**National Research and Development Centre
for adult literacy and numeracy**

Research Summary

ICT and adult literacy and numeracy

Synopsis

This project set out to obtain a picture of present teaching practice in the use of ICT in adult literacy, numeracy and ESOL within formal provision. Working closely with tutor-researchers, we drew up procedures for carrying out classroom observations and then carried out detailed observations of classrooms using ICT in adult literacy, numeracy or ESOL. Close working with the tutor-researchers was invaluable in gaining insights into present practice. The findings of this study will inform an intervention study which will develop and test effective strategies for the use of ICT in the areas of adult literacy and numeracy. The main findings are listed below.

Key points

Using ICT The predominant pattern of activity was for learners to use a desktop computer on their own with the tutor either talking to the whole class, or involved in discussion with groups or individuals. About half of the observed work was with office software, and half with direct teaching materials. The majority of ICT use was directed towards practice but some use related to the creation of new materials or accessing information (this latter activity tended to be associated with students working in small groups).

Integrating ICT There was a spectrum of integration of ICT with teaching basic skills. At one extreme, ICT was seen as just another teaching tool and the technological demands were kept as simple as possible. At the other extreme, ICT skills were seen as important elements of new literacies.

Teaching styles Most teaching consisted of group presentation followed by an activity supported by individual tutoring, though some sessions consisted exclusively of individual tutoring. The tutors spent about half their time talking to the class as a whole, and about half talking with small groups and individuals. The amount of time devoted by tutors to quiet observation of learners was quite small. On some occasions, however, tutors sat back and avoided intervening as part of a conscious process of encouraging student independence and autonomy.

Teaching with ICT Teachers adapted the use of ICT to their own style of teaching. Different patterns of ICT use were found in numeracy, literacy and ESOL. Tutors' level of ICT skills had an impact on their ability to make effective use of the technology. It was also true that specific characteristics of certain technologies affected the way in which these were used in the classroom.

Teaching ICT skills Talking about a procedure, demonstrating it and then asking the students to try it on their own was the most frequent mode of teaching ICT skills. A minority of tutors encouraged learners to experiment and discover for themselves how the software worked.

Learning styles The visual elements of ICT presentation were useful to many learners but we saw few attempts to accommodate students' learning styles in other ways. Individual and whole group work were the dominant styles but small group work was encouraged in some literacy and ESOL classes.

Background and rationale of research

There are strong expectations that ICT can contribute to the development of *Skills for Life* provisions. Previous work looking at ICT and adult literacy and numeracy (e.g. Hopey 1998, Mellar *et al* 2001) has mainly been based on surveys or interviews with managers, tutors and learners, and whilst this has given us an insight into some of the principal variables that may be involved, we have little detailed account of what tutors actually do when they are using ICT for adult literacy and numeracy. In this study we set out to develop the methodology to carry out an observational study in order to begin to identify more closely the factors involved in effective teaching with ICT in the areas of adult literacy and numeracy. This study concentrated on the use of ICT within college settings as we are simultaneously carrying out work within other projects looking at ICT and *Skills for Life* within **learndirect** centres, prisons and community provision.

Main elements of research

In collaboration with a group of eight tutor-researchers within the East London Pathfinder, we generated a range of issues that we wished to investigate and examined a range of possible observational methods (including video-capture and software for capturing learner interaction with the computer). The main methods finally developed and used were structured observation instruments for observing tutors, and to a lesser extent learners, in the classroom. We carried out detailed observations in 11 classrooms using ICT in adult literacy, numeracy or ESOL. On average each tutor was observed three times over a two-month period and a further observation session was devoted to learners. Observations were carried out by research officers and by the tutors who observed each others' sessions. The first level accounts generated were fed back to the group of tutor-researchers for further discussion. The structured observation instruments have generated both quantitative surface level descriptions and qualitative data which we then used to generate detailed accounts of each tutor's classroom. We then interviewed each tutor around the detailed account we had produced of their lessons. Close working with the tutor-researchers in this way has been invaluable in gaining insights into present practice.

Research team

Directors
Dr Harvey Mellar and Dr Maria Kambouri
Research Officers
Dr Mariana Sanderson and Dr Victoria Pavlou
East London Pathfinder Co-ordinator Jenny Barrett
Tutor-Researchers Judith Beer, Sean Gubbins, Jenik Nazarian, Jane Peckham, Camilla Nightingale, Eugene Smith, Graciano Soares and Peter Townsend

References and further reading

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Contact for further information

Dr Harvey Mellar
Telephone: 020 7612 6664
email: h.mellar@ioe.ac.uk

Dr Maria Kambouri
Telephone: 020 7612 6301
email: m.kambouri@ioe.ac.uk

Institute of Education
20 Bedford Way
London
WC1H 0AL

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Publications
NRDC,
Institute of Education,
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London WC1H 0AL
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