



Include ICT

Coming of age

Effective use of ICT for adults
with severe learning disabilities

Background and introduction

Educating adults with severe learning disabilities

Computers are a key part of life today from the cashpoint where we get our money to the internet where we can order goods or find out what is on TV. The Government is determined to extend the number of people who have access to information online and to bridge the 'digital divide' by providing additional resources to disadvantaged groups.

Valuing people: a new strategy for learning disability for the 21st century is a government white paper published in March 2001. The executive summary points out that:

'People with learning disabilities are amongst the most vulnerable and socially excluded in our society. Very few have jobs, live in their own homes or have choice over who cares for them.'

Why are adults with severe learning difficulties a special case? As Tony Blair said in the foreword to *Valuing people*:

'People with learning disabilities can lead full and rewarding lives as many already do. But others find themselves pushed to the margins of our society. And almost all encounter prejudice, bullying, insensitive treatment and discrimination at some time in their lives...'

There are about 210,000 people with severe learning disabilities in England, and about 1.2 million with a mild or moderate disability. Health and social services expenditure on services for adults with learning disabilities stands at around £3 billion.

Among the aims of the Government's strategy, as listed in the executive summary of *Valuing People*, are to:

'... enable people with learning disabilities to lead full and purposeful lives in their communities and develop a range of activities including leisure interests, friendships and relationships.'

Case study

The Home Farm Trust and the Karten Centre

The Karten Centre is run by the Home Farm Trust (HFT), a national charity which provides supported living, residential care, day services and supported employment. The HFT provides ICT training and conducts research for both service users and support staff. It has computers in 15 day centres nationwide and in 90 other locations such as service users' houses. Many of the service users are living independently for the first time or are living with support in residential settings. ICT helps these people lead independent lives and enables them to communicate with others.

And to:

'... enable more people with learning disabilities to participate in all forms of employment, wherever possible in paid work, and to make a valued contribution to the world of work.'

Since the early 1990s it has become apparent that education and training have failed to meet the needs of adults with severe learning difficulties. The sheltered workshop, and traditional college courses on hygiene, cookery and basic skills have denied many such adults access to music, art, drama, fashion, film, sport and all the other interests which are open to adults who do not have learning disabilities. The opportunity to make decisions is one of the key aspects of adult life, which should be available to everyone.

In 1993, most learning centres and colleges were using BBC or Archimedes computers, and it was common to find groups of adults with severe learning difficulties engaged in copy typing or drill-and-practice activities designed for primary school children. Now these centres are using PCs with internet connections, digital cameras and MP3 players. There is a movement towards using ICT to develop advocacy work and to support vocational work.

About this booklet

This booklet is one in a series of publications called 'Include ICT' that examine the ways in which schools and other organisations are developing inclusive learning and teaching practices using ICT. It looks at the progress which has been made since 1999 in the effective use of ICT for adults with severe learning disabilities, and identifies some successful practices. In particular, reference is made to the work of the Karten CTEC Centre in Oxfordshire, which provides ICT skills training for people with learning disabilities, and for staff and carers.

How to use the materials

The booklet is accompanied by a CD-ROM containing video clips that illustrate the key issues. This CD may be viewed in conjunction with the booklet, if you wish, or the booklet alone may be used.

This booklet can be used by all those working with adults who have severe or moderate learning disabilities.

Effective approaches to the use of ICT for adults with learning difficulties

Access to technology

Many people with learning disabilities experience chronic health problems, epilepsy, and physical and sensory disabilities, which make it hard for them to work at a computer. Access devices can make a world of difference to how well such adults can navigate a screen or write a letter. Assistive technology support packs, containing a range of hardware and software, were sent to over 800 UK Online centres in the final quarter of 2002. The products included in these packs were chosen to enable those with physical or sensory difficulties to make the fullest use of ICT equipment possible, and, in particular, to access the internet.

