

E-learning and motivating adults with literacy needs to improve their literacy

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Background

International surveys including the Adult Literacy and Life Skills survey have raised awareness of major challenges with evidence that around one in five adults has needs literacy in many countries including the Canada, New Zealand, UK, and USA (Satherley et al, 2008; Benseman & Sutton, 2007). Low levels of adult literacy have a direct impact on the economy and reduce life chances for adults and their children (Appleby & Bathmaker, 2006; Benseman & Sutton, 2007; Earle, 2009). In addition, the Moser Report (1999) declared that: "At the heart of improved quality in delivery and materials must be increased use of Information and Communication Technologies (ICT) to improve basic skills" and 21st Century Literacies include aspects of ICT (BECTA, 2009). The extensive training for all adults who need help with their LLN learning (Earle, 2009) is, however, extremely challenging for the tertiary education sector in many countries. Countries are therefore considering e-learning as an additional mode of delivery.

However, motivating adults so as to increase recruitment and retention have proved challenging. E-learning has both positive and negative effects on motivation. This paper presents an analysis of the motivational aspects that relate to e-learning for adults with literacy needs drawn from an international study on this topic.

Research Questions

The focus of our overarching international enquiry was:

- To gain greater understanding of the potential of e-learning for adult literacy, language and numeracy (LLN) learning; and
- To investigate how e-learning can be employed as a means of reaching greater numbers of adult learners and better meeting their learning needs.

The overarching research question asked: What are the characteristics of the courses and programmes and their organization that include e-learning (mixed mode or distance learning) to raise the literacy, language and numeracy skills of adult learners and how do they evolve?

For this paper our research question was:

What characteristics of e-learning programmes (including mixed mode, blended and distance learning) motivate (both positively and negatively) adults with literacy needs to address those needs effectively?

Methods

An international review of research literature, interviews of 30 New Zealand stakeholders with some experience with e-learning with the target population of adults, and a multi-level case study of successful practice in a polytechnic were accompanied by review of the accumulating evidence and research outputs by experts from New Zealand, UK and USA. The literature review used to develop a set of hypotheses on the critical success factors and to identify the case study, which was a site of good practice. Over a period of three months observations of classes, interviews with adult students, teachers/tutors, coordinators of e-learning and literacy, deans, and the chief executive formed the main data set gathered using typical case study methodology (Patton, 1990). The picture was

broadened through published documents, internet and phone contacts. Particular care was taken to include perspectives of minorities. The data was subjected to multilevel analysis using Davis' (2009) ecological framework that included the e-learning and literacy access and support in the learners' ecologies, the tutor interpretation of content, pedagogy and e-learning, and the ICT infrastructure and its linkages among education, community and industry. The evidence was then analyzed again with the narrower research question for this paper, using a thematic approach common in qualitative research (Yin, 2006).

Frame

The application of online and blended learning to adult education is an innovation, alongside that of embedding literacy in foundational and vocational programmes as well as on the job training. Therefore the analytical frame chosen for this case study was to identify the co-evolution of e-learning applied in adult literacy (Davis, 2010). This was done using three change models within the overarching ecological perspective on change. The three models were: an analysis of the attributes of the innovations (Rogers, 2003); the learning trajectory of the teacher (Sherry & Gibson, 2002); and organizational maturity in relation to e-learning (BECTA, n.d.). This framework is coherent with theories commonly applied in adult education, such as transformative learning and situated cognition (e.g. Merriam, Caferella & Baumgartner, 2006).

Research findings

The overarching message of our research is that e-learning is relevant to and useful for most adults with literacy needs, providing the learning programme is carefully designed to fit each individual's needs and lifestyle, their proficiency with computer-related technologies, and their reading literacy. For example, distance e-learning can provide a cost-effective way of extending the development of literacy for adults currently at an intermediate level of literacy, and who may need help to develop specific skills. E-learning can also help provide the time and intense practice need to develop literacy. Blended e-learning is particularly accommodating of learners who cannot easily access face-to-face tuition, such as those in rural communities (Nash & Kallenbach, 2009; UNESCO, 2006). This fits well with Taylor et al's (2009) study of the transfer of learning to workplaces that illustrated learning occurring through various 'life roles'.

However, adults with lower levels of English literacy can easily be de-motivated. Adults with beginning literacy levels need intensive face-to-face support (Davis, Fletcher, & Absalom, 2010; Lister, 2007).

ICT also provides a relevant learning context for adults wanting to improve their literacy and helps alleviate some of their anxiety about literacy learning. Adults who lack literacy are often embarrassed by these needs, and take care to conceal them with excuses such as not having their reading glasses at hand. Simmons (2002), for example, found that literacy programmes which included development of computer skills increased enrolment in these programmes. According to the workplace stakeholders we interviewed, adults with LLN needs are attracted to learning activities that involve computer-related technologies because these tend to have immediate relevance to their lives at work and beyond.

Adults can be highly motivated to use e-learning when it fits well with work practices (Australian Institute for Social Research, 2006). However, our stakeholders noted that many of these adults do not work in places that provide access to computers and the web. In New Zealand, these adults told us that they often have restricted access at home too.

An important message to accompany these findings is that realising the potential of e-learning depends on ongoing professional development for tutors and others who support learners, including the organisations where programmes and resources are developed, such as colleges and private training providers. Access to e-learning in the workplace and at home requires development of infrastructure and support from work places, families and communities.