations for sacrifices and, most importantly, by ensuring that learners feel involved and part of a project.

When planning retention and reward strategies, researchers can consider:

- Compensating participants for their contributions; for example, travel costs should be reimbursed and refreshments and meals provided
- Using other methods of reimbursement, for example small honorariums associated with each stage of data collection (for example, £20 per interview or video diary), high street shopping vouchers, and gifts of MP3 players or webcams after using them for data collection on the project
- Issuing letters of recognition of participation that can be cited in CVs



'Our approach has been learner-centred, with an emphasis on active engagement by participants in data collection and in producing the findings.'

- Offering links to key publicly available (but perhaps not known to learners) information resources that offer advice on e-learning and associated technologies
- Creating a project logo to heighten the sense of prominence of a project
- Being flexible about and responsive to data collection
- Promoting the substantial reflective learning benefits that learners will gain from their engagement

Ethics

Learner-centred investigations should have an explicit ethical stance of seeking active, engaged partnerships with participants. Researchers who want to disseminate audio or video data must obtain participants' approval before data collection begins. Careful consideration should be given to the effect on the trustworthiness of the data obtained when learners know they are being recorded.

When conducting learner-centred evaluations, researchers should consider:

- Providing clear written information about all aspects of the project for prospective participants, including the expected commitment from them, how their data will be handled, and an open assessment both of the benefits and potential risks
- Enabling participants to give informed consent, preferably in writing, and to withdraw from the study at any time
- Obtaining written consent from learners for the dissemination of any audio-visual data collected
- Seeking ethical approval from a relevant research ethics committee as a means of safeguarding the learnercentredness of the design and the appropriateness of the data-collection methods
- Employing participatory methods, which may include involving learners in developing research questions and collecting data
- Encouraging participants to check and interpret data, by sending learners transcripts or preliminary analyses, or convening a focus group to 'reality check' initial findings

'Retention is aided most importantly by ensuring that learners feel involved and part of a project.'

Eliciting the learner voice

People forget apparently trivial things in their lives that others, for example learner experience researchers, may find interesting and want to know more about. Likewise, it can sometimes be difficult for interviewees to articulate their reasons for doing what they did. Learner-centred investigations have made good use of techniques to elicit from learners their experiences, beliefs and behaviours. Many techniques can help explore learners' experiences, but the key principle is to start from concrete examples.

When eliciting the learner voice, researchers can consider:

- Using the 'interview plus' approach: the learner and researcher discuss an artefact the learner has produced or is producing, for example a piece of coursework, a blog entry, website text or a presentation
- Using card sorts and similar activities during interviews as a way to help participants think out loud about their preferences and strategies
- Encouraging participants to keep diaries or logs, which allow them to record incidents and ideas about them in a timely fashion, as close to when they occur as practical; these records also provide additional prompts for further discussion in interviews. Protocols for use simple guides that describe what to comment on are necessary
- Using simple, easy-to-access tools for gathering information, such as plug-and-play audio recorders or webcams, online voicemail storage so that learners can 'audio blog' using their phones, or email
- Conducting telephone interviews, which may intrude less into participants' time than face-to-face interviews and be

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- particularly suitable for participants in some educational contexts, for example work-based learners and part-time students, and which can be used to track developments
- Interviewing by email, called 'Pen Pals' by the Thema project, which can facilitate regular contact with participants over time and target key moments in the academic year, for example on commencement, near submission times, etc. So long as only two or three questions are asked, little commitment is required of

participants and data is gathered as useable digital text

Data analysis

Qualitative research approaches involve handling large amounts of a variety of data. The sheer quantity of data means that analysis is time-consuming; organisational tools can help.

When analysing data from learner-centred evaluations, researchers can consider:

- Using voice-recognition software to speed up and improve the accuracy of interview transcription (if the institution cannot afford to pay transcribers); simply listen to the recording and repeat into voice recognition software
- Checking interpretations with participants both helps confirm the trustworthiness of the analysis and may bring out themes important to learners

- Developing protocols for sharing analysis among members of the research team to improve the trustworthiness of the interpretations of the data
- Creating mind-maps, both of individual cases or participants and of overall themes, which can be very helpful for organising findings as they develop
- Using electronic tools for coding, such as NVivo which can handle all relevant data types; in the hands of trained users, electronic tools can considerably speed up data analysis. Coding text, audio, image and video data is at the heart of qualitative data analysis

Listening to learners

Further guidance on evaluating learners' experiences of e-learning, including a set of recipe cards for different data-collection methods, is available from the Learner Experiences of e-Learning synthesis website https://mw.brookes.ac.uk/display/JISCle2

Responding to Learners

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