For some learners the keyboard and the mouse are obstacles to be overcome, and it helps to find other ways of interacting with the computer and navigating round a screen. Touch screens offer an intuitive way to interact with a computer. The Intellikeys programmable, touch-sensitive keyboard with overlays enables students with physical, visual or cognitive disabilities to type, enter numbers, navigate on-screen displays, and execute menu commands. Different overlays may be used, for example to give instant access to the web or to particular websites. A trackerball with a very large ball can replace a mouse for people with poor manual dexterity. It can be operated with a hand, elbow or even a foot.

Service users need information in an accessible format if they are to use a computer, video or microwave independently. Symbols, voice notes or visual timetables can make all the difference to someone who is not a confident print user.

Making writing easier

For someone with poor motor skills, word processing makes their writing as legible as anyone else's. Difficulty remembering activities undertaken a year ago or even a few months ago may be overcome with digital photos, which offer a cheap and quick way to record individual moments.

Video and webcams, rather than written reports, can be used to record events, case conferences, and so on, and develop real person-centred planning.

The Karten Centre uses a person-centred approach. As part of this, service users are helped to record their life stories using a range of multimedia tools. Scanning in photos, using voice clips, choosing how to present work helps participants recall and value memories. Family, friends, carers and employers may all have photographs, letters or other memorabilia to contribute. The end product is a presentation which encapsulates all that is special and distinctive about the person, and presents it in a neat, easy-viewing package.



Not everyone can get information from reading standard printed text – some people need additional help. Symbols – shown here, and used on E-live, a symbol-supported web magazine (with news, features, recipes

and jokes) – may be used to make text more readily understood. Many centres use a mixture of symbols, pictures and words. The most popular package is Writing with Symbols, a text and symbol writing program from Widgit Software. The advantage of using such technology is that you have a consistent symbol set, lots of templates in which learners can create their own work, and ready-made materials. Those who are unable to read either text or symbols may be able to get information from hearing text read aloud either by a person or by a speech synthesiser on the computer.

In recent years, people have wanted to use communications technology. Inter_Comm is an add-on to Writing with Symbols software that allows non-text users to use email in their own preferred graphic system.

Some web pages are too complex for users with learning disabilities or those who have difficulty with text. Webwide is a service which takes any web page and changes the layout to a single column which can be viewed in symbols, or as plain text in any font size and colour.

It is important to remember that adults with severe learning difficulties are not a homogeneous group and the ability range is enormous. Each person must be treated as an individual with his or her own particular idiosyncrasies.

Enabling creativity

Lee-Anne, who lives at the Karten Centre, finds it hard to talk to people she doesn't know, but loves her flat and the office with its computer. Lee-Anne is justifiably proud of her ICT skills and her range of handmade cards. ICT gives her access to pictures and graphics on the web, and she can use a paint package to colour them in before she turns them into greetings cards. ICT has given her a way of communicating with other people and a reason to do so.

The advantages of using technology are: it produces a professional end result, work in progress can be saved, and it is a clean medium for people who dislike mess.

Encouraging independence

Teaching life skills is important to enable people with severe learning difficulties to lead more independent lives and to become aware of appropriate behaviours. Software has been used to help with social skills – Out and About is a life skills package produced by the HFT in conjunction with Granada Learning. It covers sequencing, visual discrimination, decision making, and interpreting pictures and symbols, and offers a chance to reflect on body language and behaviour, letting people see what they look like and helping them reflect on the way they present themselves to the outside world.

Interactive learning helps those who learn by doing instead of reading, watching or listening. Activities can be performed that often would not be possible on paper. Tracking, scanning and sequencing can all support the thinking process. Software is non-judgemental and users can repeat the process as often as they choose.

Vocational training

Nationally, very few people with learning disabilities – probably less than 10 per cent – have jobs. However, many of the people at the Karten Centre have part-time work, for example in local shops. The centre has a coffee shop and extensive grounds and some of the residents also staff the reception area, greeting visitors and answering the telephone.

Some of the residents help in the garden, and are working towards NVQs in horticulture. ICT has a role to play as these centre users record what they have learnt, using text, videos and photographs. ICT provides a multisensory medium for getting across concepts and ideas in a meaningful way. Captions, labels and headings provide signposts for organising information.

Others at the centre are working on Learn Direct Basic Skills courses. These are not specifically designed for adults with severe learning difficulties but, with support from tutors, the centre users are making steady progress.



Key issues

If you are reading this booklet in conjunction with viewing the video clips on the CD, you may wish to watch the videos now, to see how they illustrate the points below.

- **Use a person-centred approach to meet the needs of the individual**

Activities should be chosen to show the real person, their talents and enthusiasms. Progression is important. People need time to learn skills and to practise them in different contexts, but they also need to move on.

Much of the individuals' learning will centre on their own life experiences and personal aspirations, and should include vocational activities.

- **Support creativity and communication**

ICT can support creativity and foster independent communication. A multisensory approach to learning using ICT means opportunities for creativity can harness all the senses, and ensures high quality items can be produced without the need for advanced levels of technical skill.

- **Provide opportunities for vocational training**

Vocational training helps those with learning disabilities participate in employment. ICT can help learners record their progress towards recognised qualifications. It makes vocational training rigorous and enables learners to recall events using software and photography.

- **Use symbols to help overcome difficulties with written communication**

Symbols may enable a learner with limited reading skills to extract meaning from text.

The use of symbols makes written communication available to a far larger number of those at the Karten Centre. The symbol sets used in the centre enable individuals to have greater autonomy in reading and writing everyday materials.

- **Increase independence**

Access technologies can offer access to computers and the internet for people with disabilities. The internet provides the opportunity for people to participate in a wider community and communicate with others, for example through email.



**To start this
CD-ROM:**

Place in CD-ROM drive. The CD should start automatically. If it does not: PC users should double click the 'My computer' icon and then double click on the CD-ROM drive icon. Mac users should double click the CD-ROM icon, then double click on the icon marked 'Include ICT Coming of age'



Further help

Aspinal, A. & Hegarty, J.R. (2001). ICT for adults with learning disabilities: an organisation-wide audit. *British Journal of Educational Technology*, 32, 365–372.

Becta, Ferl Focus Area for adults with severe learning difficulties – information and ideas for using ICT to promote decision making, leisure and creativity, memory and communication
<http://ferl.becta.org.uk/sld>

Blamires, M. (1999). (Ed). *Enabling technology for inclusion*. London: Paul Chapman Publishing.

Clicker Grids for Learning – ‘Access and communication’ and ‘Adult learners’ sections
<http://www.cricksoft.com/cgfl>

Department of Health (2000). *Valuing people: A new strategy for learning disability for the 21st century*. White paper. London: The Stationery Office.

Granada Learning – Publishers of Out and About
<http://www.granada-learning.com>

Hot Potatoes™ – software for creating interactive activities
<http://web.uvic.ca/hrd/halfbaked>

Inclusion website
<http://inclusion.ngfl.gov.uk>

Inclusive Technology – access devices and some software including Lifeskills: 24 hours a day
<http://www.inclusive.co.uk>

Johnson, R. & Hegarty, J.R. (2003). Websites as educational motivators for adults with learning disability. *British Journal of Educational Technology*, 34, 479–486.

Learn Direct – basic skills materials –
<http://www.learndirect.co.uk>

Learning and Teaching Scotland – Life skills software
<http://www.ltscotland.org.uk>

McKeown, S. (2000). *Unlocking potential*. Birmingham: Questions Publishing.

Mayer-Johnson – Symbols, animations and good ideas
<http://www.mayer-johnson.com>

Widgit Software – Writing with Symbols, Inter_Comm and Webwide
<http://www.widgit.com>

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